EPA-Approved
Louisiana Statutory & Regulatory Requirements
Applicable to the
Hazardous Waste Management Program

JUNE 1997

EPA APPROVED LOUISIANA STATUTORY REQUIREMENTS APPLICABLE TO THE HAZARDOUS WASTE MANAGEMENT PROGRAM
June 1997

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UNITED STATES OF AMERICA

State of Louisiana

UNION JUSTICE AND CONFIDENCE

Fox McKeithen
SECRETARY OF STATE

As Secretary of State, of the State of Louisiana, I do hereby Certify that

the annexed and following pages contain a true and correct copy of Section 2001 et seq. of Title 30 of the Louisiana Revised Statutes of 1950, as amended, as shown by comparison with the original of said section on file in the archives of this office.

In testimony whereof, I have hereunto set my hand and caused the Seal of my Office to be affixed at the City of Baton Rouge on,

this the 6th day of July, 1993.

Fox McKeithen

Secretary of State

FRANKLIN PRINTING CO INC N O

WEST'S

LOUISIANA STATUTES

ANNOTATED

REVISED STATUTES

Sections 30:2001 to 31:End

This Edition Designated as the
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Volume 17B

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CHAPTER 1. GENERAL

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WESTLAW Electronic Research

WESTLAW supplements Louisiana Statutes Annotated and is useful for additional research. Enter a citation in INSTA-CITE for display of any parallel citations and case history. Enter a constitution, statute or rule citation in a case law database for cases of interest.

Example query for INSTA-CITE: IC 234 So.2d 794

Example query for Louisiana Constitution
LSA-Const. La.Const. Const. Constitution /8 12 XII +3 13

Example queries for statute:

Revised Statutes:
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Civil Code:
La.C.C. C.C. La.Civ! "Civ Code" "Civil Code" /8 2046

Code of Civil Procedure:
La.C.C.P. C.C.P. Civ.P! C.Civ.P! "Civil Procedure" /8 1972

Code of Criminal Procedure:
La.C.Cr.P. C.Cr.P. "Criminal Procedure" /8 873

Code of Evidence:
La.C.E! C.E. C.Ev! (Evid**** /2 Code) /8 801

Code of Juvenile Procedure:
La.C.J.P. C.J.P. "Juvenile Procedure" /8 84

Also, see the WESTLAW Electronic Research Guide following the Preface.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session, and on authority of R.S. 24:253, Part I of Chapter 11 of Title 30 of the Revised Statutes of 1950 containing R.S. 30:1052 to 30:1055, was redesignated as Chapter 1 of Subtitle II of Title 30, containing R.S. 30:2002 to 30:2005. Former R.S. 30:1051, which had preceded Part I of Chapter 11, was redesignated as R.S. 30:2001 and inserted as the first section of Chapter 1 of Subtitle II.

For disposition of the Parts and sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Tables preceding R.S. 30:2001.

§ 2001. Short title

~~This Subtitle shall be known and may be cited as the "Louisiana Environ~~mental Quality Act."

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1051 (preceding former Part I of Chapter 11 of Title 30 of the Revised Statutes of 1950), was redesignated as R.S. 30:2001 and inserted as the first section of Chapter 1 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Sections 6 to 16 of Acts 1979, No. 449 (§ 1 of which reenacted former Chapter 11) provided as follows:

"Section 6. Nothing in this Act shall be construed to limit or diminish the powers and duties of the state health officer as provided in R.S. 40:2 through R.S. 40:5, as amended herein. Nothing in this Act shall be construed to limit or diminish the authority of the Department of Wildlife and Fisheries over those environmental matters relating to the management of fish, wildlife or its habitat which shall remain under said department jurisdiction, as amended herein.

"Section 7. This Act shall become effective on January 1, 1980, except that the provisions of § 1143 of this Chapter shall become effective on June 1, 1980.

"Section 8. Upon the effective date of this Act, the unfinished business of the Louisiana Air Control Commission and the Stream Control Commission, and any unfinished business of the office of conservation of the Department of Natural Resources under the provisions of Chapter 5 of Title 51 of the Louisiana Revised Statutes of 1950 shall be taken over and be completed by the Department of Natural Resources through the Environmental Control Commission and the Office of Environmental Affairs with the same power and authority as that of the named agencies. For such purposes, the department through said commission and office shall be the successor in every way to each such agency, and every act done by the department, commission or office in the exercise of the functions of each shall be deemed to have the same force and effect under any provisions of the constitution and laws in effect on the effective date of this Section as if done by the agencies for which the provisions are repealed.

"Section 9. Wherever the Stream Control Commission, the Louisiana Air Control Commission, or any agency formerly provided for in Chapter 5 of Title 51 of the Louisiana Revised Statutes of 1950 is referred to or designated by the constitution or laws or by any contract or other document, after the effective date of this Act, such reference or designation shall be deemed to apply to the Department of Natural Resources, the secretary of said department, the Environmental Control Commission, the office of environmental affairs, or any of them together.

"Section 10. Any legal proceeding, as defined in R.S. 36:924, to which any agency, the statutory provisions for which are repealed by this Act, is a party and which is filed, initiated, or otherwise pending before any court on the effective date of such repeal, and all documents involved in or affected by said legal proceeding, shall retain their effectiveness and shall be continued in the name of the former agency. All further legal proceedings and documents in the continuation, disposition, and enforcement of said legal proceeding shall be in the name of the original party agency which is abolished, and the Department of Natural Resources shall be substituted for the original party agency without the necessity for amendment of any document to substitute the name of the department or the name or title of any office, official, employee, or other agent or representative of the department. For purposes of this Section, "document" shall be defined as in R.S. 36:924.

"Section 11. This Act is in no way and to no extent intended to, nor shall it be construed in any manner which will impair the contractual or other obligations of any agency, the provisions for which are repealed by this Act or of the state of Louisiana. It is hereby specifically provided that all obligations of any ~~such agency hereafter shall be deemed to be~~

Notes of Decisions

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1. Basis of regulatory framework

Federal and state cases interpreting various state and federal statutes may provide guidance in applying Louisiana environmental statutes (R.S. 30:1051 et seq., see, now, R.S. 30:2001 et seq.) but it should be kept in mind that the Louisiana regulatory framework is also based on LSA-Const. Art. 9, § 1 and the public trust concept. Save Ourselves, Inc. v. Louisiana Environmental Control Com'n, Sup. 1984, 452 So.2d 1152.

2. Administrative implementation

An impartial administrative tribunal is essential for efficient and fair implementation of the Environmental Affairs Act (R.S. 30:1051 et seq.; see, now, R.S. 30:2001 et seq.). Office of Environmental Affairs v. McWhorter and Associates, Inc., App. 1 Cir.1984, 449 So.2d 1062.

§ 2002. Findings and declaration of policy

The legislature finds and declares that:

(1) The maintenance of a healthful and safe environment for the people of Louisiana is a matter of critical state concern.

(2) It is necessary and desirable for the protection of the public welfare and property of the people of Louisiana that there be maintained at all times, both now and in the future, clean air and water resources, preservation of the scenic beauty and ecological regimen of certain free flowing streams, and strictly enforced programs for the safe and sanitary disposal of solid waste, for the management of hazardous waste, for the control of hazards due to natural and man-made radiation, considering sound policies regarding employment and economic development in Louisiana.

(3) It is necessary and essential to the success of the regulatory program established in this Subtitle that the enforcement procedures include unannounced regular inspections of all facilities which may be regulated by this Subtitle or any facility in violation of this Subtitle.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1982, No. 655, § 1; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984.

History and Source of Law

The 1982 amendment deleted "A." from the beginning of the section; in par. (2), substituted "strictly enforced programs" for "a program", and deleted "a program" following "waste," in two places; and added par. (3).

The 1983 amendment in par. (2), inserted "preservation of the scenic beauty and ecological regimen of certain free flowing streams,", and substituted "economic" for "industrial".

In par. (2), as amended in 1983, "and" was inserted preceding "strictly" on authority of R.S. 24:253.

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note under R.S. 30:2001.

Mississippi River Corridor/Lake Pontchartrain Sewerage and Pollution Control Authority. House Concurrent Resolution No. 78 of the 1986 Regular Session provides as follows:

"A Concurrent Resolution to create the Mississippi River Corridor/Lake Pontchartrain Sewerage and Pollution Control Authority, to include the parishes of Jefferson, Orleans, St. Bernard, St. Charles, St. Tammany, Tangipahoa, St. James, St. John, Ascension, and East Baton Rouge, in order to attempt to develop

comprehensive and coordinated approaches to the public health and environmental aspects of sewage disposal and pollution control in those parishes through institution of a common mechanism through which to address these needs and concerns.

"WHEREAS, the parishes of Jefferson, Orleans, St. Bernard, St. Charles, St. Tammany, Tangipahoa, St. James, St. John, Ascension, and East Baton Rouge have developed and continue to develop into areas with common interests in the health and safety and the economic, cultural, recreational, and general well-being of the citizens therein; and

"WHEREAS, rapid urban and suburban development throughout these parishes, particularly during the past decade, has posed serious difficulties for local governments striving to provide traditional urban services to developing localities in a systematic and comprehensive fashion; and

"WHEREAS, proper sewage disposal and pollution control facilities and techniques are particularly important in developing wetlands in these parishes, since the potential for contamination of the drinking and recreational water sources therein is so acute; and

"WHEREAS, clearly, an areawide planned approach is the answer to such areawide problems as sewage disposal and pollution control.

"THEREFORE, BE IT RESOLVED by the Legislature of Louisiana that the Mississippi River Corridor/Lake Pontchartrain Sewerage and Pollution Control Authority, to include the parishes of Jefferson, Orleans, St. Bernard, St. Charles, St. Tammany, Tangipahoa, St. James, St. John, Ascension, and East Baton Rouge, is hereby created in order to attempt to develop a comprehensive and coordinated approach to the public health and environmental aspects of sewage disposal and pollution control in those parishes through institution of a common approach to address these needs and concerns.

"BE IT FURTHER RESOLVED that the composition of the authority shall include:

"(1) The chief executive officers of the city of New Orleans and the city-parish of Baton Rouge, or their designees, and the chief executive officers of the parishes of Jefferson, St. Bernard, St. Charles, St. Tammany, Tangipahoa, St. James, St. John, and Ascension, or their designees.

"(2) One representative from each of the following local governing authorities or organizations, chosen by the respective governing authority or organization:

"(a) The parish governing authority of each parish included in the authority, except Tangipahoa Parish, other than those persons included in Paragraph (1) above. Such representatives may include persons with technical knowledge or expertise in sewage disposal or pollution control.

"(b) The Regional Planning Commission of Jefferson, Orleans, St. Bernard, and St. Tammany Parishes.

"(c) The Chamber of Commerce-New Orleans and the River Region.

"(d) The Metropolitan Area Council.

"(e) The League of Women Voters of New Orleans.

"(f) The Bureau of Governmental Research.

"(g) The Public Affairs Research Council.

"(h) The State Bond Commission.

"(i) The Orleans Parish affiliate of the Urban League.

"(j) The Orleans Parish affiliate of the National Association for the Advancement of Colored People.

"(k) The Tangipahoa Municipal Association.

"BE IT FURTHER RESOLVED that the authority shall report its findings and recommendations to the governor and to the legislature prior to its termination and that the authority shall terminate upon adjournment sine die of the 1988 Regular Session of the Legislature."

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1052 of Part I of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2002, of Chapter 1 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

United States Code Annotated

National environmental policy, see 42 U.S.C.A. § 4321 et seq.

§ 2003. Purposes

A. The maintenance of a healthful and safe environment in Louisiana requires regulation and control over the areas of water quality, air quality, solid and hazardous waste, scenic rivers and streams, and radiation.

B. In order to accomplish these goals most efficiently, it is necessary to provide for comprehensive policies on a statewide basis to unify, coordinate, and implement programs to provide for the most advantageous use of the resources of the state and to preserve, protect, and enhance the quality of the environment in Louisiana.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984.

History and Source of Law

The 1983 amendment in subsec. A, inserted "scenic rivers and streams,"; and, in subsec. B, substituted "comprehensive policies on a statewide basis" for "evolving policies for comprehensive environmental development and control on a statewide basis, and".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83–30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83–30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note under R.S. 30:2001.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1053 of Part I of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2003, of Chapter 1 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2004. Definitions

The following terms as used in this Subtitle, unless the context otherwise requires or unless redefined by a particular Chapter hereof, shall have the following meanings:

(1) "Commission" means the Environmental Control Commission.

(2) "Department" means the Department of Environmental Quality.

(3) "Implementation plan" means any pollution control or other environmental regulatory plan prepared by a state agency in compliance with the terms of the Clean Air Act,[1] the Federal Water Pollution Control Act,[2] the Resource Conservation and Recovery Act,[3] or other federal environmental legislation.

(4) "Secretary" means the secretary of the Department of Environmental Quality.

(5) "Member" means a member of the Environmental Control Commission.

(6) "Commission secretary" means the secretary of the Department of Environmental Quality serving in his capacity as secretary of the Environmental Control Commission.

(7) "Variance" means a special authorization granted to a person for a limited period of time which allows that person a specified date for compliance with a requirement pursuant to the provisions of this Subtitle.

(8) "Person" means any individual, municipality, public or private corporation, partnership, firm, the United States Government, and any agent or

subdivision thereof or any other juridical person, which shall include, but not be limited to, trusts, joint stock companies, associations, the state of Louisiana, political subdivisions of the state of Louisiana, commissions, and interstate bodies.

~~(9) "Natural resources committees" means the natural resources committees of the House of Representatives and Senate of the Louisiana Legislature.~~

(10) "Discharge" means the placing, releasing, spilling, percolating, draining, pumping, leaking, seeping, emitting, or other escaping of pollutants into the air, waters, subsurface water, or ground as the result of a prior act or omission; or the placing of pollutants into pits, drums, barrels, or similar containers under conditions and circumstances that leaking, seeping, draining, or escaping of the pollutants can be reasonably anticipated.

~~(11) "Response fund" means the Environmental Emergency Response Fund~~ created in R.S. 30:2034.

(12) "Abandoned site fund" ~~shall mean~~ the Hazardous Waste Site Cleanup Fund as ~~created by~~ R.S. 30:2205 and formerly known as the Abandoned ~~Hazardous Waste Site Fund.~~

(13) "Pollution source" means the immediate site or location of a discharge or potential discharge, including such surrounding property necessary to secure or quarantine the area from access by the general public.

(14) "Facility" means a pollution source, or any public or private property or facility where an activity is conducted which is required to be regulated under this Subtitle and which does or has the potential to do any of the following:

(a) Emit air contaminants into the atmosphere.

~~(b) Discharge pollutants into waters of the state.~~

(c) Use or control radioactive ~~materials~~ and waste.

~~(d) Transport, process, or dispose of solid wastes.~~

(e) Generate, transport, treat, store, or dispose of hazardous wastes.

(15) "Pollutant" means those elements or compounds defined or identified as hazardous, toxic, or noxious, or as hazardous, solid, or radioactive wastes under this Subtitle and regulations, or by the secretary or commission, consistent with applicable laws and regulations.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1980, No. 194, § 1; Acts 1981, No. 198, § 1; Acts 1982, No. 655, § 1; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1983, No. 467, § 1, eff. July 6, 1983; Acts 1984, No. 116, § 1, eff. June 22, 1984.

[1] 42 U.S.C.A. § 7401 et seq.
[2] 33 U.S.C.A. § 1251 et seq.
[3] 42 U.S.C.A. § 6901 et seq.

History and Source of Law

The 1980 amendment added pars. (12) to (15) (see, now, pars. (10) to (13)), defining "discharge", "response fund", "abandoned site fund" and "pollution source".

Law Review Commentaries

Public trust doctrine as a basis for environmental litigation in Louisiana. 27 Loyola L.Rev. (La.) 469 (1981).

~~§ 2005. Governor's Resource Development and Environmental Quality Council; creation; membership; functions~~

~~A. It is the purpose of this Section to establish a cabinet level council to~~ insure proper coordination of actions, employees, and equipment in the executive branch of state government in the administration of the environmental and natural resources laws of this state; to reduce conflicts between departments within the executive branch; to insure that each department head is fully informed of the environmental and resource development activities of each department which has any environmental or resource development functions assigned to it; to clearly identify the proper department to be responsible for taking actions under specified circumstances; to assist the governor of the state in planning administrative actions and setting goals for environmental and natural resource development activities by the executive branch agencies; and to insure proper and efficient operations.

B. The Governor's Resource Development and Environmental Quality Council is hereby created and shall be placed within the office of the governor. For the purposes of this Section the word "council" means the Governor's Resource Development and Environmental Quality Council. It shall be composed of the following ten members:

(1) The governor of the state of Louisiana, who shall serve ex officio as chairman of the council.

(2) The secretary of the Department of Environmental Quality.

(3) The secretary of the Department of Wildlife and Fisheries.

(4) The secretary of the Department of Natural Resources.

(5) The secretary of the Department of Health and Human Resources.

(6) The secretary of the Department of Public Safety and Corrections.

(7) The commissioner of agriculture.

(8) The secretary of the Department of Transportation and Development.

(9) One member of the Senate of the Legislature of Louisiana who shall be appointed by the President of the Senate.

(10) One member of the House of Representatives of the Legislature of Louisiana who shall be appointed by the Speaker of the House of Representatives.

C. Each member shall serve in his official capacity and may not appoint a representative to vote or take official action with respect to the council or its functions. Each member may request that an employee of the department ~~attend a meeting of the council on his behalf when he is unable to attend, but~~

~~that employee shall not take any official action, vote on any issue before the~~ council, or represent to the council the views of the member.

D. The council shall meet bimonthly for the following purposes:

(1) Discussion and review of environmental and natural resources matters.

(2) Setting of goals and making of recommendations for future natural resources and environmental activities.

(3) Coordination of personnel, actions, and equipment used to respond to environmental emergencies, cleanup activities, or containment actions.

(4) Planning strategies and responses by each agency to environmental emergencies, problems, or cleanups, where more than one agency is involved, and determining what each agency will do in specified situations.

(5) Recommending procedures for reduction of overlapping efforts, activities, or actions by different agencies.

(6) Preparation of reports to the governor on environmental and natural resources activities, problems, and goals.

E. The council shall submit a report to the governor and the legislature on or before March 31 of each year which shall contain a summary of the discussions and actions of the council and any recommendations for improvements in the management of natural resources and environmental activities by the executive branch.

F. The council shall not have authority to adopt rules or regulations, issue permits, licenses, registrations, variances, or orders, or supersede the authority granted by law to any department secretary to administer and direct the activities of their individual departments. It shall have no authority to enforce the provisions of this Subtitle or bring lawsuits on behalf of the state to enforce environmental statutes.

G. In the event there is a disagreement between the secretaries of two or more departments regarding any procedure, action, overlap, or conflict of responsibility which is not specifically provided for by law, the governor is authorized to make a final decision as to the responsibility of each department or agency and delegate to that agency the responsibility for taking the necessary action. Upon recommendation of the council, the governor is authorized temporarily to assign equipment, personnel, and resources from one department represented on the council to another department represented on the council to efficiently carry out the laws of this state relating to natural resources and the environment.

Added by Acts 1983, No. 411, § 1.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, this section, enacted by Acts 1983, No. 411, as R.S. 30:1066.2, was redesignated R.S. 30:1055 to conform with the amendments by Acts 1983, No. 97, semicolons were substituted for commas after "state", "branch", "functions assigned to it", "circumstances", and "agencies", and "setting goals" was substituted for "goal setting" on authority of R.S. 24:253.

CHAPTER 9. HAZARDOUS WASTE CONTROL LAW

Section

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2206. Contracting for hazardous waste site cleanup.

Library References

Health and Environment ⇐25.5(5), (5.5).
C.J.S. Health and Environment §§ 44 et seq., 61 et seq., 91 et seq.

§ 2171. Citation

This Chapter may be cited as the "Louisiana Hazardous Waste Control Law."

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

Landfarming moratorium: Acts 1983, No. 435 provided as follows:

"Section 1. There shall be a moratorium on the permitting, and creation of industrial off-site landfarming facilities for profit in Louisiana. The year shall begin at midnight on the first day of June, 1983, and shall end at midnight on the last day of April, 1984.

"Section 2. The purpose of the moratorium is to allow the state time to analyze and evaluate the adequacy, and safety of operating landfarm facilities for disposing of wastes.

"Section 3. The Environmental Control Commission shall not issue any permits or licenses to allow the creation of industrial off-site waste landfarming facilities for profit during the period of this moratorium.

"Section 4. The secretary of the Department of Natural Resources shall enforce the provisions of this Act.

"Section 5. The provisions of this Act shall apply only to parishes with a population of twenty-nine thousand to thirty-four thousand.

"The provisions of this Act shall not apply in the parish of Jefferson Davis."

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1131 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2171, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Cross References

Contaminating water supplies, see R.S. 14:58.
Exemplary damages for injuries caused by wanton or reckless disregard for public safety in the storage, handling, or transportation of hazardous or toxic substances, see C.C. art. 2315.3.

Law Review Commentaries

Louisiana environmental law and regulations. Charles S. McCowan, Jr., 29 La. Bar J. 171 (1981).

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

Notes of Decisions

Extent of local authority 1

1. Extent of local authority

Under provision of R.S. 33:1236, giving police juries authority to enact ordinance to require, prohibit, or regulate destruction, disposal, or burning of trash, garbage, leaves, limbs and branches, or "debris of any kind," hazardous waste attempted to be regulated by parish ordinance was not covered by term "debris of any kind," in view of R.S. 33:1236.6, giving five other parishes concurrent authority to regulate disposal of industrial waste, and in view of R.S. 30:1, R.S. 30:4, and R.S. 30:1101 et seq. (see, now, R.S. 30:2171 et seq.) establishing comprehensive state hazardous waste control program. Rollins Environmental Services of Louisiana, Inc. v. Iberville Parish Police Jury, App.1978, 365 So.2d 497, affirmed 371 So.2d 1127.

§ 2172. Policy and purpose

A. The legislature finds and declares that:

(1) The manufacture, refinement, processing, and treatment of petroleum, natural gas, raw chemicals, ores, and other natural and synthetic products is a basic and essential activity making a significant contribution to the economy of this state.

(2) This activity often produces byproducts and wastes of a character and in quantities that pose substantial present and potential danger to the health and safety of the citizens of this state and to the integrity of the environment unless such wastes and byproducts are transported, treated, stored, and disposed of in a prudent and responsible manner.

(3) Present state laws and regulations applicable thereto are inadequate to assure that necessary safeguards and practices are adhered to on a continuing basis in matters pertaining to the transportation, treatment, storage, and disposal of such hazardous wastes, which has resulted in substantial abuse of the environment, damage to private and public property and unnecessary endangerment of the health and safety of the citizens of this state.

B. In order to diminish the risks to which the citizens and environment of this state are being exposed it is in the public interest, and within the police power of the state, to establish a framework for the regulation, monitoring, and control of the generators, transportation, treatment, storage, and disposal of such hazardous wastes, and it is the declared purpose of this Chapter to authorize the development, implementation, and enforcement of a comprehensive state hazardous waste control program.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1132 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2172, of Chapter 9 of Subtitle II of Title 30.

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

For disposition of the sections of former Chapter 11 following their reorganization and

redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Law Review Commentaries

Environmental law—work of the legislature, 1978. 39 La.L.Rev. 246 (1978).

Notes of Decisions

Extent of local authority 2
Federal legislation 3
State jurisdiction 1

1. State jurisdiction

State has exclusive jurisdiction over regulation of hazardous waste. State v. Rollins Environmental Services of Louisiana, Inc., Sup. 1981, 398 So.2d 1122.

2. Extent of local authority

Under provision of R.S. 33:1236, giving police juries authority to enact ordinance to require, prohibit, or regulate destruction, disposal, or burning of trash, garbage, leaves, limbs and branches, or "debris of any kind," hazardous waste attempted to be regulated by parish ordinance was not covered by term "debris of any kind," in view of R.S. 33:1236.6, giving five other parishes concurrent authority to regulate disposal of industrial waste, and in view of R.S. 30:1, 30:4, and 30:1101 et seq. (see now, 30:2171 et seq.) establishing comprehensive state hazardous waste control program. Rollins Environmental Services of Louisiana, Inc. v. Iberville Parish Police Jury, App.1978, 365 So.2d 497, affirmed 371 So.2d 1127.

Federal and state governments have preempted field of hazardous waste regulation to exclusion of any ordinance enacted by a police jury to prohibit a person, firm, corporation or other commercial establishment from causing, suffering, allowing, or permitting any hazardous waste or any other land contaminants to be dumped, discharged, stored, injected or otherwise disposed of within the boundaries of the parish or any land within the confines of the parish. Id.

3. Federal legislation

Congressional purpose in establishing federal minimum standards governing generation, transportation and disposal of hazardous waste through enactment of the Clean Air Act (42 U.S.C.A. § 7401 et seq.) and the Water Pollution Control Act Amendments of 1972 (33 U.S.C.A. § 1251 et seq.) was to provide uniformity among the states in the field of hazardous waste disposal regulation. Rollins Environmental Services of Louisiana, Inc. v. Iberville Parish Police Jury, Sup.1979, 371 So.2d 1127.

§ 2173. Definitions

As used in this Chapter, the following terms shall have the meaning ascribed to them in this Section, unless the context of use clearly indicates otherwise:

(1) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste into or on any land or water so that such waste, or any constituent thereof, may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

~~(2) "Hazardous waste" means any waste, or combination of wastes, which~~ because of its quantity, concentration, physical, chemical, or ~~infectious~~ characteristics may cause or significantly contribute to ~~an increase~~ in mortality or an increase in serious irreversible ~~or incapacitating~~ reversible illness, or pose a substantial present ~~or potential~~ hazard to human health or the environment when ~~improperly~~ treated, stored, transported, disposed of, or otherwise ~~managed. Such definition shall be applied only to those wastes identified and~~

~~designated as such by the department, consistent with applicable federal laws and regulations.~~

(3) "Manifest" means the system and forms used for identifying the quantity, composition, origin, routing, and destination of hazardous wastes during its transportation from the point of generation to any point of disposal, treatment, or storage.

(4) "Storage" means the containment of hazardous waste on a temporary basis, for such time as may be permitted by regulations, in such a manner as not to constitute disposal of such hazardous waste.

(5) "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or render it nonhazardous, safer for transport, amenable for recovery or storage, or reduced in volume. The term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste to render it nonhazardous.

(6) "Transportation" means the movement of hazardous wastes from the point of generation or storage to the point of treatment, storage, or disposal by any means of commercial or private transport. The term does not apply to the movement of hazardous wastes on the premises of a hazardous waste generator or on the premises of a permitted hazardous waste treatment, storage, or disposal facility.

(7) "Processing, treatment, or disposal facility" means any facility or location where any treatment, incineration, processing, or deposition of hazardous waste occurs or is contained.

(8) "Waste" means any garbage, refuse, sludge from a waste 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, or agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under R.S. 30:2074, or source, special nuclear, or byproduct material as defined by R.S. 30:2103.

~~(9) "Abandoned site fund" shall mean the Abandoned Hazardous Waste Site Fund as created by Section 2205 of this Subtitle.~~

(10) "Pollution source" means the site or location of a discharge or potential discharge, including such surrounding property necessary to secure or quarantine the area from access by the general public.

~~(11) "Reusable material" means any waste material which is destined for~~ reuse or reprocessing, but which because of quantity concentration, physical, ~~chemical, or infectious characteristics may:~~

(a) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, or

(b) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed and which have been designated by the department as requiring special handling and tracking due to their hazardous characteristics and the danger caused by improper handling.

(12) "Transfer facility" means any transportation-related facility designed and constructed to be used exclusively for the handling of regulated hazardous wastes including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1980, No. 194, § 12; Acts 1982, No. 800, § 1, eff. Aug. 4, 1982; Acts 1984, No. 826, § 1, eff. July 13, 1984; Acts 1985, No. 669, § 1.

History and Source of Law

The 1980 amendment added "or is contained" in par. (7), and added pars. (9) and (10), defining "abandoned site fund" and "pollution source".

The 1982 amendment added par. (11).

The 1984 amendment rewrote par. (8), which prior thereto read:

"(8) 'Waste' means any material for which no use or reuse is intended and which is to be discarded."

The 1984 amendment also, in par. (11), inserted "waste" and deleted a comma following "quantity".

The subparagraph designations, as well as attendant capitalization and punctuation changes, in par. (11) of this section as amended in 1984 were made on authority of R.S. 24:253.

The 1985 amendment added par. (12).

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1133 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2173, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Also, on authority of R.S. 24:253, in par. (2), "(a)" and "(b)" were deleted, and a comma was inserted following "illness".

Cross References

Litter control, exclusion of hazardous waste as defined in this section, see R.S. 25:1102.

Law Review Commentaries

Developments in the law, 1981–1982: Environmental law. Joseph T. Bockrath, 43 La.L. Rev. 403 (1982).

Notes of Decisions

Hazardous waste 1

1. Hazardous waste

Criminal prosecution against corporation under parish ordinance for keeping and burning of substances offensive to smell and/or injurious to health did not infringe upon state's exclusive jurisdiction over regulation of hazardous waste where there was nothing in the record that the objectionable substances at the corporation were identified by Department of Natural Resources as "hazardous wastes" and there was no evidence that noxious odors stemmed from hazardous wastes. State v. Rollins Environmental Services of Louisiana, Inc., Sup.1981, 398 So.2d 1122.

§ 2174. Administration; interim authority

A. Except as may be otherwise specifically provided in this Chapter, the department shall have exclusive jurisdiction for the development, implementation, and enforcement of a comprehensive state hazardous waste control program consistent with the provisions of this Chapter and applicable federal laws and regulations.

B. The department may accept, operate under, and enforce all interim authority for hazardous waste control in the state, as such interim authority may become necessary or advisable pursuant to Public Law 94-580[1] and the regulations applicable thereto.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980.

1 42 U.S.C.A. § 6901 et seq.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1134 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2174, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

Notes of Decisions

Conflicting administrative powers 2
Parish roads 3
State jurisdiction 1

1. State jurisdiction

State has exclusive jurisdiction over regulation of hazardous waste. State v. Rollins Environmental Services of Louisiana, Inc., Sup. 1981, 398 So.2d 1122.

2. Conflicting administrative powers

Where various administrative powers granted Commission on Ethics for Public Employees to impose penalties or sanctions for violations of Code of Governmental Ethics (R.S. 42:1101 et seq.) did not apply to all state employees on equal basis, exercise of such powers could not be said to usurp exclusive jurisdiction of state agency or department, thus powers granted to Commission on Ethics for Public Employees do not infringe upon exclusive jurisdiction of Department of Natural Resources. Commission on Ethics for Public Employees v. IT Corp., App.1982, 423 So.2d 695, appeal after remand 453 So.2d 251, writ granted 458 So.2d 466, affirmed 464 So.2d 284.

3. Parish roads

Police juries may regulate parish roads as long as such regulations do not conflict with state or federal law. Op.Atty.Gen., No. 87-305, June 30, 1987.

§ 2175. Hazardous waste control program; time frame

On or before October 21, 1980,[1] the commission shall promulgate regulations implementing a comprehensive state hazardous waste control program.

~~The commission shall hold not less than three public hearings for the purpose~~ of receiving public input on the development of the regulations. Such regulations shall be promulgated after public hearing thereon in accordance with the Administrative Procedure Act, R.S. 49:950 et seq., and shall be consistent with the mandates of 42 USCA § 6901 et seq. and the minimum criteria hereinafter set forth.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1987, No. 607, § 1, eff. July 9, 1987.

[1] As appears in enrolled bill.

History and Source of Law

The 1987 amendment substituted "42 USCA § 6901 et seq." for "Public Law 94–580".

On authority of R.S. 24:253, "R.S. 49:950 et seq." was substituted for "R.S. 49:951 et seq.".

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1135 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2175, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2176. Hazardous Waste Advisory Board; created; powers and duties

A. (1) There is hereby created within the Department of Environmental Quality the Hazardous Waste Advisory Board, which shall be composed of five members who shall be appointed by the governor, one from each of the following disciplines:

(a) Geology.
(b) Medicine.
(c) Engineering.
(d) Law.

(2) Each appointment by the governor shall be submitted to the Senate for confirmation and every appointment confirmed by the Senate shall again be submitted by the governor to the Senate for confirmation every two years after the initial confirmation.

B. The board shall organize itself and elect such officers as it deems necessary, make its own rules and regulations, and prescribe its own procedures. It shall meet as often as its members deem necessary or as ordered by the chairman. It shall keep a record of its proceedings. Three members shall constitute a quorum for any meeting for the transaction of business.

C. The board shall have the following powers and duties:

(1) To prepare, in cooperation with the Louisiana Geological Survey, a geological and hydrological inventory of the state for purposes of determining areas of the state which may not be suitable for the siting of a hazardous ~~waste disposal facility.~~

(2) To establish criteria which must be met for determining the location of any hazardous waste disposal facility and for issuance of a permit at that location and to make recommendations for such criteria to the secretary for adoption.

(3) To conduct studies to determine future needs for hazardous waste disposal facilities in the state and to make recommendations to the secretary.

(4) To conduct any studies or investigations that the board considers to be necessary or proper to fulfill its duties under this Subtitle.

(5) To plan, encourage, and recommend appropriate methods for reducing the volume and types of hazardous waste disposed of in the state.

(6) To plan, encourage, and recommend the recovery and reuse of materials which might otherwise be disposed of as hazardous waste.

Added by Acts 1984, No. 795, § 1, eff. July 13, 1984.

History and Source of Law

On authority of R.S. 24:253, in subsec. A of this section as enacted in 1984, pars. (1) and (2) were designated, and the designation of former pars. (1) to (4) was changed to subpars. (a) to (d).

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1135.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2176, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Library References

Health and Environment ⇐6.
C.J.S. Health and Environment § 18.

§ 2177. Authority of the board to assess location

A. The board is hereby authorized and empowered to assess the impact of proposed hazardous waste disposal facilities on the environment. In making its assessment the board should determine whether or not the site proposed for the facility is in a location that is environmentally suitable. Reasons for a finding that the location is not environmentally suitable may include, but are not limited to, the following:

(1) There is leaching or a continuous discharge at or from the site.

(2) There is a probability that there will be contamination of an underground aquifer.

(3) There is a probability that leaching or a continuous discharge could occur at the site.

B. If the board finds that the location of a hazardous waste disposal facility is not environmentally suitable, it shall forward to the secretary its findings and recommendations which may include that another site or some

~~other method of disposal be utilized for waste to be disposed of at the~~ proposed site.

Added by Acts 1984, No. 795, § 1, eff. July 13, 1984.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1135.2 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2177, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2178. Impact assistance program; local infrastructure report

A. The board is authorized to establish a local impact assistance program to evaluate the impact of proposed hazardous waste disposal facility locations. This program shall provide assistance to local governments or to communities with planning for infrastructural needs and for mitigation of the impact of the location of a facility. It shall be authorized to procure funding for local impact assistance from state or federal sources or from private sources. The board shall also assist the parties in resolving disputes or points of contention with respect to the location of proposed facilities.

B. (1) The secretary may determine an additional fee schedule applicable to new commercial hazardous waste facilities not to exceed five percent of the hazardous waste permit application fee by rule in accordance with the Administrative Procedure Act, R.S. 49:950 et seq. A portion of this additional permit application fee shall be allocated to the local governmental subdivision for the preparation of an infrastructure assessment report as determined by the Hazardous Waste Advisory Board. When siting a new commercial facility, the board shall determine whether the local governmental subdivision should be compensated for any reasonable and necessary cost for preparation of the infrastructure report. The purpose of the report shall be to adequately assess the capability of the local communities to effectively manage and monitor the ongoing operations of the proposed facility and to respond to emergencies which may potentially threaten the health, safety, or welfare of the communities or any of their inhabitants. The report may propose alternate siting for the facility and propose actions to mitigate any infrastructure deficiencies found by the report.

(2) With regard to the siting area of the proposed facility, the report may include a determination of whether or not:

(a) The area is environmentally sensitive. An area may be deemed environmentally sensitive for the following nonexclusive reasons:

(i) The area is a wetland or immediately adjacent to a wetland.

(ii) The area is in close proximity to any wildlife management area or wildlife preserve.

~~(iii) The area is, or is adjacent to, any aquifer recharge zone.~~

(b) The area poses undue health risks because of potential human exposure. An area may be deemed to pose undue health risks for the following nonexclusive reasons:

(i) Proximity of the area to schools or day care centers.

(ii) Proximity of the area to hospitals or nursing homes.

(iii) Proximity of the area to any facility or structure used to store or contain any foodstuffs for human or animal consumption.

(iv) Proximity of the area to public buildings or entertainment facilities.

(v) Proximity to a residential area.

(vi) Proximity to a prison.

(c) Siting of the facility in the area may reasonably be determined to preclude the economic development of the area by businesses or industries because of undue risk associated with establishing such operations of such entities adjacent to said facility.

Added by Acts 1984, No. 795, § 1, eff. July 13, 1984. Amended by Acts 1986, 1st Ex.Sess., No. 22, § 1, eff. Dec. 24, 1986.

History and Source of Law

In the text of this section as enacted in 1984, in the first sentence, "impact assistance" was substituted for "assistance impact" on authority of R.S. 24:253.

The 1986 amendment added "; local infrastructure report" to the section heading, designated the existing language of the section as subsec. A, and added subsec. B.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1135.3 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2178, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

Cross References

Consideration of report provided for by this section, see R.S. 30:2182.

§ 2179. Waste needs assessed; board and secretary to make determinations

A.(1) Not later than January 1, 1988, the secretary of the Department of Environmental Quality in conjunction with the Hazardous Waste Advisory Board shall begin deliberations concerning the volume and types of solid and hazardous waste reduced, generated, transported, managed, recycled, disposed of or otherwise handled in Louisiana. The secretary and board, concurrent with their deliberations, shall deliberate concerning the capacity of Louisiana to safely and judiciously reduce, generate, transport, manage, recycle or dispose of these wastes.

(2) Not later than January 1, 1989, the secretary shall make a determination, with the counsel of the board, relative to the permitted capacity of Louisiana to safely reduce, transport, manage, recycle, dispose of or otherwise safely handle the solid and hazardous wastes generated within Louisiana.

~~B.(1) Upon determining the volume and types of solid and hazardous waste~~ generated, reduced, transported, managed, recycled, disposed of or otherwise handled within Louisiana, and upon determining the capacity necessary for Louisiana to safely and judiciously reduce, transport, manage, recycle, or dispose of these wastes, the secretary shall determine the total permitted capacity necessary to manage or dispose of solid and hazardous waste in Louisiana.

(2) The secretary shall ensure that the expansion or modification of existing treatment, storage, or disposal facilities needed to promote improvements in handling, treatment, destruction, or disposal of wastes in Louisiana, and construction of new facilities which would result in the generation of additional waste in Louisiana, be provided for in determining the capacity limits to be permitted. The secretary shall allow additional capacity on a case by case basis when necessary to install facilities with additional capacity for future growth and expansion or for improving, destroying, or disposing of waste generated in the state. The secretary shall allow such additional capacity in a manner which shall encourage and shall not preclude the attainment or maintenance of state-of-the-art waste management capabilities.

(3) The secretary shall ensure that sufficient validly permitted waste handling, treatment, destruction, and disposal capacity exists to safely and efficiently manage or dispose of waste substances in emergency situations or waste substances originating from in-state waste sites.

(4) The secretary shall not issue any permits or licenses for the handling, treatment, destruction, and disposal of solid or hazardous waste which would increase the total permitted capacity of Louisiana to manage or dispose of such waste in an amount in excess of fifteen percent greater than the necessary total permitted capacity of this state as determined by the secretary pursuant to Paragraph (1) of this Subsection. The secretary shall reassess on a quarterly basis the capacity necessary to handle, treat, destroy, manage, and dispose of wastes generated in Louisiana and shall insure that there is sufficient capacity to maintain the capacity within Louisiana to so handle, treat, destroy, manage, and dispose of these wastes at the level and in that amount as required in this Paragraph. However, the secretary may vary the total permitted capacity above the fifteen percent limitation for any year by rule adopted in accordance with the Administrative Procedure Act, R.S. 49:950 et seq., provided the secretary finds, based on reliable evidence in the record of a public hearing on the proposed rule, that failure to increase the total permitted capacity above the limitation required by this Section will result within one year in insufficient capacity for the proper handling, treatment, storage, and disposal of solid or hazardous waste generated in the state.

C. The provisions of this Section shall not prohibit the issuance of a permit for the treatment, storage, or disposal of solid waste for a single or multiparish system, the application for which was submitted to the Department of Environmental Quality for approval on or before July 1, 1988, or

hazardous waste, the application for which was submitted to the Department of Environmental Quality for approval on or before July 1, 1987.

Added by Acts 1987, No. 875, § 1.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1135.4 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2179, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2180. General powers and duties of the secretary

A. In addition to any other authority or responsibility vested in him by this Chapter, the secretary shall have the following powers:

(1) From time to time to adopt, amend, or repeal the standards and regulations authorized by this Chapter; however, all rules and regulations made pursuant to this Part shall be submitted to the natural resources committees and shall be approved by the committees within fifteen days of the submission of these rules and regulations to the committees. If the committees should object, they shall do so in writing to the governor. The governor shall have five days in which to disapprove the action taken by the committees. If the action of the committees is not disapproved by the governor within five calendar days from the day the committee report is delivered to him, such proposed rule change shall not be adopted by the agency until such proposed rule has been changed or modified and has been found acceptable by the committees or has been approved by the legislature by concurrent resolution. If however, the committees make no determination with respect to a proposed rule change as provided in R.S. 49:953 or if the governor disapproves the action by the committees as provided herein, the proposed rule change may be adopted.

(2) To issue, continue in effect, revoke, modify, or deny in accordance with regulations hazardous waste transporter licenses and hazardous waste treatment, storage, and disposal facility permits and schedules of compliance.

(3) To exercise all incidental powers necessary to assure that the state program is consistent with any federal laws or regulations applicable thereto.

(4) To determine and set reasonable schedules of compliance with performance guidelines for the conformance of transportation equipment and treatment, storage, and disposal facilities with the operating standards and rules and regulations of the secretary.

(5) To adopt rules and regulations relative to tracking and regulating the generation, transportation, or disposition of reuseable material.

(6) To regulate all surface and waste storage facilities incidental to hazardous waste injection wells, in such a manner as to prevent the escape of the waste into any area surrounding the surface facility.

(7) To regulate all hazardous waste transfer facilities in such a manner as to prevent the escape of waste into any area surrounding the transfer facilities.

(8) To adopt rules and regulations which set forth standards applicable to persons who produce, burn for purposes of energy recovery, distribute, or market fuel containing hazardous waste. This Subparagraph shall not apply to petroleum refinery wastes containing oil which are converted into petroleum coke at the same facility at which such wastes were generated, unless the resulting coke product would exceed one or more characteristics by which a substance would be identified as a hazardous waste. Regulations adopted pursuant to this Subparagraph, applicable to petroleum refinery and production wastes which result from normal petroleum refining, production and transportation practices, and which are classified as recyclable materials by the United States Environmental Protection Agency, shall be consistent with federal regulations applicable thereto.

B. The office of solid and hazardous waste is hereby directed to formulate plans and procedures for testing, sampling, analysis, containment, control, and abatement of sites which it suspects have been abandoned or which are declared abandoned under the provisions of R.S. 30:2204.

C. In order to achieve and maintain uniform and comprehensive statewide regulation in conformity with the provisions of this Chapter, the state shall have exclusive jurisdiction over the generation, transportation, or disposal of hazardous wastes, and no subordinate political subdivision of this state shall enact, pass, or otherwise approve any ordinance or other regulatory measure regulating or purporting to regulate any activity pertaining to the generation, transportation, or disposal of hazardous wastes. Nothing contained herein shall be construed to deny such local body authority over the siting of facilities pursuant to any general land use planning, zoning, or solid waste disposal ordinances.

D.(1) The secretary in conjunction with the state health officer shall, no later than July 1, 1989, adopt rules in accordance with the Administrative Procedure Act,[1] to regulate the packaging, storage, treatment, transportation, and disposal of infectious waste. The rules shall conform to the recommendations of the United States Environmental Protection Agency regarding infectious waste management. "Infectious waste" means waste which contains pathogens with sufficient virulence and quantity so that exposure to the waste by a susceptible host could result in an infectious disease. The rules required herein shall become effective on July 1, 1989.

(2) The rules adopted pursuant to this Subsection shall provide for the following:

(a) The designation of waste categories and a determination of which waste categories are considered to be infectious waste.

(b) The separation of infectious waste at the point of origin for management and treatment purposes.

(c) The use of distinctive containers or plastic bags with the universal biological hazard symbol, as appropriate. The packaging and method of

packaging for infectious waste are to be appropriate for the different types of wastes and are to maintain their integrity during storage and transportation.

(d) The storage of infectious waste for a minimal amount of time in a clearly marked limited access area free of rodents and vermin.

(e) The transportation and handling of infectious waste in a manner that avoids rupture of the packaging and any leaking of the waste from the packaging or the transporter.

(f) The treatment of infectious waste by steam sterilization, incineration, thermal inactivation, chemical disinfection, irradiation sterilization, or any other method, technique, or process designed to change the biological character or composition of the waste and the use of biological indicators to monitor the treatment.

(g) The disposal of infectious waste that has been treated in an appropriate manner and in accordance with law, including the rendering of body parts unrecognizable before land disposal.

(h) Permits and permit fees in order to effectuate the provisions of this Subsection.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1980, No. 194, § 13; Acts 1980, No. 748, § 1; Acts 1982, No. 800, § 1, eff. Aug. 4, 1982; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1984, No. 795, § 1, eff. July 13, 1984; Acts 1985, No. 669, § 1; Acts 1986, No. 781, § 1, eff. July 10, 1986; Acts 1987, No. 615, § 1, eff. July 9, 1987; Acts 1988, No. 962, § 1, eff. July 27, 1988.

[1] R.S. 49:950 et seq.

History and Source of Law

Acts 1980, No. 194, § 13 added subsec. B.

Acts 1980, No. 748, § 1 also added a subsec. B, concerning exclusivity of jurisdiction, which subsection was redesignated as subsec. C on authority of R.S. 24:253.

The 1982 amendment, in subsec. A, added par. (5).

The 1983 amendment, in the section heading, substituted "secretary" for "commission"; in the introductory sentence of subsec. A, substituted "him" for "it", and substituted "secretary" for "commission"; in par. (1) of subsec. A, substituted "however," for "provided, however, that", substituted "committees" for "committee", and deleted commas following "days", "committees", "If", and "49:953"; in par. (4) of subsec. A, substituted "with" for "and" following "compliance", added a comma following "storage", and substituted "secretary" for "commission"; added par. (6) of subsec. A; in subsec. B, inserted "of solid and hazardous waste", and substituted "R.S. 30:1148" for "Section 1148"; and, in subsec. C, substituted ", or" for "and/or" following "transportation", and added a comma following "wastes".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

The 1984 amendment, in subsec. A, in the first sentence, substituted "for" for "or"; and rewrote par. (6) of subsec. A, which prior thereto read:

"(6) To regulate by rules the drilling, casing, cementing, disposal interval, monitoring, plugging, and permitting of disposal wells which are used to inject hazardous waste into the subsurface and to regulate all surface and storage waste facilities incidental to hazardous waste injection wells, in such a manner as to prevent the escape of the waste into an underground water aquifer or into oil or gas strata, and he may require reasonable bond with security for the performance of the duty to plug each abandoned well or each well which is of no further use."

device to be used whenever there is a new rule regulation, a change in the statute, or a need to revoke a special rule as a result of a change in circumstances. Environmental Control Com'n v. Browning-Ferris Industries, Chemical Services, Inc., Sup.1984, 450 So.2d 1292.

4. Site closure

Absent a prohibition against the creation and the use of secured landfill cells at a hazardous waste treatment, storage and disposal facility owned and operated by corporate defendant, and absent serious and imminent threat to the environment and health and safety, the Environmental Control Commission could not close down the site, except through a revocation proceeding, or through enforcement proceedings if there was a specific finding of a violation of some statute, rule, regulation or provision of some permit, order or schedule. Environmental Control Com'n v. Browning-Ferris Industries, Chemical Services, Inc., Sup.1984, 450 So.2d 1292.

5. Review

The Supreme Court could not allow the continuation of the operations of a polluting facility for the want of a strict adherence to procedural rules and, for that reason, would independently examine the record, including transcripts of the testimony, the technical reports, and other evidence, to determine if there had been a violation of the rules and regulations, notwithstanding that the Environmental Control Commission had not properly convoked a violation proceeding. Environmental Control Com'n v. Browning-Ferris Industries, Chemical Services, Inc., Sup.1984, 450 So.2d 1292.

§ 2181. Public hearings; findings of fact

The office shall conduct hearings for the purpose of factfinding, receiving public comments, or conducting inquiries and investigations in connection with the processing of applications for permits or licenses for commercial hazardous waste treatment, storage, or disposal facilities which receive and treat, store, or dispose of waste for a fee or other consideration. The hearings shall be held in the locale where the applicant seeks to dispose of, treat, or store hazardous wastes, for the purpose of affording to members of the public the opportunity to present their views, opinions, and information. Such hearings shall be conducted in an orderly but expeditious manner. Any person shall be permitted to submit oral or written statements and to present recommendations. Any person may present written statements for the administrative record prior to the time that the record is closed to public submissions. All such hearings shall be recorded verbatim. All written statements, charts, tabulations, and similar data offered in evidence at the hearing shall, subject to exclusion because of redundancy, be received in evidence and shall constitute a part of the administrative record. The transcript together with all evidence introduced at the hearing shall constitute a part of the administrative record. The person conducting the hearing on behalf of the office shall prepare a report of the proceedings which shall become a part of the record and which shall be considered and addressed by the commission or secretary, or in the case of disposal by means of subsurface injection, by the assistant secretary of the office of conservation.

Added by Acts 1982, No. 429, § 1. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11, a section designated as R.S. 30:1136.1, enacted by Acts 1982, No. 447, § 1, relating to recommendations on applications for licenses, permits, schedules, guidelines, and orders, was redesignated as R.S. 30:1136.2 (now R.S. 30:2182) on authority of R.S. 24:253.

The 1983 amendment inserted a comma following "store"; deleted commas following

"statements" and "transcript"; inserted "or secretary" following "commission"; and substituted "assistant secretary" for "commissioner".

In the section as amended in 1983, a comma was added following "wastes" on authority of R.S. 24:253.

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1136.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2181, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

Library References

Health and Environment ⇐25.5(9).
C.J.S. Health and Environment § 65 et seq.

§ 2182. Office to make recommendations

In connection with each application for any licenses, permits, schedules of compli .nce, performance guidelines, and orders for the disposal or treatment of haz ardous wastes for commercial disposal facilities to be issued by the commission or secretary, the assistant secretary shall make recommendations based upon evidence, facts, data, and any other information obtained by the office in connection with its duties with respect to such application, including information obtained at public hearings conducted by the office and shall include proposed findings of fact. Additionally the secretary shall consider the infrastructure assessment report as provided for by R.S. 30:2178(B), provided that such report is made available to the secretary within a reasonable amount of time as determined by the secretary. The recommendations shall be made to the commission or secretary, or in the case of disposal by means of subsurface injections, to the assistant secretary of the office of conservation. The commission, the secretary, or the assistant secretary of the office of conservation, as the case may be, shall consider the recommendations presented by the office as herein required in making its determination with respect to such application.

Added by Acts 1982, No. 447, § 1. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1986, 1st Ex.Sess., No. 22, § 1, eff. Dec. 24, 1986.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11, this section, enacted as R.S. 30:1136.1 by Acts 1982, No. 447, § 1, was redesignated as R.S. 30:1136.2 on authority of R.S. 24:253.

The 1983 amendment deleted a comma following "facilities"; inserted "or secretary"; and inserted "the secretary,".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

The 1986 amendment inserted the sentence pertaining to consideration of the infrastructure assessment report.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1136.2 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2182, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, citations of particular sections were changed to reflect their redesignation.

§ 2183. Notice; permits and licenses; enforcement; violations; penalties; notification

A. No later than ninety days after the effective date of the regulations authorized by this Chapter, every person not otherwise exempt who generates, transports, or desires to transport in the state any hazardous waste or who owns, operates, or desires to own or operate a treatment, storage, transfer, or disposal facility which handles hazardous wastes within the state shall file with the secretary or commission a notification stating the nature and location of the activity conducted or desired to be conducted and, if required by regulations, a request for an application for any necessary licenses, permits, schedules of compliance, or performance guidelines. Transfer facilities which are part of facilities that generate, transport, or dispose of hazardous waste which have already notified or applied for any necessary permits, where the notice or application describes the transfer facility adequately, shall not be required to file an additional notification or permit application to assure compliance with this Section.

B. It shall be unlawful to initiate or continue the generation, transportation, treatment, storage, or disposal of hazardous wastes after the time period provided in Subsection A of this Section except in compliance with the notice requirements thereof.

C. Upon receipt of the notices required in Subsection A of this Section or as soon as practicable thereafter, the secretary shall initiate the procedures as required by this Chapter and the regulations applicable thereto for the issuance or denial of permits and licenses and the establishment of schedules of compliance and performance guidelines for facilities and equipment.

D. All facilities which have interim status shall comply with all applicable operating standards and shall comply with all regulatory requirements regarding the application for standard permits for such facilities. It shall be unlawful for any person who has received a request for submission of an application for a standard permit from the secretary or commission to initiate or continue the treatment, storage, or disposal of hazardous waste under interim status, unless such person submits an application in accordance with applicable regulations within the time required by the secretary or commission for such submission. The interim status of any facility which fails to comply with this Subsection shall be subject to revocation by the secretary or commission. The interim status of any existing facility shall not exceed two

years beyond the effective date of this Subsection unless extended by order of the secretary.

E. Upon the issuance of a license or permit or the establishment of a schedule of compliance or performance guidelines, it shall be unlawful to transport, treat, store, or dispose of hazardous wastes except in accordance with the terms and conditions thereof and the regulations applicable thereto.

F. Except as provided in Subsection G of this Section, enforcement of this Chapter and the rules and regulations promulgated hereunder shall be in accordance with R.S. 30:2025.

G. (1) Any person who willfully or knowingly discharges, emits, or disposes of any substance in contravention of any provision of this Chapter or any regulations or of any permit or license terms and conditions adopted in pursuance thereof, or any person who otherwise knowingly violates any provision of this Chapter, shall, upon conviction be subject to a fine of not more than one hundred thousand dollars per day of violation and costs of prosecution, or imprisonment at hard labor for not more than ten years, or both.

(2) Any person who knowingly transports, treats, stores, disposes of, or exports any substance in contravention of any provisions of this Chapter or the regulations or of any permit or license terms and conditions adopted in pursuance thereof, or any person who otherwise knowingly violates any provisions of this Chapter, in such manner that he knows, or should have known, at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than two hundred fifty thousand dollars per day of violation and costs of prosecution, or imprisonment at hard labor for not more than fifteen years, or both.

H. No person shall tamper with or cause to be tampered with any hazardous waste container or the contents thereof, shall discharge or cause to be discharged the contents of said container between the point of origin and point of destination listed in the manifest, or shall discharge or cause to be discharged the contents of said container at any location other than that for which it is permitted unless ordered to do so by the Department of Environmental Quality or otherwise allowed by this Subtitle and rules or regulations promulgated thereunder. Any person willfully violating this Subsection shall be subject to the civil and criminal penalties provided by this Chapter.

I. Whenever the owner or operator of any active site or other facility obtains information indicating that hazardous waste is leaching, spilling, discharging, or otherwise moving in, into, within, or on any land or water, such person shall notify the office in accordance with regulations to be adopted. This notification requirement shall apply to leaching, spilling, discharging, or moving of hazardous waste occurring hereafter although the hazardous waste was heretofore present at the site or facility.

J. No person shall operate an incinerator at a commercial facility that accepts hazardous waste or hazardous waste products for a fee, or a recycling

~~process at a commercial facility which recycles hazardous waste to produce~~ aggregates and that accepts hazardous waste or hazardous waste products for a fee, in a manner ~~which increases~~ the volume of the hazardous waste or ~~hazardous waste products received.~~

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1980, No. 194, § 14; Acts 1981, No. 246, § 1; Acts 1982, No. 146, § 1; Acts 1982, No. 797, § 1, eff. Aug. 4, 1982; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1983, No. 459, § 2, eff. July 6, 1983; Acts 1984, No. 669, § 1; Acts 1985, No. 337, § 1; Acts 1985, No. 669, § 1; Acts 1988, No. 730, § 1.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

As originally enacted, the references in subsec. E to R.S. 30:1073 and R.S. 30:1073(C) referred instead to R.S. 30:1072 and R.S. 30:1072(C), respectively. Prior to the 1980 amendment "R.S. 30:1073" was substituted for "R.S. 30:1072" and "R.S. 30:1073(C)" for "R.S. 30:1072(C)" on authority of R.S. 24:253. The 1980 amendment, purporting to amend subsec. E, made no other changes but minor punctuation corrections.

The 1981 amendment added subsec. G.

Acts 1982, No. 146, rewrote the first sentence of subsec. F, which had read: "Any person who knowingly violates any provision of this Part, or any written order or regulation in pursuance thereof, shall upon conviction, be subject to a fine of not more than twenty-five thousand dollars for each day of violation, or to imprisonment not to exceed one year, or both."; and deleted the second sentence of subsec. F, which had read: "If the conviction is for a violation committed after a first conviction of such person under this Subsection, punishment shall be by a fine of not more than fifty thousand dollars per day of violation, or by imprisonment for not more than two years, or both."

Acts 1982, No. 797, in subsec. E, inserted "Except as provided in Subsection F of this Section," and deleted "; however, failure to take corrective action within the time specified in a compliance order issued under R.S. 30:1073(C) shall render a violator liable for a civil penalty to be assessed by the commission, of not more than twenty-five thousand dollars for each day of continued noncompliance, and the commission may suspend or revoke any permit, compliance order, license, or variance which has been issued to the violator" following "R.S. 30:1073".

Acts 1983, No. 97, § 1, eff. Feb. 1, 1984, in subsec. A, deleted a comma following "exempt", substituted a comma for "in the state, or who" following "generates", deleted "assistant" preceding "secretary", and substituted "and," for "or desire to be conducted, and" following "conducted"; in subsec. C, substituted "secretary" for "commission"; in subsec. G, deleted "nor" preceding "discharge", substituted "or" for "nor" preceding "discharge", and substituted "Department of Environmental Quality" for "office of environmental affairs,".

In subsec. A, as amended by Acts 1983, No. 97, § 1, commas were inserted following "wastes" and "state" on authority of R.S. 24:253.

Acts 1983, No. 459, § 1, added subsec. H.

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

The 1984 amendment, in subsec. A, substituted "waste" for "wastes," following "transport in the state any hazardous", and deleted a comma following "within the state"; in subsec. B, deleted a comma following "Section"; inserted a new subsec. D; redesignated former subsecs. D to H as subsecs. E to I; in current subsec. E, deleted a comma following "permit"; in current subsec. G, deleted commas following "Part" in two places, following "regulations", and following "thereof"; in current subsec. H, inserted "shall" following "listed in the

manifest, or"; and in current subsec. I inserted a comma following "within".

On authority of R.S. 24:253, in the text of this section as amended in 1984, in subsec. D, a comma was inserted following "interim status"; in subsec. F, "Subsection G" was substituted for "subsection F"; and in subsec. G, commas were inserted following "thereof", preceding "shall", and following "shall".

Acts 1985, No. 337, § 1, designated par. G(1); in par. G(1), substituted "or any regulations or of any" for "of the regulations or of the"; and, added par. G(2).

Acts 1985, No. 669, § 1, in the first sentence of subsec. A, following "a treatment, storage,", inserted "transfer," and added the second sentence of subsec. A.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1137 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2183, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

The 1988 amendment added subsec. J.

Notes of Decisions

Duties of site owners 1

1. Duties of site owners

Owner of hazardous waste site is required by Environmental Affairs Act, LSA-R.S. 30:1051 et seq. (see, now, R.S. 30:2001 et seq.) to bring facility into compliance with current law and regulations and to obtain permit for disposal of hazardous waste, or to close the site. Op. Atty.Gen., No. 81-842, Aug. 21, 1981.

§ 2183.1. Commercial hazardous waste recycling and incineration facilities; standards and criteria for operation; permits and licenses

A. Each commercial hazardous waste incineration facility that accepts hazardous waste or hazardous waste products for a fee, and each commercial recycling or resource recovery facility which recycles hazardous waste to produce aggregates and that accepts hazardous wastes or hazardous waste products for a fee, shall be strictly subject to the Louisiana Hazardous Waste Control Law and any rule or regulation adopted thereunder and any permit, license, or schedule of compliance required thereunder.

B. The secretary shall establish, by rule, within one hundred and eighty days from September 9, 1988, requirements and operating standards for all commercial hazardous waste incineration facilities that accept hazardous waste or hazardous waste products for a fee, and for all commercial recycling and resource recovery facilities which recycle hazardous waste to produce aggregates and that accept hazardous waste or hazardous waste products for a fee. The rules shall be established for each category of facility under the Louisiana Hazardous Waste Control Law. The standards and requirements shall include, but shall not be limited to:

(1) Permit procedures for such facilities.

(2) Air emission standards based on the best demonstrated available technology, minimum destruction and removal efficiency for hazardous constituents no less restrictive than national performance standards, trial burn requirements, stack emission monitoring requirements, and automatic feed cutoff systems and procedures.

(3) Analysis of all hazardous waste and hazardous waste products prior to incineration, recycling, or use, including the definition, classification, or identification of those products or residuals produced by such commercial facilities which are waste or hazardous waste.

(4) Inspection requirements for all equipment at such commercial facilities.

(5) Discharge restrictions and standards on wastewaters produced as a result of treatment or processing of hazardous waste or hazardous waste products by such commercial facilities.

(6) Auditing procedures and requirements for the sale of any recycled products or residuals produced by such commercial facilities.

Added by Acts 1988, No. 730, § 1.

History and Source of Law

In this section as enacted in 1980, "September 9, 1988" was substituted for "the effective date of this Section" in the introductory paragraph of subsec. B and "on" was inserted between "based" and "the best" in par. B(2), all on authority of R.S. 24:253.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted by Acts 1988, No. 730, § 1 as R.S. 30:1137.3 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2183.1, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2184. Commercial hazardous waste recycling and resource recovery facilities; standards

A. Without exception and irrespective of any limiting provision thereof, commercial recycling and resource recovery facilities, including any facility heretofore determined to be a recycling or resource recovery facility, which accept hazardous waste or hazardous waste products for a fee and which as a part of their process subjects hazardous wastes or hazardous waste products to combustion to accomplish recovery or recycling of materials or energy, shall be strictly subject to the provisions of the Louisiana Hazardous Waste Control Law and any rule or regulation adopted thereunder or any permit, license, order, or schedule of compliance required thereunder. The purpose of this Section is to extend the Louisiana Hazardous Waste Control Law to provide specifically for the inclusion of all commercial recycling and resource recovery facilities, including any facility heretofore determined to be a recycling or resource recovery facility, which accept hazardous waste or hazardous waste products for a fee and which as a part of their process subjects hazardous wastes or hazardous waste products to combustion to accomplish recovery or recycling of materials or energy.

B. The secretary shall, within one hundred and eighty days of July 19, 1988, amend the rules and regulations promulgated under the Louisiana Hazardous Waste Control Law or any permit, license, order, or schedule of compliance, as necessary, to establish standards for commercial recycling and resource recovery facilities, including any facility heretofore determined to be a recycler or resource recovery facility, which accept hazardous waste or

~~hazardous waste products for a fee and which as a part of their process~~ subjects hazardous wastes or hazardous waste products to combustion to accomplish recovery or recycling of materials or energy. These standards can be no less restrictive than general facility standards for hazardous waste treatment, storage, and disposal facilities, including requirements concerning emergency procedures, waste analysis, manifest of hazardous wastes, inspection procedures, closure, and financial assurance and shall apply irrespective to the purpose of burning, whether for energy recovery, materials recovery, destruction, or some other purpose. Additionally, any rules or regulations promulgated pursuant to this Section shall, at a minimum:

(1) Require the development of a detailed trial burn plan by such facilities. The secretary shall designate those Principal Organic Hazardous Constituents (POHCs) in waste or waste products that are to be accepted by the facilities, are considered the most difficult to destroy, and are present in significant concentrations; and shall specify one or more of these hazardous constituents to be monitored during the trial burn. A trial burn conducted in compliance with this Section and under the supervision of the secretary after July 1, 1988, and which meets all the requirements herein provided shall be deemed in compliance herewith. The following, at a minimum, must be monitored during the trial burn:

(a) The exhaust gas must be analyzed for emissions of each POHC and for emissions of oxygen and hydrogen chloride.

(b) The destruction and removal efficiency (DRE) must be computed for each POHC.

(c) The emission of particulates and carbon monoxide must be quantified.

(d) The fugitive emissions from the boiler or furnace must be identified.

(2) Require a permit for the operation of the facility which assures, at a minimum, a destruction and removal efficiency of 99.99 percent; and that specifications be set for:

(a) Continuous monitoring of combustion temperature.

(b) Continuous monitoring of carbon monoxide concentration.

(c) Combustion gas velocity.

(d) Fugitive emissions.

(e) Automatic waste feed cut-off.

(3) Define, classify, or otherwise identify those products produced by a facility subject to such rules and regulations which are waste or hazardous waste.

(4) Establish requirements for the manifest of any products produced by such facilities or the materials from which such products are processed which are defined, classified, or otherwise identified as hazardous waste pursuant to Paragraph (3); and establish auditing requirements and procedures for the ~~sale of any recycled products or residuals produced by such facilities, includ~~

ing receipts or official state or federal tax documents, as necessary to verify any such transactions.

(5) Establish restrictions and standards on the discharge of any wastewaters.

Added by Acts 1987, No. 907, § 1. Amended by Acts 1988, No. 874, § 1.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1983, No. 260, § 1, enacted R.S. 30:1137.1, relating to the importation of hazardous waste from foreign countries, which was redesignated as R.S. 30:1140.2 (now, R.S. 30:2191), Acts 1983, No. 694, § 1, enacted R.S. 30:1137.1, relating to hazardous wastes from foreign nations, which was redesignated as R.S. 30:1140.1 (now R.S. 30:2190), Acts 1987, No. 881, § 1, enacted R.S. 30:1137.1, relating to hazardous waste cooperatives, which was redesignated as R.S. 30:1137.2 (now, R.S. 30:2185), and Acts 1983, No. 718, § 1, enacted R.S. 30:1137.1, relating to monitoring of drinking water wells, which was redesignated as R.S. 30:1138.1 (now R.S. 30:2187), all redesignations effected pursuant to authority of R.S. 24:253.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1137.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2184, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

The 1988 amendment rewrote this section and its heading, which previously read:

"§ 1137.1. Standards for industrial furnaces"

"A. The office of solid and hazardous waste shall promulgate standards applicable to any nonpermitted industrial furnaces that burn hazardous waste to facilitate, or in conjunction with, recycling processes or energy reclamation. The standards herein required at a minimum shall require owners and operators of such facilities to monitor the combustion efficiency and emissions of such furnaces, and to operate the units in a manner which will maintain steady-state combustion conditions sufficient to protect human health and the environment."

"B. An exemption shall be provided for those industrial furnaces that only burn used oil. As used in this Section, "used oil" shall mean any oil that has been refined from crude oil, used, and as a result of such use, is contaminated by physical or chemical impurities to the extent that it can no longer be used for its intended purpose. Wastes that contain only oils that have not been used, such as virgin fuel oil storage tank bottom clean-out wastes, are not used oil unless they are mixed with used oil."

In this section as amended in 1988, "July 19, 1988" was substituted for "the effective date of this Section" and a comma was inserted following "license, order" in subsecs. A and B, all on authority of R.S. 24:253.

§ 2185. Hazardous waste cooperatives

A. The secretary may license facilities, which are owned and operated by intrastate hazardous waste cooperatives for handling, transfer, storage, treatment, or disposal of hazardous waste in accordance with requirements of law and the regulations promulgated by the department.

B. Intrastate hazardous waste cooperatives consist of individual businesses, industries, associations, and allied businesses and industries located in the state of Louisiana which generate hazardous waste in the state of Louisiana of a similar nature and quality so as to be compatible for efficient, combined handling, transfer, storage, treatment, or disposal, except that no cooperative may admit to membership, any person, business, corporation, or association that is engaged for a fee or other consideration, in the business of waste transportation, treatment, disposal, or transfer.

C. Any facility owned or operated by or on behalf of such cooperative shall not accept hazardous waste except from those members of the cooperative. No such cooperative shall accept any waste generated outside of the state of Louisiana or generated by a nonmember of such cooperative. Such facility shall not, for the purposes of this Subtitle, be a commercial facility; however, such facility shall not be subject to any less standards and requirements than those provided for the operation of any similar commercial facility, provided however that prior to licensing of any such cooperative facility a public hearing shall be conducted in conformity with the same laws and regulations governing similar such commercial waste facilities.

D. No such cooperative shall begin accepting any waste without having signed its cooperative agreement with the Department of Environmental Quality. No such cooperative shall receive any waste from new or additional members of such cooperative without having first notified the Department of Environmental Quality thirty days prior to the acceptance of such waste.

E. The secretary shall adopt rules in accordance with the Administrative Procedure Act [1] to provide for:

(1) The requirements, licensing, procedure, and designation of intrastate hazardous waste cooperatives.

(2) The licensing of facilities owned or operated by or on behalf of any such cooperatives.

(3) Licensing fees.

Added by Acts 1987, No. 881, § 1.

[1] R.S. 49:950 et seq.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, this section, added by Acts 1987, No. 881, § 1 as R.S. 30:1137.1, was redesignated as R.S. 30:1137.2 on authority of R.S. 24:253.

On authority of R.S. 24:253, in subsec. E of this section, as enacted in 1987, the paragraph designations were inserted; a colon was inserted following "for"; "to provide for" was deleted following "waste cooperatives"; and "and to provide for" was deleted following "such cooperatives"; and periods were substituted for semi-colons following "cooperatives" in pars. E(1) and E(2).

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1137.2 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2185, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

§ 2186. Identification of hazardous wastes; exemptions

A. The secretary shall develop, consistent with federal regulations, objective criteria for identifying characteristics of hazardous wastes and for listing the hazardous wastes which shall be subject to the provisions of this Chapter.

B. Radioactive products and byproducts regulated by the United States Nuclear Regulatory Commission or any successor thereto shall be exempted

~~from the provisions of this Chapter and the regulations applicable thereto.~~ Individual homeowners and farmers who generate only small quantities of hazardous wastes and any person the department determines generates only small quantities of hazardous waste on an infrequent basis shall be exempt.

C. Nothing in this Chapter shall be construed to prohibit the office of public safety services, with the approval of the secretary in accordance with regulations adopted pursuant to this Chapter, in cases of emergency, from disposing of hazardous wastes which may be explosive in nature where said disposal is necessary to relieve an imminent threat to public safety.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1985, No. 336, § 1, eff. July 9, 1985.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

The 1983 amendment, in subsec. A, substituted "secretary" for "commission".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

The 1985 amendment added subsec. C.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1138 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2186, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Library References

Health and Environment ⇐25.5(5.5).
C.J.S. Health and Environment § 91 et seq.

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

Notes of Decisions

Extent of state jurisdiction 1

1. Extent of state jurisdiction

Criminal prosecution against corporation under parish ordinance for keeping and burning of substances offensive to smell and/or injurious to health did not infringe upon state's ~~exclusive jurisdiction over regulation of haz~~ardous waste where there was nothing in the record that the objectionable substances at the corporation were identified by Department of Natural Resources as "hazardous wastes" and there was no evidence that noxious odors stemmed from hazardous wastes. State v. Rollins Environmental Services of Louisiana, Inc., ~~Sup.1981, 398 So.2d 1122.~~

§ 2187. Monitoring of drinking water wells which provide public water supplies located near commercial hazardous waste facilities

A. The Environmental Control Commission shall adopt and promulgate rules and regulations to insure that drinking wells which provide public water supplies within a two-mile radius of all commercial hazardous waste disposal facilities shall be sampled and tested in the following manner:

(1) The commission shall establish a test area around each such disposal facility. Such test area shall consist of a circle with a two-mile radius with the disposal facility at its center.

(2) The commission shall divide each such test area into four quadrants of equal size by bisecting the test area twice with lines which are at right angles to each other.

(3) The commission shall select, at random, one drinking well which provides public water supplies in each quadrant and shall sample and test the water from such well. Such selection, sampling, and testing shall be conducted every six months. The commission shall not select any one such well in a quadrant for retesting until all such wells in that quadrant have been tested, unless there exists some need or reason to retest such well.

(4) The purpose of such sampling and testing shall be to insure that the drinking water wells which provide public water supplies located near said disposal facilities are not contaminated with toxic or hazardous pollutants which may be stored, treated, or disposed of at said disposal facility.

B. The secretary may additionally require that the cost of said sampling shall be done at the expense of the disposal facility.

Added by Acts 1983, No. 718, § 1.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, this section, added by Acts 1983, No. 718, § 1, as R.S. 30:1137.1 was redesignated as R.S. 30:1138.1, "testing" was substituted for "test" and a comma was inserted after "tested" in par. (3), and the last paragraph was designated par. (4) in subsec. A all on authority of R.S. 24:253.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1138.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2187, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

Library References

Health and Environment ⇐25.5(3 to 7).
C.J.S. Health and Environment §§ 44 et seq., 61 et seq.

§ 2188. Generators

A. The secretary shall promulgate such standards applicable to generators of hazardous waste subject to the provisions of this Chapter as may be necessary to protect public health and the environment. Such standards shall, at a minimum, include requirements for:

(1) Record keeping practices that accurately identify quantities and constituents of hazardous waste, as designated by the secretary, and the disposition of such wastes.

(2) Labeling practices for containers used for storage, transport, or disposal of such hazardous wastes as will accurately identify such waste.

(3) Use of appropriate containers for such hazardous waste.

(4) Furnishing of information on the general chemical composition of such hazardous waste to persons transporting, treating, storing, or disposing of such waste.

(5) Use of a manifest system to assure that all such hazardous waste generated is designated for treatment, storage, or disposal in treatment, storage, or disposal facilities, other than facilities on the premises where the waste is generated, for which a permit has been issued by the secretary.

(6) Identification of all generators of hazardous wastes located within the state and all generators of hazardous wastes located outside of the state which ship such hazardous wastes into the state for treatment, storage, or disposal.

(7) Such other standards and criteria as are necessary to administer this Chapter or to comply with federal laws and regulations.

B. Generators of hazardous waste shall dispose of such wastes in accordance with one of the following methods, which shall be more fully set forth in regulations:

(1) A generator may reprocess and reuse such wastes or may contract with other persons to reprocess and reuse such wastes in a manner consistent with this Chapter or rules or regulations promulgated hereunder.

(2) A generator may dispose of such wastes at its own private site provided such site is operated under a valid permit issued by the secretary and in compliance with performance standards promulgated by the secretary.

(3) A generator may dispose of such wastes at a privately operated disposal site provided such site is operated under a valid permit issued by the secretary or, if out of state, approved by such state's designated authority.

(4) A generator may contract with a private transporter to transport such wastes provided that the transporter is operating under a valid license issued by the secretary.

(5) A generator may dispose of such wastes at a public site operated under a valid permit from the secretary, or if out of state, approved by such state's designated authority.

C. The secretary shall promulgate regulations requiring registration of generators of hazardous waste.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1984, No. 824, § 1, eff. July 13, 1984.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

The 1983 amendment, in par. (5) of subsec. A, and pars. (4) and (5) of subsec. B, deleted "commission or the assistant" preceding "secretary"; in the first sentence of subsec. A, par. (1) of subsec. A, and par. (2) of subsec. B, substituted "secretary" for "commission"; in par. (1) of subsec. A, inserted a comma following "waste"; and, in par. (3) of subsec. D, inserted a comma following "or".

In subsec. B as amended in 1983, a comma was inserted following "methods" on authority of R.S. 24:253.

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

The 1984 amendment added subsec. C.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1139 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2188, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

~~§ 2189. Transporters~~

A. The Department of Public Safety is authorized and directed to promulgate regulations and oversee compliance therewith governing the transportation of hazardous wastes by any means of commercial or private transport. The Department of Environmental Quality shall advise and cooperate in the promulgation of regulations pursuant to this Section.

B. Such regulations at a minimum shall require:

(1) Record keeping sufficient to determine the types and quantities of hazardous wastes transported in the state, the generator source, the treatment, storage, or disposal site to which such wastes have been transported, and periodic reports thereon.

(2) Adherence to the manifest system otherwise authorized by this Chapter.

(3) Transportation equipment standards which will assure the safe handling and transport of hazardous waste.

(4) Permitting or licensing procedures for transporters by the Federal Environmental Protection Agency which, when coupled with the manifest system, will require identification of the transporters. Political subdivisions which operate such transportation systems with their own personnel shall not be required to provide a surety bond, certificate of public liability insurance, or other financial assurance, but shall be liable for any such damages.

(5) Consistency and uniformity of standards as applied to interstate and intrastate transporters.

(6) Such other regulations as are deemed necessary to effectively administer this Chapter and to comply with federal law.

C. The use of any equipment, including, without limitation, containers and holding tanks, used to transport or store hazardous waste is expressly prohibited from being used to transport or store any item, product, or commodity intended for human or animal consumption unless the equipment has been properly decontaminated.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1984, No. 419, § 1; Acts 1986, No. 891, § 1.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

The 1983 amendment, in subsec. A, substituted "Environmental Quality" for "Natural Resources".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

The 1984 amendment, in subsec. B, in par. (4), in the first sentence, inserted "by the Federal Environmental Protection Agency", and deleted at the end of the first sentence "and, by a surety bond in favor of the state, certificate of public liability insurance or other financial assurance, or any combination thereof which will assure that a financial responsibility in the event of damages as a result of accident or negligence".

In subsec. B, in par. (4) as amended in 1984, a comma was inserted following "public liability insurance" on authority of R.S. 24:253.

The 1986 amendment added subsec. C relating to proper decontamination of containers.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1140 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2189, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

§ 2190. Hazardous wastes from foreign nations; findings; prohibitions

A. The legislature finds and declares that:

(1) The laws of the United States require testing, manifesting, and safe transportation of hazardous wastes to insure proper identification and handling from generation to ultimate disposal. These laws are not applicable to hazardous wastes generated in foreign nations until such wastes are actually in this country.

(2) The laws of foreign nations are inadequate to insure that hazardous wastes sought to be exported to the United States do not contain unknown or unauthorized pollutants and that such wastes are not released into the environment due to inadequate containment, labeling, or handling during transport.

(3) The only practical method for insuring that the environment and the health of the citizens of this state are not endangered by the importation of hazardous wastes generated in foreign nations is to prohibit the introduction or receipt of such wastes into this state for the purpose of treatment, storage, or disposal.

B. It shall be unlawful for any person to transport or cause or allow to be transported into this state, for the purpose of treatment, storage, or disposal, any hazardous waste generated outside the United States and its territories.

C. It shall be unlawful for any person to receive for treatment, storage, or disposal in this state any hazardous waste generated outside the United States or its territories.

D. This Section shall not apply to any hazardous waste generated outside of the United States and its territories which must be disposed of in accordance with the provisions of Public Law 96-478 adopted by the United States Congress and known as the Act to Prevent Pollution from Ships.[1] This Section shall only apply to hazardous waste which is imported into this state directly from a foreign nation.

E. Notwithstanding any other provision of law, the importation of spent petroleum catalysts from foreign countries for purposes of recycling utilizing processes which produce no hazardous wastes, is not prohibited.

Added by Acts 1983, No. 694, § 1, eff. July 21, 1983. Amended by Acts 1984, No. 826, § 1, eff. July 13, 1984; Acts 1987, No. 506, § 1.

[1] 33 U.S.C.A. § 1901 et seq.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, this section, originally enacted by Acts 1983, No. 694, § 1, as R.S. 30:1137.1, was redesignated as R.S. 30:1140.1, and "the" was deleted before "hazardous waste" in par. (2) of subsec. A. on authority of R.S. 24:253.

The 1984 amendment, in subsec. D, added the second sentence.

The 1987 amendment added subsec. E relating to spent petroleum catalysts.

On authority of R.S. 24:253, in subsec. E as enacted in 1987, a comma was deleted following "recycling".

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1140.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2190, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2191. Importation of hazardous waste from foreign countries; prohibition

A. The commission or the assistant secretary shall deny hazardous waste transporter licenses and hazardous waste treatment, storage, and disposal

facility permits to all persons who propose to transport into and dispose of in Louisiana hazardous waste generated in a country other than the United States.

B. The provisions of this Section shall not apply to the disposal or storage of any hazardous or solid waste which must be disposed of according to the provisions of Public Law 96-478, adopted by the United States Congress and known as the Marine Pollution Protocol Law.[1]

C. The commission shall revoke the permit of any permitted hazardous waste facility which hereafter disposes of hazardous waste generated in a country other than the United States. This power shall be in addition to other powers and remedies available to the Commission under this Subtitle.

D. The provisions of this Section shall not apply to spent petroleum catalysts from foreign countries imported for purposes of recycling utilizing processes which produce no hazardous wastes.

Added by Acts 1983, No. 260, § 1, eff. June 30, 1983. Amended by Acts 1987, No. 506, § 2.

[1] See, inter alia, 33 U.S.C.A. § 1901 et seq.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, this section, enacted by Acts 1983, No. 260, § 1 as R.S. 30:1137.1, was redesignated as R.S. 30:1140.2, and a comma was deleted after "Louisiana" in the first sentence on the authority of R.S. 24:253.

The 1987 amendment designated subsecs. (A) to (C); and added subsec. (D) relating to spent petroleum catalysts.

On authority of R.S. 24:253, in this section as amended in 1987, "A.", "B.", "C." and "D." were substituted for "(A)", "(B)", "(C)" and "(D)".

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1140.2 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2191, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Library References

Health and Environment ⇐25.5(5.5), (7), 25.7(2).

C.J.S. Health and Environment §§ 91 et seq., 125 et seq.

§ 2192. Treatment, storage, and disposal facilities; exceptions

A. The secretary, with the advice and cooperation of the Department of Health and Human Resources and the Department of Wildlife and Fisheries, shall promulgate regulations providing for the identification and regulation of all hazardous waste treatment, storage, and disposal facilities.

B. The regulations at a minimum shall require:

(1) Licensing or permit procedures for the operation of every such facility which treats, stores, or disposes of hazardous wastes.

(2) Design, construction, and operational standards which will assure safe treatment, storage, and disposal without substantial risk to the environment, water supplies, air, and human health, and in connection therewith, require the submission of plans, designs, engineering reports, geological, hydrological, and other relevant data incidental to the determination of the suitability of an existing or a proposed facility for the treatment, storage, and disposal of hazardous wastes.

(3) Adequate record keeping to reflect the types and quantities of hazardous wastes treated, stored, or disposed of, and the manner of treatment, storage, and disposal, together with periodic reports thereon.

(4) A surety bond in favor of the state, a certificate of public liability insurance, payments into a State Hazardous Waste Protection Fund, other financial assurance, or any combination thereof, sufficient to assure financial responsibility for damages resulting from accidents or negligence, when corrective action is required or as specified in the permit, and to assure closure and post-closure care, said assurance to be consistent with the degree and duration of risks associated with the treatment, storage, or disposal of the type of hazardous waste handled.

(5) Payments into the State Hazardous Waste Protection Fund shall be adopted to become effective no sooner than June 1, 1980.

(6) Classification of facilities as necessary for the acceptance of only particular categories of hazardous wastes.

(7) Such other regulations as are deemed necessary to effectively administer this Chapter and to comply with federal law.

C. The secretary of the Department of Environmental Quality shall not grant a permit or license for any commercial hazardous waste incinerator facility in the parish of St. Helena.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1984, No. 826, § 1, eff. July 13, 1984; Acts 1986, No. 423, § 1, eff. July 2, 1986; Acts 1987, No. 226, § 1, eff. July 2, 1987.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

In this section as contained in Acts 1979, No. 449, the word "subdivisions" has been substituted for "subdivision" in par. (4) of subsec. B on authority of R.S. 24:253.

The 1983 amendment, in subsec. A, substituted "secretary" for "commission".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

The 1984 amendment, in subsec. B, in par. (4), deleted the former second sentence which

read, "Political subdivisions which operate such facilities with their own personnel shall not be required to furnish such financial assurances, but shall be liable for any such damages.".

The 1986 amendment in par. (4) of subsec. B, substituted "for" for "in the event of" before "damages", substituted ", when corrective action is required or as specified in the permit, and to assure closure and post-closure care" for "and assure continuity of operations and maintenance in the event of shutdown or operator changes", and substituted "type" for "types".

House Concurrent Resolution No. 9 of the 1986 First Extraordinary Session provides in part:

"WHEREAS, it has been proposed that a hazardous waste incinerator be built in St. Helena Parish, and

"WHEREAS, the people of St. Helena and surrounding parishes oppose the licensing of such facility.

"THEREFORE, BE IT RESOLVED that the Legislature of Louisiana hereby directs the secretary of the Department of Environmental Quality to suspend the granting of any permit or license to build, or construct any new commercial hazardous waste incinerator in any parish with a population of fifteen thousand persons or less."

The 1987 amendment, in the section heading, added "; exceptions"; and added subsec. C relating to the parish of St. Helena.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1141 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2192, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Notes of Decisions

Environmental standards 1

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1. Environmental standards

State environmental standard under R.S. 30:1141 (now, this section) does not set forth higher standard of protection than Const. Art. 9, § 1 but, rather, legislative aim was merely to implement and perpetuate the rule of reasonableness under Const. Art. 9, § 1. Save Ourselves, Inc. v. Louisiana Environmental Control Com'n, Sup.1984, 452 So.2d 1152.

§ 2193. Land disposal of hazardous waste; restrictions; prohibition

A. It is the determination of the legislature that Louisiana is particularly ill-suited both hydrologically and climatically to hazardous waste land disposal methods and past land disposal methods, siting criteria, and maintenance procedures have, despite the degree of stringency, been inadequate to insure the health of the citizens of the state and in maintaining the integrity of the environment generally and water resources specifically. It is further determined that eventual releases of hazardous constituents from land disposal facilities are highly probable if land disposal methods continue to be relied upon and that there presently exists alternatives which may be used to destroy, reduce, or lessen the toxicity of or lessen the leaching potential of hazardous wastes. In order to preclude further environmental damage and endangerment to the citizens of the state, it is the purpose of this Section to provide for restrictions and incentives designed to encourage alternative methods of hazardous waste disposal, destruction, and reduction; to lessen the possibility of hazardous waste releases from existing land disposal sites; and to provide for the eventual prohibition of land disposal of hazardous waste.

~~B. As used in this Section, the following terms shall have the meaning~~ ascribed to them in this Subsection, unless the context clearly indicates otherwise:

(1) "Containment system" means a system designed to contain hazardous waste or materials within the confines of a hazardous waste disposal, storage, or treatment facility and operating within and according to the limits and conditions of its permit.

(2) "Encapsulation" means the pressing or bonding together and completely enclosing within a coating or jacket of inert material so as to prevent leaching potential from a department approved hazardous waste containment system.

(3) "Land disposal" means:

(a) The disposal on or into the land including disposal in a salt dome, landfill, injection well, surface impoundment, waste pile, land spreading method, or coburial with municipal waste.

(b) Treatment on or in the land including neutralization and evaporation ponds and land farming where the treatment residues are hazardous wastes and are not removed for subsequent processing and disposal within six months, and

(c) Storage of hazardous wastes on or in the land for longer than six months except by the treatment referred to in Subparagraph (b).

(4) "Stabilization or Solidification" means the modification of wastes in a manner which ensures that the hazardous constituents are maintained in their least soluble form.

C. The secretary shall promulgate rules and regulations which:

(1) Identify generic categories of hazardous wastes that are inappropriate for land disposal and selected recycling, treatment, and destruction technologies applicable to waste streams in each category.

(2) Identify the waste constituents that present the greatest risks when disposed of in the land.

(3) Set target dates for the prohibition of land disposal of those wastes identified in Paragraph (2) based on:

(a) The risks involved.

(b) The availability of alternative facilities and methods within the state.

(4) Use the following general characteristics to determine which wastes pose the greatest risk to public health and environment when disposed of in the land:

(a) Toxicity.

(b) Persistence in the environment.

(c) Ability to bioaccumulate.

(d) Mobility in a land disposal environment.

~~(5) Provide for emergency variances.~~

(6) Provide for an exception from the application of this Section for special wastes which include:

(a) Spent bauxite (red mud) resulting from production of alumina.

(b) Byproduct gypsum and related wastes resulting from the production of phosphoric acid, phosphate fertilizers, and hydrofluoric acid.

(c) Coal residue (bottom ash and slag, fly ash, and flue-gas emission control waste) after use as a boiler fuel.

(d) Cement kiln dust.

(e) Industrial waste water in a NPDES treatment train when that train includes ponds, impoundments, or similar facilities.

(7) Prohibit the storage of hazardous waste that has been banned from land disposal unless such storage is solely for the purpose of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal by appropriate means.

D. Not later than January 1, 1986, the secretary shall determine what economically and technically feasible and environmentally sound alternatives are available in the state for processing, treating, destroying, recycling, reducing, or neutralizing the hazardous waste as identified in Subsection C. Between January 1, 1986, and January 1, 1991, any hazardous waste for which there is no alternative disposal, destruction, reduction, or recycling method in the state shall be land disposed only after stabilization, solidification, containment, encapsulation, or approved land treatment techniques in a manner and with a material sufficient to prevent the leaching potential of such wastes except that the secretary may, upon a showing that no other reasonable alternative exists, permit the injection of hazardous waste in an injection well. The burden of proof shall rest with the generators of such hazardous waste that they cannot meet the requirements of this Subsection, and the secretary shall determine the sufficiency and adequacy of such proof and evidence presented by generators.

E. (1) Effective January 1, 1991, and thereafter, the land disposal of hazardous waste shall be prohibited, except as provided in this Subsection.

(2) Any person seeking to appeal the prohibition on the land disposal of hazardous waste shall file a written request for a determination on such with the secretary. The secretary, after considering reasonable economic and environmental alternatives, may allow the land disposal of certain hazardous waste if in his determination:

(a) The best available technology cannot further reduce the toxicity, corrosiveness, virulent or infectious character, or volume of the hazardous waste.

(b) The waste cannot be further reduced through production modifications.

(c) The waste or specific constituents of the waste cannot be reclaimed and reused.

(d) The waste can be permanently confined within a department-approved hazardous waste containment system.

(e) The land disposal of the hazardous waste does not and will not endanger public health or the environment.

(f) That no reasonable alternative exists to the injection of hazardous waste in an injection well.

(3) The burden of proof that the conditions of Paragraph (2) of this Subsection have been met shall rest with the person requesting the determination by the secretary.

F. Any person found by the secretary to be in violation of any requirement or provision of this Section may be liable for a civil penalty of one hundred thousand dollars for each separate violation.

Added by Acts 1984, No. 803, § 1. Amended by Acts 1986, No. 422, § 1, eff. July 2, 1986; Acts 1987, No. 852, § 1.

History and Source of Law

The 1986 amendment added par. (7) to subsec. C.

The 1987 amendment, in subsec. D, inserted commas following the dates at the beginning of the second sentence; and in the same sentence, substituted "containment, encapsulation, or" for "and encapsulation and".

On authority of R.S. 24:253, in this section as amended in 1987, "Subparagraph" was substituted for "Paragraph" in subpar. B(3)(c) and "Paragraph (2)" was substituted for "Paragraph 2" in par. E(3).

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1141.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2193, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

Cross References

Alternative technologies research and development trust fund, see R.S. 30:2016.

§ 2194. Underground storage tanks; registration and fees

A. It is the determination of the legislature that hazardous substances contained in underground storage tanks pose a present and future hazard to the public health, safety, and welfare of the citizens of the state of Louisiana, and consequently, there is a need to have all such facilities register with the state; and, in connection therewith, the fees from such registration are to be placed in the Underground Storage Tank Trust Fund.

B. As used in R.S. 30:2194 through R.S. 30:2195.10, the following terms shall have the meaning ascribed to them in this Subsection, unless the context clearly indicates otherwise:

(1) "Hazardous substance" means:

(a) Those substances defined or identified as hazardous substances pursuant to R.S. 30:2272(4)(a) and regulations thereunder, and

(b) Petroleum, including crude oil or any fraction thereof which is liquid as standard conditions of temperature and pressure, 60 degrees Fahrenheit and 14.7 pounds per square inch absolute.

(2) "Motor fuels" shall be defined as all grades of gasoline including but not limited to gasohol, No. 1 diesel, No. 2 diesel, kerosene, and all aviation fuels.

~~Liquid petroleum (LP) gas shall not be included in this definition of motor fuel.~~

(3) "Response action" means any activity, including but not limited to assessment, planning, design, engineering, construction, operation of recovery system, or ancillary services which are carried out in response to any discharge or release or threatened release of motor fuels into the groundwater or subsurface soils.

(4) "Response action contractor" means a person who has been approved by the department and is carrying out any response action, including a person retained or hired by such person to provide services relating to a response action.

(5) "Substantial compliance" shall mean that an owner of an underground storage tank has registered that tank with the department, has timely paid the annual tank fee, has complied with the state and federal laws and regulations applicable to underground storage tanks, and the rules and regulations adopted pursuant thereto, and is fully paid into the trust in compliance with the payment schedule set forth by the private legal entity, and shall have met the financial responsibility requirements imposed by R.S. 30:2195.9, and shall have promptly notified the secretary of any third party claim or suit made against him.

(6) "Third party claim" means any civil action brought or asserted by any person against any owner of any underground storage tank for damages to person or property when damages are the direct result of the contamination of groundwater and/or subsurface soils by motor fuels released during operation of storage tanks covered under this Chapter.

(7) "Underground motor fuel storage tank" means an underground storage tank used only to contain an accumulation of motor fuels.

(8) "Underground storage tank" means any one or combination of tanks and their attendant product piping which is used to contain an accumulation of hazardous substances, and the volume of which is ten percent or more beneath the surface of the ground. Such term may be further defined by regulations adopted under this Subtitle.

C. The secretary shall promulgate regulations requiring the registration of all commercial underground storage tanks, regardless of capacity, and other underground storage tanks with a capacity equivalent to or in excess of one thousand one hundred gallons which contain hazardous substances, and imposing fees for such registration. The fees charged shall be in accordance with R.S. 30:2114(B), but in no case shall the fees collected be greater than twenty-five dollars per underground storage tank not to exceed one thousand dollars per owner. For the purpose of this Section, "underground storage tank" shall not include a:

(1) Farm or residential tank of one thousand one hundred gallons or less ~~capacity used for storing motor fuel for noncommercial purposes.~~

(2) Tank used for storing heating oil for consumptive use on the premises where stored.

(3) Septic tank.

(4) Pipeline facility, including gathering lines:

(a) Regulated under the Natural Gas Pipeline Safety Act of 1968, 49 U.S.C.A. 1671 et seq.;

(b) Regulated under the Hazardous Liquid Pipeline Safety Act of 1979, 49 U.S.C.A. 2001 et seq.; or

(c) Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of law referred to in Subparagraph (a) or (b) above.

(5) Surface impoundment, pit, pond, or lagoon.

(6) Storm water or waste water collection system.

(7) Flow-through process tank.

(8) Liquid trap or associate gathering lines directly related to oil or gas production and gathering operations.

(9) Storage tank situated in an underground area such as a basement, cellar, mineworking drift, shaft, or tunnel if the storage tank is situated upon or above the surface of the floor.

D. Notwithstanding any other provision of this Subtitle to the contrary, fees generated from such registrations shall be deposited in the Underground Storage Tank Trust Fund as provided in R.S. 30:2195.

Added by Acts 1985, No. 493, § 1, eff. July 12, 1985. Amended by Acts 1986, No. 421, § 1, eff. July 2, 1986; Acts 1988, No. 767, § 1, eff. July 15, 1988.

History and Source of Law

On authority of R.S. 24:253 and 24:253.1, in R.S. 30:1141.2 (now, this section) as enacted by Acts 1985, No. 493, in subsec. B, par. (1) was redesignated as par. (2) and par. (2) as par. (1); and subparagraphs were set out as separate paragraphs.

The 1986 amendment rewrote subsec. C which had provided:

"C. The secretary shall promulgate regulations requiring registration of underground storage tanks with the capacity equivalent to or in excess of five hundred gallons which contain hazardous substances and impose fees for such registration. The fees charged shall be in accordance with R.S. 34:1065(B), but in no case shall the fees collected be greater than twenty-five dollars per underground storage tank not to exceed one thousand dollars per owner."

In R.S. 30:1141.2 (now, this section) as amended in 1986, the deletion of "regulated under" in the introductory sentence of par. (4) of subsec. C, the insertion of the same phrase at the beginning of subpars. (a) and (b) of par. (4) of subsec. C, and the correction of the federal citations in subpars. (a) and (b) of par. (4) of subsec. C were on authority of R.S. 24:253.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1141.2 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2194, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sec-

tions were changed to reflect their redesignation.

The 1988 amendment, in subsec. B, substituted "R.S. 30:1141.2 through R.S. 30:1141.13" (redesignated as R.S. 30:2194 through R.S. 30:2195.10 on authority of R.S. 24:253) for "this section" in the introductory paragraph; and inserted "and their attendant product piping" in par. (8) defining underground storage tanks (redesignated from par. (2) on authority of R.S. 24:253.1); and added paragraphs defining motor fuels, response actions, response action contractors, substantial compliance, third party claims and underground motor fuel storage tanks.

The paragraphs in subsec. B of this section as amended in 1988 were renumbered to reflect the alphabetical order of the definitions contained therein on authority of R.S. 24:253.1.

Library References

Health and Environment ⇐25.5(5.5).
States ⇐127.

C.J.S. Health and Environment § 91 et seq.
C.J.S. States § 228.

§ 2195. Underground Storage Tank Trust Fund

A. There is hereby established a fund in the state treasury to be known as the Underground Storage Tank Trust Fund, hereafter referred to as the "Tank Fund", into which the state treasurer shall, each fiscal year, deposit the revenues received from the collection of the initial fees and the annual monitoring and maintenance fees as established in R.S. 30:2014(B) for the registration of underground storage tanks as provided in R.S. 30:2194(C), after those revenues have been deposited in the Bond Security and Redemption Fund. Out of the funds remaining in the Bond Security and Redemption Fund, after a sufficient amount is allocated from that fund to pay all the obligations secured by the full faith and credit of the state that become due and payable within each fiscal year, the treasurer, prior to placing such funds in the state general fund, shall pay into the Tank Fund an amount equal to the revenue generated from collection of fees for the registration of underground storage tanks. The monies in the Tank Fund shall be invested by the state treasurer in the same manner as monies in the state general fund.

B. The secretary shall administer the Tank Fund and shall make disbursements from the fund for all necessary and appropriate expenditures. The monies in the Tank Fund shall be used to defray the cost to the state of administering the underground storage tank program and the cost of investigation, testing, containment, control, and clean up of releases from underground storage tanks containing hazardous substances. The monies in the Tank Fund shall also be used to provide money or services as the state share of matching funds for federal grants involving underground storage tanks.

Added by Acts 1985, No. 493, § 1, eff. July 12, 1985.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1141.3 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sec-

tions were changed to reflect their redesignation.

2195.1. Underground motor fuel storage tank remediation agreements

A. The legislature hereby finds and declares that the preservation of its groundwater is a matter of highest urgency and priority as these waters provide a primary source of potable water in this state; and that the leakage of motor fuels from underground storage tanks within the state poses threats of damage to the environment of this state, to citizens of the state, and to interests deriving livelihood from this state; and that such hazards have occurred in the past, are now occurring, and will continue to occur; and that remediation of contamination of groundwater or subsurface soils should be conducted with all due haste, and to the extent possible those persons who have owned such storage tanks should bear the cost of such remediation; and that such remediation should be done under the supervision and regulation of the department; that taxpayers' funds should to the greatest extent possible not be used for the payment of the cost of such remediation; that the state should be encouraged where possible to use assistance from private sources for the payment of these costs; that where private sources cannot obtain insurance or other means of financial assurances to pay for said remediation that a state private contractual agreement between the state and a private entity can best provide assurance of financial responsibility for remediation of leaking underground storage tanks.

B. The secretary is hereby authorized pursuant to the Louisiana Constitution, Article VII, Section 9(A) and R.S. 30:2031 to enter into an agreement with a private legal entity to receive and administer a trust fund for the purpose of providing financial responsibility for underground motor fuel storage tanks which shall constitute a grant under such terms and conditions as the department and the private legal entity shall agree. The funds received shall be placed in a special trust fund in the custody of the state treasury to be used only in accordance with the terms and conditions of said grant and of R.S. 30:2194 through R.S. 30:2195.10 and shall not be placed in the general fund nor subject to appropriation by the legislature in accordance with Louisiana Constitution, Article VII, Section 9(A) and R.S. 49:308.3(B)(2) and (B)(6). The funds provided to the department pursuant to this Section and to the said agreement shall at all times be and remain the private funds of the private legal entity. Such funds shall constitute a trust fund which shall be administered by the secretary of the Department of Environmental Quality in accordance with the following sections, terms, and conditions.

C. Such agreement as authorized in Subsection B above shall be valid as long as the parties thereto comply with the terms of the agreement, the terms of R.S. 30:2194 through 2195.10, and for such time as stated in the agreement.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.4 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.1, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, citations of particular sections were changed to reflect their redesignation.

2195.2. Uses of the trust

A. Pursuant to the authorization in R.S. 30:2195.1, the board may establish the Motor Fuels Underground Tank Trust, hereinafter referred to as the "trust" to be administered by the secretary of the Department of Environmental Quality of Louisiana, which shall be placed in a special custodial trust in the state treasury. The funds shall be used as follows.

B. Whenever in the secretary's determination incidence of groundwater or subsurface soils contamination resulting from the storage of motor fuels may pose a threat to the environment or the public health, safety, and welfare and the owner of the underground storage tank has been found to be in substantial compliance with the rules and regulations of the department, the department shall obligate monies available in the trust to provide for the following response actions:

(1) Investigation and assessment of sites shown to be contaminated by a release into the groundwater or subsurface soils from an underground motor fuels storage tank;

(2) Interim replacement and permanent restoration of potable water supply where it has been demonstrated that the supply was contaminated by a leak from an underground motor fuels storage tank;

(3) Rehabilitation and remediation of sites contaminated by a leak into the groundwater or subsurface soils in an underground motor fuels storage tank, which may consist of cleanup of affected soil, groundwater, and inland surface waters, using cost effective methods that are technologically feasible and reliable, while insuring adequate protection of the public health, safety, and welfare and minimizing environmental damage, in accordance with the site selection and cleanup criteria established by the department. Nothing herein shall be construed to authorize or require the department to obligate funds for payment of costs which may be associated with, but are not integral to, site rehabilitation, such as the cost of retrofitting or purchases of equipment needed in assisting cleanup operations; however, subject to the provisions of Subsections C and D, the funds in the trust shall be used for the replacement of leaking underground storage tanks and attendant product piping as provided in this paragraph. No trust funds shall be used to replace leaking underground storage tanks or attendant product piping unless the tanks are double wall construction of continuous glass filament winding, void of dishend seams or welds and comply with all applicable state and federal standards. Said funds shall be allocated on a match basis of twenty-five

1 42 U.S.C.A. § 6901 et seq.

2 See, inter alia, 42 U.S.C.A. §§ 6991 et seq., 9601 et seq., 9671 et seq., and 11002 et seq.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.5 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.2, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, citations of particular sections were changed to reflect their redesignation.

In this section as enacted in 1988, a period was substituted for a colon at the end of the first paragraph and such paragraph was designated as subsec. A; subsecs. A to E were redesignated as subsecs. B to F; and, in redesignated par. B(3), "Subsections C and D" was substituted for "Subsections B and C", all on authority of R.S. 24:253.

§ 2195.3. Source of funding; limitations on disbursements from the trust; limit on amount in trust

A. (1) Every owner of an underground motor fuels storage tank as defined in R.S. 30:2194 shall pay an underground storage tank trust fee as established by the provisions of this Section to be paid to the department. During the period following July 15, 1988 and through the year 1989, the amount of the annual fee shall be one hundred dollars per regulated tank. Thereafter, the secretary, upon recommendation of the board, shall set such an amount not to exceed one hundred fifty dollars per year per regulated tank. Should the trust become depleted due to claims being greater than amounts provided by tank fees, the board shall be empowered to make special assessments of tank fees to protect the financial integrity of the trust; however, the total tank fees and special assessments for any fiscal year shall not exceed one hundred fifty dollars per regulated tank.

(2) The failure to pay fees within the time prescribed by the secretary shall make the owner of such storage tank liable for a late charge penalty in an amount not to exceed twenty-five dollars per tank for each day such payment is delinquent, subject to the discretion of the secretary. Failure to comply with the requirements of this Chapter within the time prescribed by the secretary shall bar the owner from participation in the trust until the next annual anniversary date of the trust.

B. The secretary shall not make any disbursements from the trust to any person who has not complied with and paid the fee assessment as required by the private legal entity, except payments to third parties as provided in R.S. 30:2195.2(D). Except for the limits described in R.S. 30:2195.2(E) of this Chapter, the trust established hereby shall be the sole source of any third party liability recovery and any owner who has complied with all of the provisions required herein shall be protected from any liability not otherwise provided for by this trust.

C. The Underground Motor Fuels Storage Tank Trust established in R.S. 30:2195.2 shall not at any one time exceed the amount of six million dollars. If at any time the amount in the trust exceeds six million dollars, the legal entity assessing the fee may suspend assessment of the fee until such time that

~~percent of the replacement cost of the leaking tanks and piping. The monies~~ expended from the trust for any of the above approved costs shall be spent only up to such sum as will cause the Resource Conservation and Recovery Act, Subtitle I,[1] the Superfund Amendments and Reauthorization Act of 1986,[2] and any other federal laws governing disbursement of federal funds for cleanup and/or third party claims to come into effect.

C. Whenever costs have been incurred by the department for taking response actions with respect to the release of motor fuels from an underground storage tank, or the department has expended funds from the trust for response costs, the owner of the underground motor fuels storage tank shall be liable to the department for such response costs only if the owner was not in substantial compliance on the date of discharge of the motor fuels which necessitates the cleanup; otherwise liability is limited to the provisions contained in R.S. 30:2195.9. Nothing contained herein shall be construed so as to authorize the expenditure from the trust on behalf of any owner of an underground storage tank who has not paid the required fees and was not in substantial compliance on the last anniversary date of the trust for any third party liability.

D. In the event funds have been expended by the secretary on behalf of an owner who was not in substantial compliance, and the trust is entitled to reimbursement of those funds so expended, the secretary shall have the authority to, and is hereby obligated to use any and all administrative and judicial remedies which might be necessary for recovery of the expended funds plus legal interest from the date of payment by the secretary and all costs associated with the recovery of the funds.

E. The trust may be used to reimburse the private legal entity for any costs associated with the review of applications for reimbursement from the trust, legal fees associated with the collection of costs from parties not in substantial compliance, audits of the trust, accounting and reporting to the private legal entity regarding the uses of the trust. The trust will also reimburse the Department of Environmental Quality for administrative costs associated with the trust up to a limit of thirty thousand dollars per year or that amount agreed to by the secretary and the board, whichever is the greater amount.

F. The trust may be used to make payments to a third party who brings a third party claim against any owner of an underground motor fuel storage tank because of damages sustained by a release into the groundwater or subsurface soils and who obtains a final judgment in said action enforceable in this state against the owner if and only if it has been satisfactorily demonstrated that the owner was in substantial compliance with the laws, rules, and regulations at the time that the release occurred as defined in R.S. 30:2194(B)(5). The indemnification limit of the trust with respect to satisfaction of third party claims shall be that which is necessary to satisfy underground storage tank owner financial responsibility requirements of Subtitle I of the Resource Conservation and Recovery Act, U.S.Code.

~~Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.~~

the trust reaches the amount of a minimum of two million dollars. At no time shall the trust have less than a balance of two million dollars and if the balance in the trust reaches less than two million dollars the legal entity shall again assess the fee and make deposits into the trust in accordance with this Section and the agreement between the secretary and the legal entity.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.6 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.3, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

In this section as enacted in 1988, paragraph designations were made in subsec. A and "July 15, 1988" was substituted for "the effective date of this Section", all on authority of R.S. 24:253.

§ 2195.4. Procedures for disbursements from the fund trust

A. Monies held in the trust established hereunder shall be disbursed by the secretary in the following manner:

(1) Payments shall be made in reasonable amounts to approved response action contractors or for reimbursement of payment to approved response action contractors for response actions taken when authorized by the secretary or his designee only after the amount required by R.S. 30:2195.9 has been paid by the underground motor fuels storage tank owner or those acting for the owner.

(2) The owner shall file a sworn application with the department with a copy to the legal entity indicating fair and reasonable value of the cost of site rehabilitation, subject to those regulations and limitations as set by the department, together with proof of payment of the amount required by R.S. 30:2195.9.

(3) Except in cases of emergency, no disbursement from the trust may be made by the secretary until such time that the secretary obtains verification from the legal entity that the owner applicant is in substantial compliance with the law and this agreement.

B. Payments shall be made to third parties who bring suit against the secretary in his official capacity as representative of the trust and the owner of an underground motor fuel storage tank who is in substantial compliance as stated in R.S. 30:2194 and such third party obtains a final judgment in that action enforceable in this state. The owner above stated shall pay the amount required by R.S. 30:2195.9 toward the satisfaction of said judgment and after that payment has been made, the trust will pay the remainder of said judgment. The attorney general of the state of Louisiana is hereby responsible to appear in said suit for and in behalf of the secretary as representative of the trust and the secretary as representative of the trust is a necessary party

in any suit that is brought by any third party which would allow that third party to collect from this trust; and the secretary must be made a party to the initial proceedings. Payment shall be made to the third party claimant if and only if the judgment is against an owner who was in substantial compliance on the date of the incident which gave rise to the claim occurred. The costs of defending these suits by the attorney general or those assistants employed by the secretary, or appointed by the attorney general to assist, shall be recovered from the trust. In the event the trust is insufficient to make payments at the time the claim is filed, such claims shall be paid in the order of filing at such time as monies are paid into the trust. The amount of money in this trust, the method of collecting the trust, nor any of the particulars involved in setting up this trust shall be admissible as evidence in any trial where suit is brought when the judgment rendered could affect the trust.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.7 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.4, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, citations of particular sections were changed to reflect their redesignation.

Also on authority of R.S. 24:253, "R.S. 30:2194" was substituted for "this Act" in subsec. B of this section as enacted in 1988.

§ 2195.5. Audits

The legal entity shall conduct an annual independent audit of the trust. Such funds necessary to perform the audit shall be authorized from the trust.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.8 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.5, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2195.6. Ownership of trust

This trust shall remain the private funds of the private legal entity at all times and shall only be used for the purposes set forth in this Chapter and for no other governmental purposes, nor shall any portion hereof ever be available to borrow from by any branch of government; it being the intent of the legislature that this trust and its increments shall remain intact and inviolate. Any interest or earnings of the trust shall be credited only to the trust.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.9 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.6, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively.

§ 2195.7. No inference of liability on the part of the state

Nothing in R.S. 30:2194 through 30:2195.10 shall establish or create any liability or responsibility on the part of the department or the state of Louisiana to pay any cleanup cost or third party claims from any source other than the trust created by R.S. 30:2195.1 nor shall the department or the state of Louisiana have any liability or responsibility to make any payments for cleanup costs or third party claims if the trust created herein is insufficient to do so.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.10 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.7, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253, "R.S. 30:2194 through 30:2195.10" and "R.S. 30:2195.1" were substituted for "this Act" following "Nothing in" and "created by", respectively in this section as enacted in 1988.

§ 2195.8. Advisory board

A. There shall be an underground motor fuels storage tank advisory board to advise the secretary with regard to implementation of the trust including investment of the trust, changing of the trust ceiling if after a reasonable time this would be deemed appropriate and with regard to the minimum level of funding. The board shall also determine the role of the trust in establishing financial responsibility as required by federal or state law, except that such requirement shall not exceed those established by the U.S. Environmental Protection Agency. The board shall additionally examine claims made and loss experience, make recommendations to the secretary regarding minimum levels of financial responsibility for underground storage tank owners, and the necessity for and contents of rules and regulations issued under the Environmental Quality Act in similar matters. The board shall recommend standards for the qualification of response action contractors as defined herein, and shall submit a proposal as to response action contractors to the secretary for approval. The board may recommend at any time that response action contractors be added to or deleted from the list. The board shall also have the authority to review applications for disbursements from the trust

and shall certify to the secretary that such applicants have paid their assessment as required by the rules of the board.

B. The board shall consist of the secretary of the Department of Environmental Quality and five members, as follows:

(1) Two members appointed by the president of the Louisiana Oil Marketers Association.

(2) One member appointed by the Mid-Continent Oil and Gas Association.

(3) One member appointed by the Bayou State Gasoline Retail Dealers Association.

(4) The secretary of the Department of Public Safety and Corrections or his designee.

C. The board shall meet at least twice each year and each member shall have one vote concerning any matter coming before the board. The board shall elect its own chairman. The board may meet at any other time upon fifteen days notice from the secretary or any two of the board's members.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.11 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.8, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253, the final paragraph of this section as enacted in 1988 was designated as subsec. C.

§ 2195.9. Financial responsibility

A. The financial responsibility requirements for taking response action by underground motor fuels storage tank owners are hereby established as follows:

(1) Ten thousand dollars per occurrence for cleanup and ten thousand dollars per occurrence for third party judgments for the period following July 15, 1988 through the year 1989.

(2) Fifteen thousand dollars per occurrence for cleanup and fifteen thousand dollars per occurrence for third party judgments for the year 1990.

(3) Thereafter the advisory board shall review the financial responsibility requirements on an annual basis and may recommend to the secretary adjusting the requirements. The secretary shall determine and set the financial responsibility requirements annually.

B. Financial responsibility may be established by any one or combination of the following: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. A person may qualify as a self-insurer by showing tangible net worth in the amount established by the board.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.12 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.9, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253, "July 15, 1988" was substituted for "the effective date of this Section and" in par. A(1) of this section as enacted in 1988.

§ 2195.10. Voluntary cleanup; private contracts; exemptions

Nothing in R.S. 30:2194 through R.S. 30:2195.9 shall be deemed to prohibit a person from conducting site rehabilitation and remediation through approved response action contractors. Voluntary rehabilitation of contaminated sites shall be encouraged by the department provided that such rehabilitation and remediation is conducted in a manner and to a level of completion which will protect the public health, safety, and welfare and will minimize damage to the environment. To accomplish this purpose, the department shall promulgate rules and regulations for the approval and compensation of response action contractors. Response action contracts shall not be construed as state contracts and said contracts shall be exempt from the public bid laws as provided in R.S. 30:2031.

Added by Acts 1988, No. 767, § 2, eff. July 15, 1988.

History and Source of Law

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, enacted in 1988 as R.S. 30:1141.13 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2195.10, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2196. Manifest system

Within its comprehensive hazardous waste control program, the secretary shall require the use of a manifest system for the orderly tracking of hazardous wastes from the generation site to the site of treatment, storage, and disposal. The system shall at a minimum require the designation of the generator, each transporter, the disposal facility, and the type and quantity of waste involved. The secretary may establish additional criteria to accommodate the manifest system to internal record keeping and to facilitate the monitoring of hazardous wastes activity within the state. Any requirements of the secretary shall be consistent with regulations promulgated by the Department of Public Safety which govern the transportation of hazardous wastes.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

The 1983 amendment substituted "secretary" for "commission"; and deleted commas following "shall" and "minimum".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1142 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2196, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

§ 2197. Payment of tax on disposal of hazardous waste

Every person subject to the provisions of this Chapter, except those persons disposing of special waste as defined in the rules and regulations adopted pursuant to this Chapter, may be liable for the payment of the tax imposed by R.S. 47:821 et seq.

Added by Acts 1984, 1st Ex.Sess., No. 8, § 2, eff. July 1, 1984.

History and Source of Law

R.S. 47:821 et seq., relating to taxation of disposal and storage of hazardous waste, was enacted by Acts 1984, 1st Ex.Sess., No. 8, § 3.

Section 4 of Acts 1984, 1st Ex.Sess., No. 8 (§ 2 of which enacted this section) provides:

"Notwithstanding any provision of law to the contrary, including but not limited to any provision of Chapter 17 of Subtitle III of Title 39 or Chapter 1 of Title 43 of the Louisiana Revised Statutes of 1950, the Department of Revenue and Taxation, with the approval of the governor, may do all things necessary in order to provide for the timely implementation of this Act, including but not limited to procurement of printing and other services and expenditure of funds."

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1142.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2197, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

§ 2198. Hazardous Waste Protection Fund

A. There is hereby established a Hazardous Waste Protection Fund, hereinafter referred to as the "Protection Fund", to which shall be deposited all bonds forfeited to the state under this Chapter and all hazardous waste protection payments under Section 2192(B)(4) of this Chapter, after being deposited into the state treasury and credited to the Bond Security and Redemption Fund, as provided by laws of this state and the constitution.

~~After a sufficient amount is allocated from the Bond Security and Redemption~~ Fund to pay all obligations secured by the full faith and credit of the state which become due and payable within any fiscal year, the treasurer shall pay into the Protection Fund an amount equal to the total amount of the bonds forfeited to the state under this Chapter and all the payments made as hazardous waste protection payments, under Section 2192(B)(4) of this Chapter. The protection fund shall additionally consist of sums appropriated specifically to it by the legislature for maintenance and custody of closed sites, for emergencies caused by closed sites, and to assure financial responsibility for damages caused by closed sites.

B. Any grants or allocations made to the state of Louisiana from the United States government for the purposes of protecting the public from hazards associated with closed sites shall be paid by the treasurer directly into the Hazardous Waste Protection Fund.

C. The secretary shall provide by rule or regulations for the Protection Fund to consist of sums sufficient to assure financial responsibility for closed hazardous waste facilities, and shall provide for the procedures for assessing said payments to the Protection Fund.

D. The secretary shall administer the Protection Fund and shall make disbursements from the Protection Fund for all necessary and appropriate expenditures. Disbursements shall be made upon sufficient proof of services rendered and materials or equipment used or expended.

E. The monies in the Protection Fund shall be used only in cases where the site has been permitted under this Subtitle and has been closed in accordance with the rules and regulations of the secretary pertaining to closure of hazardous waste facilities, for the following purposes:

(1) Emergency responses to hazardous waste accidents;

(2) The maintenance and custody of hazardous wastes and hazardous waste facilities;

(3) To assure financial responsibility in the event of damages resulting from accidents and negligence; and

(4) To provide money or services as the state share of matching funds for federal grants.

F. Interest earned through investments of the fund capital may be utilized to finance research concerning hazardous waste management, disposal, and resource recovery from hazardous waste.

G. In any case where monies in the Hazardous Waste Protection Fund are expended because of damages resulting from a violation of this Subtitle, the secretary shall institute a civil action under Section 2025(B) of this Subtitle to recover from the responsible person as damages, all such monies expended from the Protection Fund.

Acts 1979, No. 449, § 1, eff. June 1, 1980. Amended by Acts 1980, No. 194, § 15; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

Effective date: Section 7 of Acts 1979, No. 449 (§ 1 of which reenacted former Chapter 11) provided in part that "the provisions of § 1143 of this Chapter shall become effective on June 1, 1980."

The 1980 amendment rewrote subsec. A, which had read:

"A. All bonds forfeited to the state under this Part, all sums recovered in a suit under R.S. 30:1073(B), and all Hazardous Waste Protection Payments under R.S. 30:1141(B)(4) shall be paid into the state treasury and shall be credited to the Bond Security and Redemption Fund. Out of the funds remaining in the Bond Security and redemption Fund, after a sufficient amount is allocated from that fund to pay all obligations secured by the full faith and credit of the state which become due and payable within any fiscal year, the treasurer shall, prior to placing such remaining funds in the state general fund, pay into a special fund, which is hereby created in the state treasury and designated as the Hazardous Waste Protection Fund, an amount equal to the total amount of the Hazardous Waste Protection Payments, sums recovered under R.S. 30:1073(B) and the bonds forfeited to the state under this Part."

The 1980 amendment also added subsecs. B to D; divided former subsec. B into two subsections, redesignating them as subsecs. E and F; and rewrote subsec. E, which, as the beginning of former subsec. B, had read: "The monies in the Hazardous Waste Protection Fund shall be used solely to defray the cost of emergency response to hazardous waste accidents, the maintenance and custody of hazardous waste materials and hazardous waste disposal sites, and to assure financial responsibility in the event of damages resulting from accidents and negligence, except that".

The 1980 amendment also redesignated former subsec. C as subsec. G, and in that subsection substituted "Chapter" for "Act" before "to recover" and substituted "the protection fund" for "the fund". As originally enacted, former subsec. C made reference to "Section 1072(B)(1)". Prior to the 1980 amendment "Section 1073(B)" was substituted for that reference on authority of R.S. 24:253. The 1980 amendment made the same change.

The 1983 amendment, in subsecs. C and E, substituted "secretary" for "office"; and, in subsec. D, deleted "assistant" preceding "secretary".

In subsec. C as amended in 1983, a comma was inserted following "facilities" on authority of R.S. 24:253.

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83–30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83–30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1143 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2198, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation. In addition, "Protection Fund" was substituted for "protection fund" throughout the section on the same authority.

§ 2199. Applications; comments; local government

A. The secretary shall furnish a copy of each permit or license application to the Department of Wildlife and Fisheries, the office of public works within the Department of Transportation and Development, the Department of Health and Human Resources, the Department of Justice, and the local

governing authorities of any municipality and parish within whose territorial jurisdiction the facility or activity is or will be located. The permittee shall file with the secretary two extra copies of each application, with one copy to be provided to the first intervenor and the other copy to be used by the office to allow for public access and inspection of the application.

B. No facility shall be granted a permit or license if the location thereof violates a parish or municipal land use or zoning ordinance applicable to its siting in effect at the time of the original permit or license application.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1980, No. 748, § 2; Acts 1982, No. 802, § 1, eff. Jan. 1, 1983; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 33:2001.

The 1980 amendment, in subsec. B, deleted "or activity" following "facility", and added "applicable to its siting in effect at the time of the original permit or license application".

The 1982 amendment, in subsec. A, inserted "the Department of Justice" in the first sentence, added the second sentence, and deleted the former last sentence, which read: "The entities to which the copies are furnished shall have a reasonable time, as prescribed by regulations of the commission, to present comments and recommendations on the application which shall be considered by the commission prior to acting on the application."

The 1983 amendment, in subsec. A, substituted "secretary" for "commission".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83–30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83–30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1144 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2199, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

Library References

States ⇐127.
C.J.S. States § 228.

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

Notes of Decisions

Ordinances 1

1. Ordinances

Calcasieu Parish Police Jury has authority to enact ordinances that restrict the siting of hazardous waste facilities, but does not have authority to enforce said ordinances. Op.Atty. Gen., No. 87–617, Sept. 30, 1987.

§ 2200. Subsurface injection

Nothing herein shall limit the power of the assistant secretary of the office of conservation to issue permits and make regulations relative to the subsurface injection of waste products and oil and gas field salt water in compliance with Chapter 1 of Title 30 of the Louisiana Revised Statutes of 1950 and the subsurface injection of hazardous wastes in compliance with the Safe Drinking Water Act, 42 USC § 300(F) et seq., and the Resource Conservation and Recovery Act of 1976, 42 USC § 6901 et seq.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1984, No. 795, § 1, eff. July 13, 1984.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 33:2001.

The 1983 amendment designated subsec. A; added subsec. B; and, in subsec. A, deleted "Nothing in this Park shall be construed to limit" preceding "the power", substituted "assistant secretary" for "commissioner", and inserted "shall be limited by the provisions of R.S. 30:1136(A)(6)".

In subsec. A as amended in 1983, commas were added following "et seq."in two places, and "§" was inserted following "USC" in two places.

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83–30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83–30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

The 1984 amendment substituted "nothing herein shall limit the" for "A. The" at the beginning, deleted ", shall be limited by the provisions of R.S. 30:1136(A)(6)" at the end of former subsec. A and deleted former subsec. B, which prior thereto read:

"B. The assistant secretary of the office of conservation shall assist and consult with the secretary of the Department of Environmental Quality regarding their respective functions related to underground injection and shall provide such personnel, technical data, engineering data, geological data, permit data, equipment, and expertise as the secretary may from time to time need. The secretary shall, in issuing permits for underground injection of hazardous waste, consult with the assistant secretary of the office of conservation and notify him of each permit issued for such injection wells."

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1145 of Part VII, of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2200, of Chapter 9, of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

Notes of Decisions

Venue 1

1. Venue

Suit seeking to enjoin operation of disposal well used to inject chemical waste products into subsurface of certain tract of land was an attack on an order of the Commissioner of

Conservation, which authorized such operation, and, therefore, under R.S. 30:12, exclusive venue of such suit was in parish in which principal office of the Commissioner was located and not in parish in which tract of land was located. Theriot v. Mermentau Resources, Inc., App.1980, 385 So.2d 939, writ denied 392 So.2d 689.

§ 2201. Existing facilities

A. The owner or operator of any facility or equipment in existence and being used on the effective date of the regulations promulgated under this Chapter who is authorized by regulations or a permit issued pursuant to Chapter X of the Louisiana Sanitary Code or other applicable law to transport, treat, store, or dispose of hazardous wastes and who complies with the requirements of R.S. 30:2183 may continue to transport, treat, store, or dispose of such hazardous wastes in accordance with such permit or regulations or other applicable state laws until issuance or denial of a permit or license or the setting of a schedule of compliance or performance guidelines by the commission and thereafter only in accordance with the decision and subject to the terms and conditions imposed by the commission.

B. A commercial hazardous waste treatment, storage, or disposal facility in existence and being operated on the effective date of the regulations promulgated pursuant to this Chapter and which is operating without a standard permit which intends to cease operations or withdraw its application for a standard operating permit shall notify the assistant secretary of such intention, shall submit a closure plan to the assistant secretary within ninety days of such notification, and shall be allowed to continue commercial operations for no longer than ninety days following such notification, unless the commission has determined that such facility satisfies all requirements of law and regulations for issuance of a standard operating permit. The commission may authorize an additional ninety days in which commercial operations may continue when the standard permit cannot be reasonably denied or issued within the original ninety days.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1980, No. 194, § 16; Acts 1983, No. 444, § 1, eff. Jan. 1, 1980.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978, No. 334, § 1, effective July 10, 1978) to consist of as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

As originally enacted, this section made reference to "Section 1307". Prior to the 1980 amendment, "Section 1137" was substituted for "Section 1307" on authority of R.S. 24:253. The 1980 amendment made no other changes in this section.

The 1983 amendment designated the original paragraph as subsec. A.; deleted a comma after "Part", "hazardous wastes" and "commission", substituted "R.S. 30:1137" for "Section 1137", and deleted "the" before "issuance" in subsec. A; and added subsec. B. A comma was added after "notification" in subsec. B as amended in 1983 on authority of R.S. 24:253.

Application of 1983 Amendment. Section 2 of Acts 1983, No. 444 provides: "The provisions of the Act shall be deemed to be remedial and shall be retroactive to January 1, 1980."

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1147 of Part VII of Chapter 11 of Title

30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2202, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Notes of Decisions

Compliance schedules 2
Site owners' duties 1

1. **Site owners' duties**

Owner of hazardous waste site is required by Environmental Affairs Act, LSA-R.S. 30:1051 et seq. (now designated as Environmental Quality Act, R.S. 30:2001 et seq.), to bring facility into compliance with current law and regulations and to obtain permit for disposal of hazardous waste, or to close the site. Op.Atty. Gen., No. 81-842, Aug. 21, 1981.

2. **Compliance schedules**

The existing permit under which the alleged hazardous waste treatment, storage and disposal facility owned and operated by the corporate defendant was already operating could not be replaced with a compliance schedule by the Environmental Control Commission. Environmental Control Com'n v. Browning-Ferris Industries, Chemical Services, Inc., Sup.1984, 450 So.2d 1292.

Provision of R.S. 30:1146 (now, this section) giving authority to the Environmental Control Commission to issue compliance schedules to existing permitted facilities in the manner and for the same purpose as for newly permitted facilities authorizes the Commission to rule on a permit application or, if the appropriate occasion arises, to issue a compliance schedule, but does not authorize the Commission to replace a permit with a compliance schedule. Environmental Control Com'n v. Browning-Ferris Industries, Chemical Services, Inc., Sup. 1984, 450 So.2d 1292.

§ 2202. Prohibitions

A. No person shall initiate or continue the generation, transportation, treatment, storage, or disposal of hazardous waste except as in compliance with the provisions of this Subtitle.

B. No person shall violate any rule or regulation adopted by the secretary under this Subtitle.

C. Notwithstanding any law, order, or regulation to the contrary, no person shall dispose of hazardous waste by injection into a Class I underground injection well when the well head or any portion of the casing is within the banks or boundaries of a lake, stream, or other surface water body within the jurisdiction of the state of Louisiana, whether man-made or occurring naturally, whether on a temporary or permanent basis.

D. No person shall treat, store, or dispose of hazardous waste in salt domes or sulphur mines within and under the jurisdiction of this state. However, nothing in this Section shall in any way limit the authority of the federal government with regard to petroleum storage activities in the state.

Acts 1979, No. 449, § 1, eff. Jan. 1, 1980. Amended by Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1983, No. 375, § 1; Acts 1985, No. 448, § 1, eff. July 1, 1985.

History and Source of Law

Prior to the 1988 redesignation of the sections of Chapter 11 into Subtitle II, Acts 1979, No. 449, § 1 amended and reenacted the former subject matter of Chapter 11 of Title 30, (previously consisting of Part I, entitled "Hazardous Waste Control" and containing R.S. 30:1101 to 30:1116, as enacted by Acts 1978,

No. 334, § 1, effective July 10, 1978) as Part VII, containing R.S. 30:1131 to 30:1147. See notes and Table 1 preceding R.S. 30:2001.

Acts 1983, No. 97, § 1 in subsec. B, substituted "secretary" for "commission".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83–30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83–30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

Acts 1983, No. 375, § 1, added subsec. C. "When" was substituted for "where" after "injection well" in subsec. C, as amended by Acts 1983, No. 375, § 1, on authority of R.S. 24:253.

The 1985 amendment added subsec. D.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1147 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2202, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

§ 2203. Remediation; evidence; prohibitions

A. Any person who causes, suffers, allows, or permits hazardous waste to be transported, generated, treated, stored, or disposed in such manner that it enters any groundwaters of the state upon obtaining knowledge of such shall notify the secretary and if necessary take prompt remedial action pursuant to regulations adopted under this Subtitle or as ordered by the secretary or by an authorized assistant secretary.

~~B. The pollution of any waters of the state beneath or adjacent to any site~~ to or from which hazardous waste has been transported or where hazardous waste has been treated, stored, or disposed, intentionally or accidentally, shall be presumed to be evidence of pollution from such site unless evidence is shown to rebut it, and the secretary may issue such orders in accordance with R.S. 30:2025 as may be necessary to contain, abate, control, and cleanup the pollution and may suspend, revoke, or terminate the operating authority of the site in addition to any other action provided by this Subtitle.

C. This Section shall not apply to discharges into waters of the state in accordance with state or federal licenses or permits issued under the authority of this Subtitle or the regulations promulgated hereunder.

~~Added by Acts 1984, No. 319, § 1, eff. July 2, 1984.~~

History and Source of Law

A section designated as R.S. 30:1147.1, added by Acts 1983, No. 547, § 2 and relating to citation of the Louisiana inactive and abandoned hazardous waste site law, was redesignated as R.S. 30:1149.2 (see, now, R.S. 30:2221) on authority of R.S. 24:253.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1147.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2203, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and

redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

§ 2204. Hazardous waste sites; clean up

A.(1) Whenever any owner, operator, or responsible person of any site obtains information that indicates hazardous waste or hazardous waste constituents are leaching, spilling, discharging, or otherwise moving in, into, within, or on any land, subsurface strata, water, or air, such person shall notify the office in accordance with regulations to be adopted. This notification requirement shall apply to leaching, spilling, discharging, or moving of hazardous waste or hazardous waste constituents occurring hereafter although the hazardous waste or hazardous waste constituents were heretofore present at the site.

~~(2) Upon receipt of the information required to be provided in Paragraph~~ (A)(1) of this Section, the secretary may order any owner, operator, or responsible person to test, monitor, and analyze to ascertain the nature and extent of any hazard and require such owner, operator, or responsible person to contain, abate, or clean up the site, or the secretary may undertake such activities and order an investigation of the site, take samples to be analyzed by the office, or may expend monies from the Hazardous Waste Site Cleanup Fund for these purposes. Any person ordered by the secretary to undertake certain actions as provided herein on property outside a facility's boundary shall either obtain permission from the owner of the property to perform such required actions or, if unable to obtain the owner's permission, request the secretary to order access to the property for the purpose of performing such required actions. In those cases where the secretary orders any owner, operator, or responsible person to test, monitor, and analyze to ascertain the nature and extent of such hazard, the order shall require the person to whom such order is issued to submit to the secretary within thirty days from the issuance of such order a proposal for carrying out the required monitoring, testing, and analysis.

B. Any failure or refusal by an owner or operator or responsible person to undertake such action as ordered by the secretary to test, monitor, analyze, contain, abate, or clean up a hazardous waste site shall be a violation of this Subtitle, and the secretary, in order to prevent damage to the public health and environment, may immediately declare the site abandoned, notwithstanding the provisions of R.S. 30:2225 or commence appropriate action or initiate proceedings under R.S. 30:2025, including the recovery of penalties, revocation of any permit, closure of the site, or any combination thereof.

C. A "hazardous waste site" as used in this Section includes the entire contaminated area and may extend beyond a facility's boundary.

Added by Acts 1980, No. 194, § 17. Amended by Acts 1981, No. 702, § 2, eff. July 23, 1981; Acts 1982, No. 799, § 1, eff. Aug. 4, 1982; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1983, No. 459, § 1, eff. July 6, 1983; Acts 1984, No. 674, § 1; Acts 1986, No. 329, § 1, eff. June 30, 1986.

History and Source of Law

The 1981 amendment, in subsec. B, added "or assistant secretary acting on behalf of the commission,"; in subsec. C, deleted "and" preceding "take", added ", and may expend monies from the Abandoned Hazardous Waste Site Fund for these purposes"; in subsec. D, deleted "in which the site is located, a notification" following "parish", substituted "and if requested by any owner within ten days after notice, shall hold a hearing prior to declaring the site abandoned" for "and such notification shall contain the date, place and time at which a hearing shall be held to determine whether the site abandoned should be declared abandoned"; in subsec. E, substituted "deemed necessary, including the acquisition of emergency easements and rights of way, conducting negotiations for property acquisition and exercise of eminent domain as provided by R.S. 30:1080," for "the commission or assistant secretary may deem necessary"; and added subsecs. G and H.

The 1982 amendment, in subsec. F, inserted the paragraph number designation (1), and in that paragraph substituted "clean-up," for "cleanup"; and added pars. F(2) and (3).

Acts 1983, No. 97, § 1, eff. Feb. 1, 1983, in subsecs. B, C, E, and G, deleted "commission or assistant" preceding "secretary"; in subsecs. A, H, and par. (2) of subsec. F, substituted "secretary" for "commission"; in subsec. A, substituted "he" for "it" deleted commas following "disposal" and "emits", inserted a comma following "classified", deleted "and" following "Chapter,", and substituted "the site" for "which"; in subsec. B, substituted "Part" for "Subpart"; in subsec. C, deleted "from the office" following "permit", and deleted "acting on behalf of the commission," following "secretary"; in subsec. D, "assistant" preceding "secretary" and deleted "and" following "abandoned", and inserted a comma following "and"; in subsec. E, inserted a comma following "acquisition", deleted a comma following "30:1080", and substituted "secretary" for "office"; in subsec. F, deleted "assistant" preceding "secretary"; in par. (1) of subsec. F, substituted "cleanup" for "clean-up"; in par. (2) of subsec. F, substituted "prepare" for "submit", deleted "to the commission" following "plan" and deleted a comma following "plan"; in subsec. G, inserted a comma following "environment", and deleted commas following "D" and "herein"; and, in par. (2) of subsec. H, deleted commas following "thereby" and "court".

In the section as amended by Acts 1983, No. 97, § 1, a comma was inserted following "abandoned" in subsec. D, and "When" was substituted for "Where" in par. F(1) on authority of R.S. 24:253.

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83–30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83–30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

Acts 1983, No. 459, § 1, eff. July 6, 1983, rewrote subsecs. A., C., and G. which formerly read:

"A. A site may be declared to be an abandoned hazardous waste site by the commission when it finds that the site has received for storage, treatment, or disposal, or now contains or emits, wastes that are identified, classified or defined to be hazardous wastes in accordance with the regulations adopted under the provisions of this Chapter, and the site was not closed in accordance with the requirements of this Chapter and the regulations adopted hereunder, and which constitutes or may constitute a danger or potential danger to the public health and the environment and for which no financially responsible owner or operator can be located."

"C. Upon receipt of information that a pit, pond, lagoon, landfill, or site is no longer in operation and is not under permit from the office, the commission or assistant secretary acting on behalf of the commission, may order an investigation of the site, take samples to be analyzed by the office, and may expend monies from the Abandoned Hazardous Waste Site Fund for these purposes."

"G. Any failure or refusal by a financially responsible owner or operator to undertake such action as ordered by the commission or the assistant secretary to contain or abate an abandoned hazardous waste site shall be a violation of this Chapter, and the commission or assistant secretary, in order to prevent damage to the public health and environment may immediately declare the site abandoned notwithstanding the provisions of Subsection D, herein, and commence appropriate action, including proceedings under R.S. 30:1073."

In the text of 1983, No. 459, § 1, commas were inserted after "disposal" and "emits" in par. 1 of subsec. A., and after "environment" in subsec. G. on authority of R.S. 24:253.

See the 1984 amendment note for texts of the subsections amended by the 1983 acts.

The 1984 amendment rewrote the section heading and the section which, as amended by the conflicting 1983 Acts, had read:

"§ 1148. Abandoned hazardous waste site

"A. A site may be declared to be an abandoned hazardous waste site by the secretary when he finds that the site has received for storage, treatment, or disposal or now contains or emits wastes that are identified, classified, or defined to be hazardous wastes in accordance with the regulations adopted under the provisions of this Chapter, the site was not closed in accordance with the requirements of this Chapter and the regulations adopted hereunder, and the site constitutes or may constitute a danger or potential danger to the public health and the environment and for which no financially responsible owner or operator can be located. (*Section heading and text of subsec. A as amended by Acts 1983, No. 97, § 1*).

"§ 1148. Abandoned or inactive hazardous waste site

"A. A site, defined for the purposes of this Section as a geographic location of totally owned or leased property, may be declared to be an abandoned hazardous waste site by the commission or assistant secretary upon a finding that the site:

"(1) Has received for storage, treatment, or disposal, or now contains or emits, wastes that are identified, classified, or defined to be hazardous wastes in accordance with the regulations adopted under the provisions of this Chapter.

"(2) Was not closed in accordance with the requirements of this Chapter and the regulations adopted hereunder.

"(3) Constitutes or may constitute a danger or potential danger to the public health and the environment, and

"(4) Has no financially responsible owner or operator who can be located, or such person has failed or refused to undertake actions ordered by the assistant secretary or the commission pursuant to R.S. 30:1148(G). (*Section heading and text of subsec. A as amended by Acts 1983, No. 459, § 1*).

"B. For the purposes of this Part, 'financially responsible' shall mean that the person has insurance, bonds, or assets sufficient to take action as necessary or as ordered by the secretary to protect the health and welfare of the citizens or to protect the environment. (*Text of subsec. B as amended by Acts 1983, No. 97, § 1*).

"C. Upon receipt of information that a pit, pond, lagoon, landfill, or site is no longer in operation and is not under permit, the secretary may order an investigation of the site, take samples to be analyzed by the office, and may expend monies from the Abandoned Hazardous Waste Site Fund for these purposes. (*Text of subsec. C as amended by Acts 1983, No. 97, § 1*).

"C. (1) Whenever any responsible person, owner, or operator of any inactive or abandoned site obtains information that indicates that hazardous waste is leaching, spilling, discharging, or otherwise moving in, into, within, or on any land or water, such person shall notify the office in accordance with regulations to be adopted. This notification requirement shall apply to leaching, spilling, discharging, or moving of hazardous waste occurring hereafter although the hazardous waste was heretofore present at the site.

"(2) Upon receipt of information that a pit, pond, lagoon, landfill, or site is no longer in operation and is not under permit from the office, whether or not the site has been declared abandoned under R.S. 30:1148(A), the commission or the assistant secretary on his own authority or acting on behalf of the commission may order any responsible owner, operator, or person to test, monitor, and analyze to ascertain the nature and extent of such hazard and to contain, abate, or clean up the site, or the assistant secretary may undertake such activities and order an investigation of the site, take samples to be analyzed by the office, and may expend monies from the Abandoned Hazardous Waste Site Fund for these purposes. In those cases where the commission or the assistant secretary orders any responsible person, operator, or person to test, monitor, and analyze to ascertain the nature and extent of such hazard, the order shall require the person to whom such order is issued to submit to the commission or the assistant secretary within thirty days from the issuance of such order a proposal for carrying out the required monitoring, testing, and analysis. (*Text of subsec. C as amended by Acts 1983, No. 459, § 1*).

"D. Prior to declaring a site to be an abandoned hazardous waste site, the secretary shall seek to notify every person who may own an interest therein that the site is to be declared abandoned, shall publish on three consecutive occasions in the official journal of the parish that the site is to be declared abandoned, and, if requested by any owner within ten days after notice, shall hold a hearing prior to declaring the site abandoned. (*Text of subsec. D or amended by Acts 1981, No. 702, § 2*).

"E. Upon declaration that a site is an abandoned hazardous waste site, the secretary shall notify the attorney general of such declaration and shall request the attorney general to take such specific legal actions as deemed necessary, including the acquisition of emergency easements and rights of way, conducting negotiations for property acquisition, and exercise of eminent domain as provided by R.S. 30:1080

to secure such site or compel cleanup or containment consistent with regulations and guidelines established by the secretary. (*Text of subsec. E as amended by Acts 1983, No. 97, § 1*).

"F. (1) When a site has been declared an abandoned hazardous waste site, the secretary is authorized to undertake the physical control, containment and cleanup, or closure of the abandoned hazardous waste site and may retain personnel for these purposes who shall operate under his direction.

"(2) In all cases in which the secretary proposes to treat, store, or dispose of hazardous wastes at the abandoned hazardous waste site, he shall prepare a closure plan setting forth how the site will be closed. The secretary shall provide an opportunity for the public to submit comments about the plan. The secretary shall provide adequate notice to the public of any public hearings on the closure plan by placing a notice in the general circulation newspaper of the parish in which the hearing is to be held. If the secretary determines that immediate action is required to secure the site or dispose of any waste in order to protect the health or safety of persons affected by the site or its contents or to protect the environment, he may take such action prior to submission of the plan and may subsequently submit a plan detailing emergency actions taken and those actions which he will be taking in the future.

"(3) The secretary shall have authority to implement the closure plan and to take all actions including erecting fences, signs, gates, levees, and monitoring devices as are reasonably necessary to secure the site and prevent unauthorized or inadvertent entry. (*Text of subsec. F as amended by Acts 1983, No. 97, § 1*).

"G. Any failure or refusal by a financially responsible owner or operator to undertake such action as ordered by the secretary to contain or abate an abandoned hazardous waste site shall be a violation of this Chapter, and the secretary, in order to prevent damage to the public health and environment, may immediately declare the site abandoned notwithstanding the provisions of Subsection D herein and commence appropriate action, including proceedings under R.S. 30:1073. (*Text of subsec. G as amended by Acts 1983, No. 97, § 1*).

"G. Any failure or refusal by an owner or operator or person responsible to undertake such action as ordered by the commission or the assistant secretary to test, monitor, analyze, contain, abate, or clean up a hazardous waste site shall be a violation of this Chapter, and the commission or assistant secretary, in order to prevent damage to the public health and environment, may immediately declare the site abandoned, notwithstanding the provisions of Subsection D herein, and commence appropriate action or initiate proceedings under R.S. 30:1073, including the recovery of penalties, or both. (*Text of subsec. G as amended by Acts 1983, No. 459, § 1*).

"H. (1) The secretary may, by recording the declaration of abandonment in the mortgage records of the parish where the property is located, create a lien against property declared to be abandoned to the extent of the expenditures by the state necessary to remedy the problem or to the extent of the appraised value after said expenditures, whichever is less. The secretary may provide in the declaration that the lien is limited to certain portions of property declared to be abandoned and may provide that a lien shall not be recorded against property of a person that the commission finds was in no way responsible for the spill or accident causing the damage requiring the expenditure of money from the fund. The filing of a sworn statement of the amount expended perfects the lien retroactively to the date of the recordation of the declaration.

"(2) Subsequent to a declaration of abandonment, a person whose property has been declared to be abandoned and against which a lien has been created thereby may apply to the secretary or file an action in the district court to require that the clerk erase the lien from the records, if the secretary or the court finds that the spill was in no way caused by any action or negligence on the part of the person who is the owner of the property subject to the lien or may file an action to have the debt reduced to the appraised value of the property." (*Text of subsec. H as amended by Acts 1983, No. 97, § 1*).

The 1986 amendment rewrote subsec. A and inserted a subsec. C relative to the extent of a hazardous waste site. Subsection A had provided:

"A. (1) Whenever any responsible person, owner, or operator of any site obtains information that indicates that hazardous waste is leaching, spilling, discharging, or otherwise moving in, into, within, or on any land or water, such person shall notify the office in accordance with regulations to be adopted. This notification requirement shall apply to leaching, spilling, discharging, or moving of hazardous waste occurring hereafter although the hazardous waste was heretofore present at the site.

"(2) Upon receipt of the information required to be provided in Paragraph (A)(1) of this Section, the secretary may order any responsible owner, operator, or person to test, monitor, and analyze to ascertain the nature and extent of any hazard and require subsequent to the submission of the plan to contain,

abate, or clean up the site, or the secretary may undertake such activities and order an investigation of the site, take samples to be analyzed by the office, or may expend monies from the Hazardous Waste Site Cleanup Fund for these purposes. In those cases where the secretary orders any operator or person to test, monitor, and analyze to ascertain the nature and extent of such hazard, the order shall require the person to whom such order is issued to submit to the secretary within thirty days from the issuance of such order a proposal for carrying out the required monitoring, testing, and analysis."

The insertion of quotation marks in subsec. C of this section as amended in 1986 was made on authority of R.S. 24:253.

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1148 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2204, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

Cross References

Hazardous waste cleanup, limitation of liability, this section not affected, see R.S. 9:2800.3.

Library References

Health and Environment ⇐25.5(5.5).
C.J.S. Health and Environment § 91 et seq.

§ 2205. Hazardous Waste Site Cleanup Fund

A.(1) All sums recovered through judgments, settlements, assessments of civil or criminal penalties, or otherwise under this Chapter, or other applicable law, for violation of this Subtitle, shall be paid into the state treasury and shall be credited to the Bond Security and Redemption Fund. After a sufficient amount is allocated from that fund to pay all obligations secured by the full faith and credit of the state which become due and payable within any fiscal year, the treasurer, prior to placing such remaining funds in the state general fund, shall pay into a special fund, which is hereby created in the state treasury and designated as the Hazardous Waste Site Cleanup Fund, an amount equal to the total amount of the sums recovered through all judgments, settlements, assessments of civil or criminal penalties, or otherwise, for violation of this Subtitle, except as provided in R.S. 30:2017, R.S. 30:2025, and R.S. 30:2198.

(2) The Hazardous Waste Site Cleanup Fund, hereinafter referred to as the "Site Cleanup Fund," shall additionally consist of all funds designated to that fund and received by donation, grant, gift, or otherwise from any source and sums appropriated specifically to it by the legislature and any other allocations made directly to it, including reimbursements for restoration of the environment damaged by a hazardous waste site.

B. Any grants or allocations made to the state of Louisiana from the United States government for the purposes of investigation, analysis, containment, or cleanup of hazardous waste sites shall be paid directly into the Site Cleanup Fund to be used for that purpose.

C. The secretary shall administer the Site Cleanup Fund and shall make disbursements from the fund for all necessary and appropriate expenditures. Disbursements shall be made upon sufficient proof of services rendered and materials or equipment used or expended. For both the design and conduct of remedial actions, including cleanup at hazardous waste sites, the secretary shall select an appropriate action based on cost effectiveness that also meets the requirement that any exposure or potential exposure to hazardous wastes present at the site is reduced to such level as not to pose any significant threat to public health or the environment.

D. The monies in the Site Cleanup Fund shall be used to defray the cost of investigation, testing, containment, control, and cleanup of hazardous waste sites, to provide money or services as the state share of matching funds for federal grants, and to defray the cost of securing and quarantining hazardous waste sites, including the acquisition of rights of way, easements, or title when necessary. Interest earned through investment of the fund capital shall be credited to the general fund.

E. In any cases where monies from the Site Cleanup Fund are expended, the attorney general shall institute a civil action to recover from the responsible persons all such monies expended from the Site Cleanup Fund. Any monies so recovered shall be paid into the Hazardous Waste Site Cleanup Fund as a reimbursement as provided in this Section.

Added by Acts 1980, No. 194, § 17. Amended by Acts 1981, No. 702, § 3, eff. July 23, 1981; Acts 1982, No. 299, § 1; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1983, No. 467, § 1, eff. July 6, 1983; Acts 1984, No. 674, § 1; Acts 1985, No. 331, § 1, eff. July 9, 1985; Acts 1986, No. 941, § 1, eff. July 11, 1986; Acts 1986, No. 943, § 2, eff. July 11, 1986; Acts 1987, No. 799, § 3, eff. July 20, 1987.

History and Source of Law

The 1981 amendment, in subsec. D, added "investigation, testing".

The 1982 amendment, in subsec. C, inserted "hazardous waste" preceding "site fund" in the first sentence, and added the last sentence.

Acts 1983, No. 97, § 1, eff. Feb. 1, 1984, in subsec. C, deleted "assistant" preceding "secretary".

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83–30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83–30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

In Acts 1983, No. 467, § 1, substituted "Hazardous Waste Site Cleanup Fund" for "Abandoned Hazardous Waste Site Fund" and "site cleanup fund" for "abandoned site fund" throughout the section; substituted "R.S. 30:1079" for "Section 1080 of this Chapter" in the first sentence of subsec. A; inserted a comma after "containment" in subsec. B and after "easements" in subsec. D; and substituted "this Section" for "R.S. 30:1149" in subsec. E. "Assistant" was deleted before "secretary" twice in subsec. C on authority of R.S. 24:253 to conform with the amendments of this section made by Acts 1983, No. 97.

The 1984 amendment rewrote the section heading as amended by Acts 1983, No. 97, § 1, which prior thereto read, "Abandoned Hazardous Waste Site Fund"; in subsec. A, transposed the quotation marks and comma following "site cleanup fund", and deleted commas following "Environmental Emergency Response Fund", following "by the legislature" and following "allocations made directly to it", and substituted "a" for "and abandoned" preceding

"hazardous waste site"; in subsec. B deleted "abandoned" preceding "hazardous waste sites" and deleted a comma following "site cleanup fund"; in subsec. C, as amended by Acts 1983, No. 97, § 1, and Acts 1983, No. 467 § 1, deleted "abandoned" preceding "hazardous waste sites"; in subsec. D, deleted "abandoned" preceding "hazardous waste sites" in two places; and in subsec. E, deleted a comma following "reimbursement".

The 1985 amendment rewrote subsec. A, which prior thereto read:

"A. There is hereby established an Hazardous Waste Site Cleanup Fund, hereinafter referred to as the 'site cleanup fund', to which the treasurer shall deposit all monies received in excess of the amount which is to be deposited into the Environmental Emergency Response Fund as provided for in R.S. 30:1079. The site cleanup fund shall additionally consist of all funds received by donation, grant, gift, or otherwise from any source and sums appropriated directly to the site cleanup fund by the legislature and any other allocations made directly to it including reimbursements for restoration of the environment damaged by a hazardous waste site."

On authority of R.S. 24:253, in par. A(1), as amended in 1985, subparagraph designations were added.

Section 2 of Acts 1985, No. 331 (§ 1 of which amended subsec. A of this section) provided:

"The treasurer shall upon the effective date of this Act transfer any funds within the Emergency Response Fund in excess of one million dollars to the Hazardous Waste Site Cleanup Fund."

Acts 1986, No. 943, § 1 rewrote subsec. A which had provided:

"A. (1)(a) All sums recovered in judgments or settlements or from the assessment of civil or criminal penalties under Section 1073 of this Chapter, or under other provisions of this Chapter, or other applicable laws shall be paid into the state treasury and shall be credited to the Bond Security and Redemption Fund, after a sufficient amount is allocated from that fund to pay all obligations secured by the full faith and credit of the state which become due and payable within any fiscal year, the treasurer shall, prior to placing such remaining funds in the state general fund, pay into a special fund, which is hereby created in the state treasury and designated as the Hazardous Waste Site Cleanup Fund, an amount equal to the total amount of the sums recovered under Section 1073 of this Chapter, all judgments, settlements, or assessments of penalties, or recovery under other provisions of applicable laws, except as provided in Section 1143 of this Chapter.

"(b) The Hazardous Waste Site Cleanup Fund, hereinafter referred to as the "site cleanup fund," shall additionally consist of all funds received by donation, grant, gift, or otherwise from any source and sums appropriated specifically to it by the legislature and any other allocations made directly to it including reimbursements for restoration of the environment damaged by a hazardous waste site.

"(2) Upon the accumulation of four million dollars in the site cleanup fund the treasurer shall pay into the Environmental Emergency Response Fund monies as provided for in R.S. 30:1079."

Acts 1986, No. 941, § 1 rewrote par. (2) of subsec. A omitting the final sentence in Acts 1986, No. 943, § 1. On authority of R.S. 24:253, the text of Acts 1986, No. 943, § 1 was printed.

The subparagraph designations, insertion of commas, and substitution of "R.S. 30:1066" for "R.S. 30:1066.7" in this section as amended was on authority of R.S. 24:253.

Sections 3 and 4 of Acts 1986, No. 941 provide:

"Section 3. Funds transferred to the Environmental Programs Trust Fund under the provisions of Act 941 and Act 385 of the 1986 Regular Session are hereby declared to be self-generated revenues for Fiscal Year 1986-87.

"Section 4. This Act shall become effective upon signature by the governor or, if not signed by the governor, upon expiration of the time for bills to become law without signature by the governor, as provided in Article III, Section 18 of the Constitution of Louisiana."

Acts 1986, No. 943, §§ 3 and 4 provide:

"Section 3. The treasurer shall upon the effective date of this Act transfer any funds within the Hazardous Waste Site Cleanup Fund in excess of two million dollars and within the Environmental Emergency Response Fund in excess of five hundred thousand to the Environmental Programs Trust Fund as provided in R.S. 30:1065.1, notwithstanding any conflicting provision of law.

"Section 4. The aggregate total of any fee increases adopted pursuant to the authority of this Act shall not exceed one million seven hundred fifty thousand dollars; however, no single permit or license fee shall be increased by more than thirty percent."

Acts 1987, No. 799, § 2 repealed par. A(2) which read:

"(2) Upon the accumulation of two million dollars in the site cleanup fund, the treasurer shall pay into the Environmental Emergency Response Fund monies as provided for in R.S. 30:1079, those monies which would otherwise be paid into the site cleanup fund.",

Acts 1987, No. 799, § 3, in the second sentence of subsec. D, substituted "shall be credited to the general fund" for "may be utilized for research concerning the disposal, treatment, and resource recovery of hazardous waste".

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1149 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2205, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

On authority of R.S. 24:253 and pursuant to the redesignation of the sections of Chapter 11 into Subtitle II, references in the texts of the affected sections to "Chapter" and "Part" were changed to refer to "Subtitle" and "Chapter", respectively, and citations of particular sections were changed to reflect their redesignation.

In addition and on the same authority, subpars. A(1)(a) and A(1)(b) were redesignated as pars. A(1) and A(2) [a prior par. A(2) was repealed in 1987]; "Site Cleanup Fund" was substituted for "site cleanup fund" throughout; and "Hazardous Waste Site Cleanup Fund" was enclosed in parentheses in redesignated par. A(1).

Library References

States ⇐127.
C.J.S. States § 228.

Notes of Decisions

Responsibility for tax 1

1. Responsibility for tax

Department of Transportation and Development is required to pay to the Department of Revenue a hazardous waste generator tax. Op. Atty.Gen. No. 87-10, July 21, 1987.

§ 2206. Contracting for hazardous waste site cleanup

A. Whenever a hazardous waste site must be permanently closed, isolated, cleaned up, or otherwise rendered safe and there is no responsible party other than the state to perform the work, the secretary, in the name and on behalf of the state, may enter into contracts with a responsible person or corporation to provide the necessary services and materials. Contracting for such cleanup shall be based on priorities to be determined by the department. Any party to such an agreement must be licensed according to law before negotiating or entering into such a contract.

B. If the secretary cannot reach an agreement for the contract with a party to perform the work without inclusion within the contract of a hold-harmless clause, the secretary is hereby authorized to include such a clause, which shall be binding upon the state of Louisiana. The hold-harmless clause may obligate the state to hold harmless the party performing the work for property damages and personal injuries arising from the performance of the contract although the party may be found to be negligent in the performance of the contract. However, this agreement to hold the contractor harmless may only cover acts of ordinary negligence and shall not cover damages resulting from intentional acts or acts of gross negligence.

C. Contracts pursuant to this Section shall be negotiated informally by the secretary and shall not be subject to any other requirements of law for entering into public contracts. Prior to the execution of such contract it shall

be reviewed by the secretary of the department and the commissioner of the Division of Administration.

Added by Acts 1982, No. 772, § 1. Amended by Acts 1983, 1st Ex.Sess., No. 46, § 1, eff. Jan. 19, 1983; Acts 1983, No. 97, § 1, eff. Feb. 1, 1984; Acts 1986, No. 319, § 1.

History and Source of Law

Subsections A and B of R.S. 30:1149.1 as enacted in 1982 were designated on authority of R.S. 24:253.

Acts 1983, No. 97, § 1, deleted "assistant" preceding "secretary"; in subsecs. A and C, substituted "department" for "Department of Natural Resources"; in subsec. A, deleted commas following "party" and "state", and substituted "cleanup" for "clean-up"; in subsec. B, deleted commas following "clause" and "contract"; and, in subsec. C, inserted a comma following "Administration".

In the text as amended by Acts 1983, No. 97, § 1, inserted hyphens between "hold" and "harmless", and inserted a comma following "clause" in subsec. B, and, in subsec. C, deleted a comma following "cleanup" on authority of R.S. 24:253.

Suspension of Acts 1983, No. 97. Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session suspended Acts 1983, No. 97 until the sixtieth day after adjournment of the 1984 Regular Session of the Legislature. However, the Governor, by Executive Order No. 83-30, challenged the validity of SCR No. 3 and directed implementation of Acts 1983, No. 97. The full texts of SCR No. 3 and Executive Order No. 83-30 are set forth under R.S. 30:2001.

Senate Concurrent Resolution No. 3 of the 1983 Second Extraordinary Session was repealed by Acts 1984, No. 342, § 2, eff. July 2, 1984. See note following R.S. 30:2001.

Acts 1983, 1st Ex.Sess., No. 46, § 1 added the third sentence to subsec. A and added subsec. C.

The 1986 amendment, in subsec. C, deleted the subsection ending which had provided ", and on completion of the cleanup the secretary of the department shall submit a report on the cleanup to the chairman of the Senate Natural Resources Committee and the chairman of the House Natural Resources Committee".

Pursuant to House Concurrent Resolution No. 247 of the 1987 Regular Session and on authority of R.S. 24:253, this section, formerly R.S. 30:1149.1 of Part VII of Chapter 11 of Title 30 of the Revised Statutes of 1950, was redesignated as R.S. 30:2206, of Chapter 9 of Subtitle II of Title 30.

For disposition of the sections of former Chapter 11 following their reorganization and redesignation in Subtitle II, see notes and Table 2 preceding R.S. 30:2001.

Library References

Health and Environment ⇐25.5(5.5), (7).
C.J.S. Health and Environment § 91 et seq.

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LOUISIANA STATUTES ANNOTATED

REVISED STATUTES

TITLE 30

MINERALS, OIL, AND GAS AND ENVIRONMENTAL QUALITY

SUBTITLE II. ENVIRONMENTAL QUALITY

Chapter		Section
5-A.	Coastal Environmental Protection Trust Fund	30:311
18.	Solid Waste Recycling and Reduction Law	30:2411
19.	Oil Spill Prevention and Response Act	30:2451

SUBTITLE II. ENVIRONMENTAL QUALITY

Law Review Commentaries

A primer on environmental damage insurance under comprehensive general liability policies. Joseph E. LeBlanc, Jr. and Eric E. Jarrell, 38 La.B.J. 85 (1990).

State and federal notification requirements for spills and releases. Robert E. Holden, 38 La.B.J. 77 (1990).

United States Code Annotated

Clean Water Act notification requirements for spills and releases, see 33 U.S.C.A. § 1321.

Comprehensive Environmental Response, Compensation and Liability Act notification requirements for spills and releases, see 42 U.S.C.A. § 9601.

Emergency Planning and Community Right to Know Act requirements for spills and releases, see 42 U.S.C.A. § 11001 et seq.

Oil Pollution Act of 1990, see 32 U.S.C.A. § 2701.

CHAPTER 1. GENERAL

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~~§ 2001. Short title~~

Law Review Commentaries

Federal facilities and environmental compliance: Toward a solution. Stan Millan, 36 Loy. L.Rev. 319 (1990).

Oil Pollution Act of 1990. Antonio J. Rodriguez and Paul A.C. Jaffe, 15 Tul.Mar.L.J. 1 (1990).

The private enforcement of environmental law. Michael S. Grave, 65 Tul.L.Rev. 339 (1990).

§ 2004. Definitions

The following terms as used in this Subtitle, unless the context otherwise requires or unless redefined by a particular Chapter hereof, shall have the following meanings:

[See main volume for text of (1) to (8)]

(9) "Natural resources committees" means the natural resources committee of the House of Representatives and the environmental quality committee of the Senate of the Louisiana Legislature.

Amended by Acts 1991, No. 21, § 1, eff. June 14, 1991.

~~*[See main volume for text of (10)]*~~

~~(11) "Response fund" means the Environmental Trust Fund created in R.S. 30:2015.~~

Amended by Acts 1989, No. 392, § 1, eff. June 30, 1989.

[See main volume for text of (12) to (15)]

Historical and Statutory Notes

1989 Legislation

The 1989 amendment, in par. (11), substituted "the Environmental Trust Fund created in R.S. 30:2015" for "the Environmental Emergency Response Fund created in R.S. 30:2034".

1991 Legislation

The 1991 amendment, in par. (9) defining "natural resources committees", substituted "committee" for "committees" following "natural resources" and added "the environmental quality committee of the" preceding "Senate of the Louisiana Legislature."

§ 2005. Repealed by Acts 1989, No. 662, § 8, eff. July 7, 1989

Historical and Statutory Notes

The repealed section related to the governor's resource development and environmental quality council. The title of the repealing Act reflected an intent to, inter alia, abolish the council. See main volume for text of the section prior to repeal.

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY

Section
2011.1 to 2011.9. Blank.
2019.1. Promulgation of rules and regulations affecting agriculture.
2038. Degradable or recyclable plastics; state agencies.
2039. Recordation of notice of solid or hazardous waste site by landowner.
2040. Siting disposal facilities in Rapides Parish.

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

Louisiana Environmental Law Cases and Louisiana Environmental Law Administrative Decisions are available on WESTLAW databases: LAENV-CS and LAENV-ADMIN.

§ 2011. Department of Environmental Quality created; duties; powers; structure

[See main volume for text of A(1) and (2)]

(3) The department is authorized and empowered to administer, maintain, and operate ~~the Municipal Facilities Revolving Loan Fund as created and provided in R.S. 30:2078 et~~

~~seq. In connection with such administration, maintenance, and operation, the department~~ is authorized to incur debt and issue bonds, notes, or other evidences of indebtedness, and is authorized to pledge the sums in, credited to, or payable to the Municipal Facilities Revolving Loan Fund as security for the debt of other entities, and is authorized to arrange, provide for, and pay the cost of credit enhancement devices for its debt and the debt of other entities in order to provide funds in connection with the Municipal Facilities Revolving Loan Fund Program. Any such evidence of indebtedness, guarantee, pledge, or credit enhancement device shall be authorized, executed, and delivered by the secretary or his designee in accordance with the provisions and subject to the limitations provided in R.S. 30:2011(D)(23) and R.S. 30:2080 through 30:2088.

Added by Acts 1990, No. 594, § 1, eff. July 18, 1990.

[See main volume for text of B]

C. (1) The department shall be divided into offices.

(a) The office of air quality and radiation protection shall administer and enforce the Louisiana Air Control Law as provided in Chapter 3 of this Subtitle, the Louisiana Nuclear Energy and Radiation Control Law as provided in Chapter 6 of this Subtitle, and the Central Interstate Low-Level Radioactive Waste Compact as provided in Chapter 7 of this Subtitle.

Amended by Acts 1990, No. 245, § 1.

[See main volume for text of C(1)(b) to C(2)]

D. The secretary shall have the following powers and duties:

[See main volume for text of D(1)]

(2) To grant or deny permits, licenses, registrations, variances, or compliance schedules as are provided for in this Subtitle. The secretary shall have the general power to require such conditions in individual instances as are necessary to assure compliance with applicable federal laws and regulations relating to this Subtitle. In those instances in which a permit or license is required prior to construction of a new or modified facility, the secretary may issue construction authorizations prior to issuance of a permit in appropriate circumstances where there is a positive human health or environmental benefit. The secretary may establish an escrow account, to be maintained in accordance with regulations adopted hereunder, which account shall be utilized by the secretary for receipt and disbursement of deposits supplied by any environmental quality permit applicant to defray specific costs of holding an adjudicatory hearing on that applicant's permit. The secretary shall promulgate regulations regarding such account and requiring such deposits.

Amended by Acts 1991, No. 848, § 1, eff. July 23, 1991.

[See main volume for text of D(3) to (15)]

(16) To prepare and present to the United States Environmental Protection Agency a priority list for funding of treatment works under the Construction Grants Program and the criteria used to develop the priority list as required under both Section 106 and Section 303 of the Federal Water Pollution Control Act,[1] as amended, and any other sections of that act requiring the ranking of applicants for grants for construction of treatment works. The criteria and any modifications thereof shall be submitted to the House Natural Resources Committee and to the Senate Environmental Quality Committee for their consideration.

Amended by Acts 1991, No. 21, § 1, eff. June 14, 1991.

[See main volume for text of D(17) to (20)]

(21) To create the division of local programs and public participation with the following powers and duties:

[See main volume for text of D(21)(a) to (d)]

(e) The secretary shall provide a detailed report to the legislative oversight committees of the House Natural Resources Committee and the Senate Environmental Quality ~~Committee on June first of each year. This report shall include specific activities,~~

accomplishments, and recommendations on these programs. It shall include comments provided by individuals, organizations, private business, local governments, municipalities, or others affected by this Section.

Amended by Acts 1991, No. 21, § 1, eff. June 14, 1991.

[See main volume for text of D(22)]

(23) To authorize by executive order, the issuance, sale, execution, and delivery of bonds, notes, or other evidences of indebtedness of the department, obligations representing guarantees by the department of the debt of other entities, and the granting of pledges of the sums deposited in, credited to, or payable to the Municipal Facilities Revolving Loan Fund as created and provided in R.S. 30:2078 et seq., including sums to be received pursuant to letters of credit, as security for the debts of other entities, subject to the approval of the State Bond Commission.

Added by Acts 1990, No. 594, § 1, eff. July 18, 1990.

(24)(a) Notwithstanding any other provision of the law to the contrary, the secretary shall issue no permit that authorizes the construction or operation of any new or expanded commercial hazardous waste incineration facility of any type until rules and regulations are promulgated which govern the design, siting, construction, operation, emissions limitations, and the disposal methods of incineration facilities.

(b) The prohibition in this Paragraph shall not apply to the regulation or permitting of any such facility possessing a permit or an interim permit on July 24, 1991. Any interim permit issued to a commercial hazardous waste incineration facility by the secretary on or after July 24, 1991 shall expire within ninety days after the date of the promulgation of the regulations governing the design, siting, construction, operation, emissions limitations, and disposal methods of incineration facilities.

(c) In no event shall any such permit be issued without the following:

(i) Prior notification of legislators representing the area which includes the proposed site of the facility.

(ii) Prior public hearing in that area.

(d) If rules and regulations which govern the design, siting, construction, operation, emissions limitations, and disposal methods of commercial hazardous waste incineration facilities are not promulgated by April 1, 1992, the secretary shall issue or reissue any permit or interim permit previously issued to any commercial incineration facility under the existing rules and regulations.

(e) The provisions of this Paragraph shall not apply to the construction or operation of a medical waste incinerator which is permitted pursuant to the provisions of R.S. 30:2154(C) or 30:2180(D)(4).

Added by Acts 1991, No. 998, § 1, eff. July 24, 1991.

[See main volume for text of E to G]

[1] 33 U.S.C.A. § 1256 and 33 U.S.C.A. § 1313, respectively.

Historical and Statutory Notes

Acts 1989, No. 234, §§ 1, 2, effective June 26, 1989, changed the date for the termination of the statutory entities made part of the Department of Environmental Quality from July 1, 1989 to July 1, 1990.

1990 Legislation

Acts 1990, No. 245, § 1, in subpar. C(1)(a) substituted "office of air quality and radiation protection" for "office of air quality and nuclear energy".

Acts 1990, No. 594, § 1 added par. (3) of subsec. A, relating to the Department of Environmental Quality's authorization to administer, maintain, and operate the Municipal Facilities Revolving Loan Fund; and added par. (23) in subsec. D relating to the authority to issue, sell, execute, or deliver bonds, notes, or other evidences of indebtedness of the department.

At the end of par. A(3) as amended in 1990, "R.S. 20:2011.1 through 2011.9" was changed to "R.S. 30:2080 through 30:2088" on authority of R.S. 24:253.

1991 Legislation

Acts 1991, No. 21, § 1, in subsec. D, substituted "Natural Resources Committee and to the Senate Environmental Quality Committee" for "and Senate Natural Resources Committees" in par. (16) and "Natural Resources Committee and the Senate Environmental Quality Committee" for "and Senate Natural Resources Committees" in subpar. (21)(c).

~~Acts 1991, No. 846, § 1, in par. D(2), inserted a~~ new third sentence regarding construction authorizations issued prior to permits.

Acts 1991, No. 993, § 1 added par. D(24) relating to commercial hazardous waste incinerators.

Pursuant to the statutory revision authority of the Louisiana State Law Institute, in this section as amended in 1991, a comma was inserted following "accomplishments" in the second sentence of subpar. D(21)(e), "July 24, 1991" was substituted for "the date this Paragraph becomes effective" in the first and second sentences of subpar. D(24)(b), and "30:2154(C)" was substituted for "30:2154(c)" in subpar. D(24)(e).

House Concurrent Resolutions Nos. 132 and 282 of the 1991 Regular Session both relate to the relationship of the Department of Environmental Quality to the agricultural industry.

House Concurrent Resolution No. 132 provides in part:

"THEREFORE, BE IT RESOLVED that the Legislature of Louisiana does hereby urge and request the Department of Environmental Quality to amend its proposed rules on solid waste, the notice of intent of which was published in the Louisiana Register on March 20, 1991, to provide that the regulation of agricultural crop residues, aquacultural residues, silvicultural residues, and other agricultural wastes which are removed off site of production during the process of drying, cleaning, ginning, grinding, milling, or any other agricultural process, and which can be used to increase top soil, as a compost, as feed stock for fuel, or in the generation of electricity, shall fall within the jurisdiction of the Department of Agriculture and Forestry."

House Concurrent Resolution No. 282 of the 1991 Regular Session provides in part:

"THEREFORE, BE IT RESOLVED that the Legislature of Louisiana does hereby direct the Department of Environmental Quality to take ~~the following steps prior to the promulgation of~~ rules and regulations which affect the agriculture industry in order to promote balance and harmony in achieving environmental quality:

"(1) The governor shall designate a person from the office of the governor to act as a liaison between the department and the agriculture industry, including both production and processing and their various operations and industries; and

"(2) The department shall inform the chancellor of the Louisiana State University Agricultural Center of proposed rules, regulations, or practice changes and the reasons for such. The chancellor shall designate appropriate research, extension, or other personnel under his authority who shall provide documentation to the department and the governor's appointed liaison with respect to the environmental effects of agricultural practices; the economic impact of the proposed rules, regulations, or changes; the acceptable and unacceptable risk levels associated with traditional and proposed agricultural practices; alternative methods of achieving environmental goals; the probable effectiveness of any proposed rules, regulations, or changes; and any other information that should be considered; and

"(3) The positions of the department and the agriculture community, as supported by the chancellor, shall be communicated to the governor through his designated liaison for his participation in implementing or limiting the implementation of any such rule, regulation, or practice change."

Law Review Commentaries

The private enforcement of environmental law. Michael S. Greve, 65 Tul.L.Rev. 339 (1990).

United States Code Annotated

Oil Pollution Act of 1990, see 32 U.S.C.A. § 2701.

§§ 2011.1 to 2011.9. [Blank]

Historical and Statutory Notes

Sections designated as R.S. 30:2011.1 through R.S. 30:2011.9, relating to the Municipal Facilities Revolving Loan Fund, were enacted by Acts 1990, No 594, § 1, eff. July 18, 1990 and were redesignated as R.S. 30:2080 through 30:2088 on authority of R.S. 24:253.

§ 2012. Enforcement inspections

[See main volume for text of A to E]

F. The secretary may institute a civil action to compel inspections under this Section and to obtain a permanent or temporary injunction, restraining order, or any other appropriate order. The venue of such an action shall be in East Baton Rouge Parish or in the parish in which the facility is located or has an office. The court shall enter, ex parte or after a hearing, an appropriate order or decree upon a showing that the owner or operator of the facility has acted to or is about to do any of the following:

[See main volume for text of F(1) to (3)]

(4) Refuse access to, or the copying of, such records as the secretary or his representative determines are necessary for the enforcement of this Subtitle or refuse to provide reasonable copies of such records within a reasonable time.

~~Amended by Acts 1990, No. 141, § 1.~~

G. Any person who in any way impedes an inspection authorized under this Section shall be liable for the penalties provided in this Subtitle unless a court finds that the inspection was unconstitutional. In any such action involving a refusal to provide copies as provided in Subsection (F)(4) of this Section, the respondent shall have the burden of proving that the request to provide copies of records was unreasonable.

Amended by Acts 1990, No. 141, § 1.

[See main volume for text of H and I]

Historical and Statutory Notes

1990 Legislation

The 1990 amendment inserted "or refuse to provide reasonable copies of such records within a reasonable time" to the end of par. F(4); and added to the end of subsec. G the second sentence regarding burden of proof.

Notes of Decisions

Risk benefit analysis 3
Validity 1
Violations 2

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1. Validity

This section authorizing warrantless inspections of all facilities subject to environmental regulations, which allowed warrantless periodic inspections, along with special inspections when exigent circumstances exist or environmental violations are suspected, comported with constitutional protections against unreasonable searches and seizures, as applied to oil production facilities. Matter of Mullins & Pritchard, Inc., App. 1 Cir.1989, 549 So.2d 872.

2. Violations

Evidence supported Department of Environmental Quality conclusion that waste disposal facility maintained by applicant for final facility permit did not adequately provide for the geology of site; according to some expert testimony presence of sand created possibility that wastes escaping from containment might migrate to nearby water supply within a few years. Matter of Cecos Intern., Inc. ("Cecos") Livingston Facility Permit Application No. LAD00618298, App. 1 Cir.1990, 574 So.2d 385, writ denied 576 So.2d 18.

Searches of oilfield production facilities were permitted under this section specifically authorizing warrantless inspections whenever there exists reasonable belief of violation of environmental rules and regulations, where, prior to each inspection, complaint alleging potential violations of environmental regulations had been lodged with Department of Environmental Quality. Matter of Mullins & Pritchard, Inc., App. 1 Cir.1989, 549 So.2d 872.

3. Risk benefit analysis

Secretary of Department of Environmental Quality had conducted sufficient risk/benefit analysis, prior to rejecting final permit for operation of waste disposal facility; Secretary had made decision after review of record containing expert testimony and evidence on economic and societal benefits from facility and risk of water contamination and harm to environment, had noted problems and concluded risk was not warranted or acceptable. Matter of Cecos Intern., Inc. ("Cecos") Livingston Facility Permit Application No. LAD00618298, App. 1 Cir.1990, 574 So.2d 385, writ denied 576 So.2d 18.

§ 2014. Permits, licenses, registrations, variances, monitoring fees, and research and development fees

[See main volume for text of A]

B. In order to provide for adequate permitting, monitoring, investigation, administration, and other activities required for the maintenance of a healthful and safe environment, an initial fee and an annual monitoring and maintenance fee shall be charged for all permits, licenses, registrations, or variances authorized by this Subtitle. These fees shall be determined, except as otherwise provided in this Subtitle relative to maximum amounts of fees, using a formula developed by rules to be based upon a cost equal to the cost of the annual maintenance, permitting, monitoring, investigation, administration, and other activities required therewith, including any effects the volume of emissions or effluents may have on such activities. Any such formula or fees shall be adopted by the department by rule in accordance with the Administrative Procedure Act, R.S. 49:950 et seq. Funds generated from these fees shall be deposited in the Environmental Trust Fund as provided in R.S. 30:2015.

Amended by Acts 1989, No. 392, § 1, eff. June 30, 1989.

[See main volume for text of C and D]

Historical and Statutory Notes

1989 Legislation

The 1989 amendment, in subsec. B, substituted "Environmental Trust Fund" for "Environmental Programs Trust Fund" following "deposited in the" in the final sentence and substituted "or" for "of" between "volume" and "emissions" in the second sentence.

On authority of R.S. 24:253, in this section as amended in 1989, a comma was inserted between "Permits" and "licenses" in the section heading, and, in the second sentence of subsec. B, "volume or emissions" was changed to "volume of emissions".

Notes of Decisions

Compliance history 3
Period of permit 4

3. Compliance history

Evidence from lawsuit brought by United States involving waste disposal facility could be used as evidence of past compliance history in determining whether final state permit should be issued, even though litigation had been terminated by consent decree which had resolved issues as between parties; consent decree provided that it would not be construed as a ruling or determination of any issue relating to state permits. Matter of Cecos Intern., Inc. ("Cecos") Livingston Facility Permit Application No. LAD00618298, App. 1 Cir.1990, 574 So.2d 385, writ denied 576 So.2d 18.

4. Period of permit

Earlier permit to operate waste facility had been interim, rather than final, and facility's operator was therefore not entitled to ten-year operation period provided for under final permit. Matter of Cecos Intern., Inc. ("Cecos") Livingston Facility Permit Application No. LAD00618298, App. 1 Cir.1990, 574 So.2d 385, writ denied 576 So.2d 18.

§ 2015. Environmental Trust Fund

A. In order to fulfill the constitutional mandate of Article IX of the Louisiana Constitution to protect, conserve and replenish the natural resources of the state, the legislature hereby declares that sufficient funds shall be available to the Department of Environmental Quality to fulfill that mandate. It is the intent of this Section to insure that all funds generated by the department are used to fulfill and carry out its powers, duties, and functions as provided by law.

B. There is hereby established a fund in the state treasury to be known as the "Environmental Trust Fund", hereafter referred to as the "trust fund", into which the state treasurer shall each fiscal year deposit the revenues received from those sources provided for by Subsection C of this Section and other sources as provided for by law after those revenues have been deposited in the Bond Security and Redemption Fund. Out of the funds remaining in the Bond Security and Redemption Fund after a sufficient amount is allocated from that fund to pay all obligations secured by the full faith and credit of the state that become due and payable within each fiscal year, the treasurer, prior to placing such funds in the state general fund, shall pay into the trust fund an amount equal to the revenue generated from collection from those sources provided for by Subsection C of this Section and other sources as provided for by law. No expenditures shall be made from the trust fund unless first appropriated by the legislature. The monies in the trust fund shall be invested by the state treasurer in the same manner as monies in the state general fund. All interest earned on money from the fund and invested by the state treasurer shall be credited to the Environmental Trust Fund.

C. The Environmental Trust Fund shall consist of all revenues generated from the following sources:

(1) All fees assessed pursuant to the authority granted in R.S. 30:2014, R.S. 39:55.2, and any other provision of law authorizing the department to assess a fee. Such fees shall be used only for the purpose for which they were assessed.

(2) All sums in excess of that required to fully fund the Hazardous Waste Site Cleanup Fund recovered through judgments, settlements, or assessments of civil or criminal penalties, or under this Subtitle or any other applicable law for any violation of this Subtitle.

(3) Any donations, grants, and sums appropriated or allocated to the trust fund by the legislature.

~~(4) Reimbursements for funds expended by the department for any response activities~~ conducted due to any pollution discharge or disposal, environmental emergency, or remedial action.

(5) Any grants or allocations made to the state of Louisiana from the United States government for any purpose provided by the grant or allocation.

(6) Reimbursement or a judgment awarding damages for restoration or damages to the state's natural resources.

(7) Any costs assessed as part of any administrative hearing or enforcement action or reimbursement of costs associated with the granting of any permit, license, variance, or registration.

D. The monies in the Environmental Trust Fund shall be used for the following purposes:

(1) To defray the cost to the state of permitting, monitoring, investigating, maintaining, and administering the programs provided for under the Louisiana Environmental Quality Act. All monies in the fund in excess of that amount necessary to administer such programs shall remain in the fund, to be invested by the treasurer, until such time as either state or federal funds become unavailable for these purposes. These excess funds shall be retained for the purpose of supplanting lost and reduced state environmental funding, or federal environmental funding presently granted to the state.

(2) To defray the costs of emergency response activities or to pollution discharges, the containment, control, and abatement of pollution sources and pollutants, to provide money or services as the state share of matching funds for federal grants, the costs of securing and quarantining pollution sources, including the acquisition of rights of way, and easements or title to pollution sources.

(3) To defray the cost of investigation, testing, containment, control, and cleanup of hazardous waste or solid waste sites, to provide money or services as the state share of matching funds for federal grants, and to defray the cost of securing and quarantining hazardous waste sites, including the acquisition of rights of use, servitudes, or title when necessary.

(4) To implement the Environmental Emergency Response Training Program established by R.S. 30:2035.

(5) For the identification and determination of hazardous wastes which are inappropriate for certain methods of land disposal as required in R.S. 30:2193.

(6) To insure adequate scientific, technical, and legal support of litigation seeking recovery of costs of response activities, penalties sought under this Subtitle, or environmental damages.

(7) To make grants to colleges and universities within Louisiana for the purpose of theoretical and practical research and development of alternative and environmentally sound methods and technologies for reducing, destroying, recycling, neutralizing, and, to the least extent possible, disposing of hazardous waste. Research and development of alternative methods and technologies for the purpose of waste reduction shall receive priority consideration from the secretary in the granting of any monies authorized by this Subsection.

(8) To make reimbursements to local political subdivisions or volunteer fire departments which incurred expenses in performing services approved by the secretary in response to a declared emergency.

E. In any cases where monies from the trust fund are expended, the attorney general shall institute a civil action to recover from the responsible persons all such monies expended from the response trust fund. Any monies so recovered shall be paid into the trust fund.

F. Upon a declaration of emergency, the secretary may enter into contracts providing ~~for environmental emergency responses after informal negotiations without any other~~

~~requirement of law; however, such contracts shall be subject to the prior written approval~~ of the commissioner of the division of administration.

Amended by Acts 1989, No. 392, § 1, eff. June 30, 1989.

Historical and Statutory Notes

1989 Legislation

The 1989 amendment deleted "Programs" preceding "Trust" in the section heading and rewrote the section (see main volume for prior text).

In the first sentence of subsec. B of this section as amended in 1989, "Environmental Trust Fund" was enclosed in quotation marks on authority of R.S. 24:253.

§§ 2016, 2017. Repealed by Acts 1989, No. 392, § 3, eff. June 30, 1989

Historical and Statutory Notes

See main volume for text of these sections prior to repeal.

See, now, R.S. 30:2015, relating to the Environmental Trust Fund, and R.S. 30:2205, relating to the Hazardous Waste Site Cleanup Fund.

§ 2018. Hearing officers; employment, qualifications, powers and duties

A. (1) The secretary may employ one or more hearing officers to perform such duties as are assigned to them by the secretary of the Department of Environmental Quality.

(2) A hearing officer employed pursuant to this Subsection shall be a classified employee of the office of the secretary of environmental quality.

B. Each such hearing officer employed pursuant to Subsection A shall possess the following qualifications:

(1) He shall have a general knowledge of the contaminants, wastes, and other materials whose interactions with the environment are regulated by any Chapter of this Subtitle under which he shall render any decision or issue any order.

(2) He shall have a working knowledge of the provisions of this Subtitle and the rules and regulations.

(3) He shall be duly and regularly licensed and admitted to practice law by the Supreme Court of the state of Louisiana.

(4) He shall hold no other public office nor otherwise be a public employee of the state of Louisiana, except of an institution of higher education.

(5) He shall not be an owner, stockholder, employee, or officer of, nor have any other business relationship with, any corporation, partnership, or other business or entity which is subject to regulation by the Department of Environmental Quality.

C. Each hearing officer shall have the following powers:

(1) To administer oaths and affirmations.

(2) To receive acknowledgements and affidavits and to preside over the taking of depositions.

(3) To collect evidence, conduct hearings, issue orders, make findings of fact and conclusions of law, make recommendations, and render decisions with respect to any matter assigned to him.

(4) To conduct any other hearing or to collect any evidence or public comments in connection with his assigned duties.

(5) To sign and issue subpoenas requiring attendance and giving of testimony by witnesses and the production of books, papers, and other documentary evidence.

D. A hearing officer shall file orders issued, recommendations or decisions rendered with the secretary and forward a copy by mail, postage prepaid, to all parties or their counsel of record. Except where the secretary is to make the final decision, each such order or decision shall become final as to any party thirty days after the mailing of a copy to that party, unless within that time the party files a written motion for review stating the specific grounds upon which the review is requested. Upon receipt of the motion for ~~review, the secretary may:~~

(1) Deny the motion, at which time the order or decision shall become final; or

(2) Grant the motion as to one or more of the grounds on which the review is requested and:

(a) Remand the matter with instructions to the hearing officer;

(b) Overrule the decision or order of the hearing officer and render a contrary decision or order based on the record developed by the hearing officer; or

(c) Hold new hearings or collect additional evidence or both and render his own decision or issue his own order thereon.

Amended by Acts 1990, No. 193, § 1, eff. July 2, 1990.

Application of Acts 1990, No. 193

Acts 1990, No. 193, § 1 amends this section. Section 3 of Acts 1990, No. 193 provides: "This Act shall not impair any contracts for hearing officers which are in existence on June 1, 1990; nor, shall it render invalid any action taken by such hearing officers."

Historical and Statutory Notes

1990 Legislation

The 1990 amendment rewrote this section and its heading (see main volume for prior text).

Notes of Decisions

Administrative judge 2

2. Administrative judge

Authority of Secretary of Department of Environmental Quality to overrule decision of administrative law judge and render a contrary decision is tempered only with requirement that reversal must be based on record. Matter of Cecos Intern., Inc. ("Cecos") Livingston Facility Permit Application No. LAD00618298, App. 1 Cir.1990, 574 So.2d 385, writ denied 576 So.2d 18.

Secretary of Department of Environmental Quality could issue preliminary notice of intent to deny request for permit and also review administrative law judge decision in case challenging denial. Matter of Cecos Intern., Inc. ("Cecos") Livingston Facility Permit Application No. LAD00618298, App. 1 Cir.1990, 574 So.2d 385, writ denied 576 So.2d 18.

§ 2019. Promulgation of rules and regulations

[See main volume for text of A and B]

C. Except for R.S. 49:953(B)(1), promulgation of rules or regulations requiring a permit, license, or compliance schedule of a previously unregulated industry or practice shall not be initiated prior to a public hearing being held. Such hearing shall be held in accordance with the Administrative Procedure Act.[1]

Added by Acts 1991, No. 190, § 1.

[1] R.S. 49:950 et seq.

Historical and Statutory Notes

1991 Legislation

The 1991 amendment added subsec. C regarding public hearings.

§ 2019.1. Promulgation of rules and regulations affecting agriculture

A. No rule, regulation, or permit fee shall be adopted, amended, or repealed which affects the agriculture industry, including both production and processing and their various operations and industries, prior to compliance with this Section.

B. The governor shall designate a person from the office of the governor to act as a liaison between the department and the agriculture industry, including both production and processing and their various operations and industries.

C. (1) The department shall inform the chancellor of the Louisiana State University Agricultural Center and the commissioner of agriculture and forestry of proposed rules, regulations, or permit fees and the reasons for such.

~~(2) The chancellor shall designate appropriate research, extension, or other personnel~~ under his authority who shall provide documentation to the department and the governor's appointed liaison with respect to:

(a) The environmental effects of agricultural practices.

(b) The economic impact of the proposed rules, regulations, or fees.

(c) The acceptable and unacceptable risk levels associated with traditional and proposed agricultural practices.

(d) The alternative methods of achieving environmental goals.

(e) The probable effectiveness of any proposed rules, regulations, or fees.

(f) Any other information that should be considered.

D. The positions of the Department of Environmental Quality and the agriculture community, as supported by the chancellor and the commissioner of agriculture and forestry, shall be communicated to the governor through his designated liaison for his participation in implementing or limiting the implementation of any such rule, regulation, or practice change.

E. Unless an emergency is initially declared by the governor and action is taken as provided for in R.S. 49:953(B)(1), no rule, regulation, or permit fee may be adopted, amended, or repealed which affects the agriculture industry unless statements from the secretary of the department, the chancellor, and the commissioner of agriculture and forestry accompany the rule, regulation, or permit fee and outline their individual opinions on the issues that the rule, regulation, or permit fee is justified, practical, and worthy of implementation, and public hearings have been held in accordance with the Administrative Procedure Act. Such statements from the secretary of the department, the chancellor, and the commissioner of agriculture and forestry shall be provided to the appropriate legislative oversight committee by the respective official. The failure of an official to provide a statement shall constitute support for the rule, regulation, or permit fee.

Added by Acts 1991, No. 860, § 1, eff. July 23, 1991.

Historical and Statutory Notes

Pursuant to the statutory revision authority of the Louisiana State Law Institute, this section as ~~enacted in 1991, paragraph and subparagraph~~ designations were made in subsec. C, with attendant changes in capitalization, punctuation, and wording.

§ 2022. Permit applications and variance requests; notification

A. Any person seeking a permit, license, registration, or variance shall file a written application for such with the secretary. ~~Excluding applications relative to medical and dental devices, the secretary shall promptly send a notice of the subject matter of each~~ application to the governing authority of the parish affected by the application. The parish governing authority shall promptly notify each municipality within said parish affected by the application. The secretary shall promptly consider such application and take such action thereon as he deems appropriate in accordance with law.

B. No later than April 20, 1991, the secretary shall promulgate rules and regulations establishing procedures for the processing and review of permit applications for new facilities and applications for substantial permit modifications, including but not limited to administrative completeness reviews, checklists of required information, and maximum processing times, and which shall specify:

(1) Procedures for completeness review to determine whether an application contains the information required to substantively review the application. The completeness review procedure shall not extend beyond one hundred ten days from the date the application is submitted.

(2) The final decision shall not extend beyond four hundred ten days from the date the application is submitted, except where additional time is required for the applicant to revise or supplement technical deficiencies in the application, or for adjudicatory or ~~judicial proceedings under R.S. 30:2024, or for consideration of comments received at a~~

~~public hearing in the case of an extraordinary public response, however in no case shal~~ the extension exceed forty-five days.

(3) Applications undergoing technical review shall not be subject to rule changes whic occur during the technical review unless such changes are made in accordance with R.S 49:953(B)(1) or are required by federal law or regulation to be incorporated prior to permit issuance. However, such a rule change made prior to the issuance of the permit may constitute grounds for a modification of the final permit.

(4) The deadlines established by this Section may be extended upon mutual agreement of the secretary and the applicant.

C. (1) Notwithstanding any other law to the contrary, the secretary shall, after notification by the department to the applicant that the application is complete, grant or deny all applications for permits, licenses, registrations, variances, or compliance schedules relating to oil and gas wells and pipelines within sixty days. The notification of completeness shall be issued within fourteen days, exclusive of holidays, by the department. If the application is not complete the department shall notify the applicant in writing of the deficiencies which cause the application not to be complete. If the secretary does not grant the application, he shall provide written reasons for his decision to deny, and copies of the decision shall be provided to all parties. The secretary may delegate the power to grant permits, licenses, registrations, variances, or compliance schedules to an assistant secretary.

(2) If the secretary does not grant or deny the application within the time period provided for herein, the applicant may file a rule as provided for in R.S. 49:962.1.

Amended by Acts 1990, No. 686, § 1; 1990, No. 996, § 1; Acts 1991, No. 828, § 1.

Historical and Statutory Notes

1990 Legislation

Acts 1990, No. 686, § 1 designated subsec. A; at the end of subsec. A, added "in accordance with law"; and added subsec. B.

Acts 1990, No. 996, § 1 designated the existing paragraph as subsec. A; in subsec. A, in the fourth sentence, following "shall promptly consider", deleted "such application"; and added subsec. B (now subsec. C).

Both Acts 1990, No. 686, § 1 and Act 1990, No. 996, § 1 amended this section. Pursuant to the statutory revision authority of the Louisiana State Law Institute, the Acts were merged by printing subsecs. A and B as set out in Act 686, and by printing, as subsec. C, that material which was set out as subsec. B in Act 996.

On the same authority, the article "a" was inserted following "all applications for" in subsec. C.

1991 Legislation

The 1991 amendment rewrote subsec. C, which had read:

"C. Notwithstanding any other law to the contrary, the secretary shall respond to all applications for permit, license, registration, variance, or compliance schedule relating to oil and gas wells and pipelines within thirty days. If the secretary does not grant the application, he shall provide written reasons for his decision within thirty days from the filing of such decision, and copies of the decision shall be provided to all parties. The secretary may delegate the power to grant a permit, license, registration, variance, or compliance schedule to an assistant secretary."

Pursuant to the statutory revision authority of the Louisiana State Law Institute, in this section as amended in 1991, "permit" was changed to "permits" in the first sentence of par. C(1).

§ 2023. Existing permits, registrations, variances, and licenses

A. All permits, registrations, variances, and licenses granted for any activity covered by this Chapter shall have, as a matter of law, a term of not more than ten years, unless otherwise specified by rule or regulation for all facilities of a particular class or category, or specified in the permit, registration, variance, or license. At the end of the term the department may in accordance with rules and regulations:

(1) Extend or reissue a permit, registration, variance, or license for another term of up to ten years; or

(2) Require a modification to incorporate terms and conditions deemed necessary for the protection of the environment or to reflect regulatory changes which have been specified by rule or regulation for all facilities of a particular class or category or ~~technological changes.~~

B. The department may at any time revoke a permit, registration, variance, or license for cause in accordance with law, rule, or regulation.

C. At the end of the term of any permit, registration, variance, or license the provisions of R.S. 49:961(B) shall apply with regard to any request for an extension or renewal. No permit, registration, variance, or license shall be terminated pursuant to this Section if the department has taken no action to extend, modify, or revoke the grant of authority. The grant shall remain in effect until such action is taken.

Amended by Acts 1989, No. 472, § 1.

Historical and Statutory Notes

1989 Legislation

The 1989 amendment rewrote the section (see main volume for prior text).

§ 2024. Finality of action; trial de novo; appeals

A. Any enforcement or permit action shall be effective upon issuance unless a later date is specified therein. Such action shall be final and shall not be subject to further review unless, no later than twenty days after the notice of the action is served by certified mail or by hand upon the respondent, he files with the secretary a request for hearing. Upon timely filing of the request, the secretary shall either grant or deny the request within twenty days. If the request for hearing is granted, the issues raised in the request shall be resolved by an adjudicatory hearing before a hearing officer. Any appeal from a final decision of the secretary shall be in accordance with the provisions of R.S. 30:2024(C). If the request for hearing is denied, or the secretary does not act on the request within twenty days after the timely filing, the respondent shall, within twenty days from the denial or the lapse of the period for the secretary to act, be entitled to file an application for de novo review of the secretary's action in the Nineteenth Judicial District Court for the parish of East Baton Rouge.

Amended by Acts 1990, No. 197, § 1, eff. July 2, 1990; Acts 1991, No. 846, § 1, eff. July 23, 1991.

[See main volume for text of B and C]

D. Notwithstanding the provisions of Subsection A of this Section, with respect to the effectiveness of a permit action, a final decision of the secretary which will result in the practical closing and elimination of a lawful business by either the denial or restriction of a permit shall become effective no sooner than one hundred twenty days after notice of the action is served upon the respondent. In such an instance the existing permit will continue in effect until such decision becomes effective.

Added by Acts 1991, No. 231, § 1.

Historical and Statutory Notes

1990 Legislation

The 1990 amendment added "; trial de novo" to the section heading and rewrote subsec. A (see main volume for prior text).

The section heading as amended in 1990, was changed from "Finality of action; appeals; trial de novo" to "Finality of action; trial de novo; appeals" on authority of R.S. 24:253.

1991 Legislation

Acts 1991, No. 846, § 1, in the final sentence of subsec. A, inserted "or the secretary does not act on the request within twenty days after the timely filing," following "request for hearing is denied" and ", within twenty days from the denial or the lapse of the period for the secretary to act," following "the respondent shall".

Acts 1991, No. 231, § 1 added subsec. D, relating to permit actions causing business closures.

Notes of Decisions

Aggrieved party 4
Intervention 5
Validity ½

½. Validity

Statute permitting direct appeal of Department of Environmental Quality (DEQ) decision to Court of Appeal, bypassing district court, was unconstitutional to the extent it circumvented constitutional grant to district court of original jurisdiction of all civil matters and exclusive original jurisdiction of cases involving State as defendant. Matter of American Waste and Pollution Control Co., App. 1 Cir.1991, 580 So.2d 392.

2. Scope and extent of judicial review

Denial by the Department of Environmental Quality of request for a variance from air quali-

Note 2

ty regulations was a "final decision or order" of the Department within meaning of statute, sufficient to invoke appellate jurisdiction of the Court of Appeals to review merits of decision. Matter of Marine Shale Processors, Inc., App. 1 Cir. 1990, 563 So.2d 278.

Appellate jurisdiction conferred by provisions in this section giving to any "aggrieved person" the right to appeal a "final decision or order" of the Department of Environmental Quality is not limited to instances in which the Secretary of the Department issues a final order in a permit or enforcement action, or when the Secretary finds an emergency exists and grants a variance. Matter of Marine Shale Processors, Inc., App. 1 Cir.1990, 563 So.2d 278.

4. Aggrieved party

Citizens groups' allegations, that their purposes were to enjoy outdoors and that such purposes had been diminished by illegal chemical releases, that releases detrimentally affected and endangered community and its residents, and that group's members suffered injury in that their physical well being and aesthetics of their domiciles were diminished by releases, were sufficient to establish group's status a "aggrieved" parties with real and actual interes in state Department of Environmental Quality assessment of fine against violator of state a quality regulations and right to appeal Depar ment's decision. Matter of BASF Corp., Chem cal Div., App. 1 Cir.1988, 533 So.2d 971, wr denied 539 So.2d 624, writ denied 541 So.2d 90

5. Intervention

Provision of C.C.P. art. 1091 permitting thir party to intervene in pending action to enforc right related to object of action was inapplicabl in connection with environmental group's at tempted appellate level intervention under thi section in challenge to state Department of Envi ronmental Quality's assessment of penalt against violator of state air quality regulations intervention could not be filed after judgment had been rendered on merits of principal action except as provided by statute, and group did not appeal within 30 days after Department's final decision. Matter of BASF Corp., Chemical Div., App. 1 Cir.1988, 533 So.2d 971, writ denied 539 So.2d 624, writ denied 541 So.2d 900.

§ 2025. Enforcement

[See main volume for text of A to D]

E. Civil penalties.

(1) Any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than twenty-five thousand dollars for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharge is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars. Any person found to be in violation of any requirement of this Subtitle may be subject to the revocation or suspension of any permit, license, or variance which has been issued to the person.

Amended by Acts 1989, No. 484, § 1; Acts 1990, No. 249, § 1.

[See main volume for text of E(2) to (5)]

F. Criminal penalties.

Except as otherwise provided by law:

[See main volume for text of F(1) and (2)]

(3) Any person who knowingly omits material information or knowingly and intentionally makes any false statement, representation, or certification in any application, record, label, manifest, report, plan, or other document filed or required to be maintained under this Subtitle, or under any permit, rule, or regulation issued under this Subtitle, or who falsifies, intentionally tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Subtitle, or under any permit, rule, or regulation issued under this Subtitle, shall upon conviction be punished by a fine of not more than twenty-five thousand dollars or imprisonment for not more than six months, or both.

Amended by Acts 1990, No. 988, § 1.

(4) Upon a determination that a criminal violation may have occurred, notification shall be given to the district attorney in whose jurisdiction such possible violation has occurred.

The department shall provide the district attorney with any and all information necessary to evaluate the alleged violation for criminal prosecution. The criminal prosecution of such violations shall be at the direction of the district attorney. The department shall cooperate fully with the district attorney.

Amended by Acts 1990, No. 988, § 1.

(5) The court may suspend the execution of a sentence imposed on any offender convicted under this Subtitle of illegally disposing of solid waste as defined under R.S. 30:2153, if the offender is placed on supervised probation for at least two years and, as a condition of probation, cleans up the site or removes the illegally disposed waste from the site to the satisfaction of the Department of Environmental Quality.

Added by Acts 1990, No. 988, § 1.

[See main volume for text of G to I]

J. Reporting.

(1) No later than January 1, 1990, the Department of Environmental Quality and the Department of Public Safety and Corrections shall jointly establish a uniform reporting procedure and facilities, and shall provide the necessary personnel to be available to receive reports containing the same information on a twenty-four hour per day, three hundred sixty-five day per year basis of all emergency releases and shall be responsible for dissemination of such reports to other state agencies or authorities.

(2) Any person who discharges, emits, or disposes of any substance in contravention of any provision of this Subtitle or the regulations or of any permit or license terms and conditions issued thereunder, upon learning of the discharge, emission, or disposal, shall immediately, or in accordance with regulations adopted under this Subtitle, provide notification in accordance with the uniform reporting procedures to be established pursuant to Paragraph (J)(1) above, to the proper authorities as to the nature and amount thereof and the circumstances surrounding same, provided that no additional notifications or reports shall be required for emergency releases except as specifically required by law or rules as provided by this Section.

(3) The secretaries of each department shall jointly adopt and promulgate a single set of rules and regulations establishing procedures for making such notification.

(4) Any failure to make this notification or any attempt to conceal or actual concealment of the actual discharge or emission or disposal shall be a violation of this Subtitle.

(5) Each day of failure to give notification required herein shall constitute a separate violation, and shall be in addition to any other violations of this Subtitle.

Amended by Acts 1989, No. 200, § 1, eff. June 26, 1989.

K. Recovery of used resources or expended funds. In any action brought pursuant to this Section, the National Guard or local governmental agency which in an emergency response situation used resources or expended funds for the protection of the health, safety, or welfare of its citizens, for prevention of damage, or for the cleanup or repair of damages caused by or as a result of a violation of this Subtitle, shall, with the concurrence or review of the department, have the right to recover such funds and the value of the resources used from the violator, where such funds or resources used are reasonably considered to be outside the scope of normal activities. Any such funds recovered from the violator shall be credited toward the amount that he is assessed or held liable for to the state under this Section. Any action to recover funds or resources expended by the National Guard or a local governmental agency shall be brought within sixty days of the completion of the emergency response situation.

Added by Acts 1990, No. 628, § 1.

Historical and Statutory Notes

1989 Legislation

Acts 1989, No. 200, § 1 rewrote subsec. J (see main volume for prior text).

Acts 1989, No. 392, § 3 repealed subsec. K (see main volume for text of subsec. K prior to repeal).

Acts 1989, No. 484, § 1 rewrote par. E(1) (see main volume for prior text).

In par. J(2) as amended in 1989, "Paragraph (J)(1)" was substituted for "Subsection (J)(1)" on authority of R.S. 24:253.

1990 Legislation

Acts 1990, No. 249, § 1, in par. E(1), inserted "is done intentionally, willfully, or knowingly, or" between "such violation" and "results in a" in the second sentence.

Acts 1990, No. 628, § 1 added subsec. K relating to recovery of costs related to a violation of the Louisiana Environmental Quality Act. A prior subsec. K was repealed in 1989; see note, ante.

In subsec. K as enacted in 1990, the subsection heading was added on authority of R.S. 24:253.

Acts 1990, No. 988, § 1, in subsec. F, designated the existing pars. (3) and (4) as pars. (4) and (5); and inserted a new par. (3).

In subsec. K as enacted in 1990, the subsection heading was added on authority of R.S. 24:253.

Law Review Commentaries

Analysis of damages and relief related to property affected by hazardous waste (a Louisiana perspective). Comment, 12 Southern U.L.Rev. 72 (1985).

Defending state environmental enforcement actions. Charles S. McCowan, Jr., 36 La.B.J. 20 (1988).

State and federal notification requirements for spills and releases. Robert E. Holden, 38 La.B.J. 77 (1990).

United States Code Annotated

Oil and Hazardous Substance Spill Control and Notification Program, see 33 U.S.C.A. § 1321.

Reporting spills under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), see 42 U.S.C.A. § 9603.

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

Louisiana Energy Cases are available on WESTLAW database: LAEN-CS.

Louisiana Environmental Law Cases and Louisiana Environmental Law Administrative Decisions are available on WESTLAW databases: LAENV-CS and LAENV-ADMIN.

Notes of Decisions

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4. Civil actions

Although trial court lacked subject matter jurisdiction to grant declaratory relief as to original water resource order or related issues of foreign waste matter and aggregate matter, because proper forum was appellate court, it had jurisdiction to entertain suit for nullity, in which issues were whether processor had complied with order and validity of statutory procedure employed by Attorney General. Marine Shale Processors v. State, Dept. of Environmental Quality, App. 1 Cir.1989, 551 So.2d 643, writ denied 553 So.2d 465.

5. Penalties

Total penalty of $73,034.49 assessed against owner of oilfield production facilities for impermissible discharges of oil and other wastes was not excessive; previous compliance orders for saltwater discharges had been issued, violations were negligent in nature and were of serious gravity, owner had gross revenues exceeding $1 million, owner was culpable of the violations and had displayed indifference and defiance of state laws and regulations, violations had not been reported, and minimal effort had been made to mitigate damages and to take remedial action. Matter of Mullins & Pritchard, Inc., App. 1 Cir. 1989, 549 So.2d 872.

Penalty of nearly $21,000, for violations of conditions under which landfill operator was allowed to continue operating for limited purpose as construction/demolition debris site, was not arbitrary or capricious, despite operator's claim that penalty should have been assessed in light of operator's net income, rather than gross income, and that operator had made efforts to mitigate damages; violations of closure order posed risk to human health, violations were discovered only four months after operator began operating at site, and operator's lax procedures permitted gross violations of closure order. Matter of Sixty Acres, Inc., App. 1 Cir.1989, 546 So.2d 575.

Penalty assessment ordered by Department of Environmental Quality for alleged violations of Environmental Quality Act, R.S. 30:2001 et seq., was invalid on basis that Attorney General did not approve settlement. Matter of BASF Corp., Chemical Div., App. 1 Cir.1988, 538 So.2d 635, writ granted 539 So.2d 624, writ denied 539 So.2d 624, writ denied 541 So.2d 900.

Showing of actual damages to environment is not required for assessment of penalty under R.S. 30:1073 (redesignated; see, now, this section); Secretary of Department of Environmental Quality Office of Water Resources could consider gross revenues generated by owner and operator of production leases in assessing penalty. Matter of McGowan, App. 1 Cir.1988, 538 So.2d 999, writ denied 537 So.2d 1168, certiorari denied 110 S.Ct. 80, 107 L.Ed.2d 46.

Decision of Secretary of Department of Environmental Quality, Office of Water Resources to assess penalty under R.S. 30:1073 (redesignated; see, now, this section) on owner and operator of production leases for discharges of salt water and ten-barrel oil spill was arbitrary and an abuse of discretion; prior to the hearing, only a $5,000 penalty was assessed and hearing appeared to be only basis for $51,000 increase in penalty assessment. Matter of McGowan, App. 1 Cir.1988, 538 So.2d 999, writ denied 537 So.2d

1168, certiorari denied 110 S.Ct. 80, 107 L.Ed.2d 46.

6. Site closure

Landfill operator, which was continuing to operate for limited purpose as construction/demolition debris site, was ultimately responsible for automobile batteries found at site in violation of closure order that permitted operator to continue operating for limited purpose; claim that those items were concealed in truckload of debris and not found until load had been spread did not relieve operator of responsibility. Matter of Sixty Acres, Inc., App. 1 Cir.1989, 546 So.2d 575.

8. Intervention

Because no adjudication was held with respect to alleged violations of Environmental Quality Act, R.S. 30:2001 et seq., party intervention was unnecessary and procedurally improper under rule promulgated pursuant thereto. Matter of BASF Corp., Chemical Div., App. 1 Cir.1988, 538 So.2d 635, writ denied 539 So.2d 624, writ denied 541 So.2d 900.

Provision in Const. Art. 4, § 8 outlining powers and duties of attorney general did not give attorney general right to intervene on appellate level in challenge to state Department of Environmental Quality's assessment of penalties against violator of state air quality regulations without complying with procedural rules of this section governing intervention. Matter of BASF Corp., Chemical Div., App. 1 Cir.1988, 533 So.2d 971; writ granted, intervention permitted 539 So.2d 624.

9. Notice

Department of Environmental Quality erroneously assessed civil penalties against landowner and demolition contractor for failure to give timely notice of intent to demolish building containing friable asbestos material, inasmuch as owner and contractor had no intent to render nonfriable asbestos material in building friable during demolition but wrecking-ball accident caused material to become friable, and contractor promptly gave telephone notice to Department and followed it up with written notice before continuing demolition of building or removing friable asbestos material. Matter of Woodrow Wilson Const. Co., Inc., App. 1 Cir. 1990, 563 So.2d 386.

Meetings held between Department of Environmental Quality and alleged violator of Environmental Quality Act, R.S. 30:2001 et seq., in an attempt to settle or resolve suit, dispute or claim were not "hearings" requiring public notice and opportunity for public comment as set forth in departmental rules. Matter of BASF Corp., Chemical Div., App. 1 Cir.1988, 538 So.2d 635, writ granted 539 So.2d 624, writ denied 539 So.2d 624, writ denied 541 So.2d 900.

Secretary of Department of Environmental Quality, Office of Water Resources did not assess $1,000 penalty for oil spill and $25,000 for failure to notify authorities of spill of less than one-half barrel of oil that did not give rise to notification requirements under R.S. 30:1073 (redesignated; see, now, this section) and instead, Secretary merely assessed $56,000 penalty against owner and operator of production leases for salt water discharge and ten-barrel oil spill. Matter of McGowan, App. 1 Cir.1988, 533 So.2d 999, writ denied 537 So.2d 1168, certiorari denied 110 S.Ct. 80, 107 L.Ed.2d 46.

10. Evidentiary hearing

Department of Environmental Quality is not required to hold adjudicatory hearing every time it determines that there has been a violation of R.S. 30:2001 et seq. containing provisions of the Environmental Quality Act. Matter of BASF Corp., Chemical Div., App. 1 Cir.1988, 538 So.2d 635, writ granted 539 So.2d 624, writ denied 539 So.2d 624, writ denied 541 So.2d 900.

11. Limited operation

Ample evidence supported Department of Environmental Quality's determination that exposed waste at landfill site consisted of at least 50% paper products in direct violation of closure order under which operator had been permitted to continue operating site for limited purpose, despite operator's claim that some unidentified person at Department told operator that cardboard products were not "paper" within meaning of closure order. Matter of Sixty Acres, Inc., App. 1 Cir.1989, 546 So.2d 575.

12. Contiguous property

Ample evidence supported Department of Environmental Quality's finding that exposed waste at landfill site had migrated into contiguous wetlands, in violation of closure order under which landfill operator was permitted to continue operating for limited purpose. Matter of Sixty Acres, Inc., App. 1 Cir.1989, 546 So.2d 575.

§ 2026. Citizen suits

Law Review Commentaries

Liability for attorneys' fees in environmental litigation. Robert L. Boese, 38 La.B.J. 93 (1990).

The private enforcement of environmental law. Michael S. Greve, 65 Tul.L.Rev. 339 (1990).

Notes of Decisions

Site closure 6

6. Site closure

Citizens groups' allegations, that their purposes were to enjoy outdoors and that such

Note 6

purposes had been diminished by illegal chemical releases, that releases detrimentally affected and endangered community and its residents, and that group's members suffered injury in that their physical well being and aesthetics of their domiciles were diminished by releases, were sufficient to establish group's status as "aggrieved" parties with real and actual interest in state Department of Environmental Quality's assessment of fine against violator of state air quality regulations and right to appeal Department's decision. Matter of BASF Corp., Chemical Div., App. 1 Cir.1988, 533 So.2d 971, writ denied 539 So.2d 624, writ denied 541 So.2d 900.

§ 2027. Environmental violations reported by employees; reprisals prohibited

A. No firm, business, private or public corporation, partnership, individual employer, or federal, state, or local governmental agency shall act in a retaliatory manner against an employee, acting in good faith, who does any of the following:

(1) Discloses, or threatens to disclose, to a supervisor or to a public body an activity, policy, practice of the employer, or another employer with whom there is a business relationship, that the employee reasonably believes is in violation of an environmental law, rule, or regulation.

(2) Provides information to, or testifies before any public body conducting an investigation, hearing, or inquiry into any environmental violation by the employer, or another employer with whom there is a business relationship, of an environmental law, rule, or regulation.

Amended by Acts 1991, No. 959, § 1.

B. (1) Any employee against whom any action is taken as a result of acting under Subsection A of this Section may commence a civil action in a district court of the employee's parish of domicile, and shall recover from his employer triple damages resulting from the action taken against him and all costs of preparing, filing, prosecuting, appealing, or otherwise conducting a law suit, including attorney's fees, if the court finds that Subsection A of this Section has been violated. In addition, the employee shall be entitled to all other civil and criminal remedies available under any other state, federal, or local law.

Amended by Acts 1991, No. 959, § 1.

(2)(a) The term "action is taken" shall include firing, layoff, lockout, loss of promotion, loss of raise, loss of present position, loss of job duties or responsibilities, imposition of onerous duties or responsibilities, or any other action of inaction the court finds was taken as a result of a report of an environmental violation.

(b) "Damages" for the purposes of this Section shall include, but not be limited to, lost wages, lost anticipated wage due to wage increase, or loss of anticipated wages which would have resulted from a lost promotion, any property lost as a result of lost wages, lost benefits, and any physical or emotional damages resulting therefrom.

[See main volume for text of C]

Historical and Statutory Notes

1991 Legislation

The 1991 amendment rewrote subsecs. A and B (see main volume for prior text).

The title and the enacting clause of § 1 of Acts 1991, No. 959 purport to amend subsecs. A and B. Pursuant to the statutory revision authority of the Louisiana State Law Institute, the text of subsec. B as set forth in Act 959 was designated as par. B(1) and the current text of subsec. B was retained and redesignated as subpars. B(2)(a) and B(2)(b).

Title of Act:

An Act to amend and reenact R.S. 30:2027(A) and (B), relative to environmental violations; to provide for employee actions; to prohibit retaliatory action; to provide for legal action; and to provide for related matters. Acts 1991, No. 959.

Law Review Commentaries

Liability for attorneys' fees in environmental litigation. Robert L. Boese, 38 La.B.J. 93 (1990).

Notes of Decisions

Environment 2

1. Protection against retaliation

Bartlett v. Reese, App. 1 Cir.1988, 526 So.2d 475 [Main Volume] writ denied 532 So.2d 177, appeal after remand 569 So.2d 195, writ denied 572 So.2d 72.

Statute prohibiting reprisals against employees for reporting environmental violations did not protect employee who allegedly reported violation from reprisals for subsequently refusing

to do his job. Cheramie v. J. Wayne Plaisance, Inc., App. 1 Cir.1991, 583 So.2d 921.

2. Environment

Acts about which employee complained, which allegedly violated statutes dealing with protection of endangered or threatened species of animals, were not "possible environmental violations" within meaning of statute prohibiting reprisals against employees for reporting environmental violations and, thus, that statute was not violated in connection with employee's discharge; statute prohibiting reprisals was intended to deal with violations of type proscribed under state Environmental Quality Act, i.e., discharge of pollutants into environment, not violations of other laws of environmental nature such as those protecting wildlife. Cheramie v. J. Wayne Plaisance, Inc., App. 1 Cir.1991, 583 So.2d 921.

§ 2031. Donations or assistance for pollution sources

A. It is declared to be the public policy of the state to expedite the investigation, testing, containment, cleanup, and abatement of pollution sources, and to that end the secretary is authorized to accept and receive grants, donations, or other forms of assistance from private sources which are provided to the state for those purposes and dedicated to a specific designated pollution source. Such grants, donations, or monetary assistance shall be deposited in accordance with R.S. 30:2015 and R.S. 30:2205, unless their terms and conditions require otherwise, as contemplated by Article VII, Section 9(A)(1) of the Constitution of Louisiana.

Amended by Acts 1989, No. 392, § 1, eff. June 30, 1989.

[See main volume for text of B to E]

Historical and Statutory Notes

1989 Legislation

The 1989 amendment, in subsec. A, substituted "R.S. 30:2015 and R.S. 30:2205" for "R.S. 30:2034" following "deposited in accordance with" in the second sentence.

§ 2034. Repealed by Acts 1989, No. 392, § 3, eff. June 30, 1989

Historical and Statutory Notes

See main volume for text prior to repeal.

See, now, R.S. 30:2205, relating to the Hazardous Waste Site Cleanup Fund, and R.S. 30:2015, relating to the Environmental Trust Fund.

§ 2035. Environmental Emergency Response Training Program

[See main volume for text of A]

B.(1) The chief of each eligible agency including any municipality or parish may apply to the assistant secretary of the office of environmental affairs for allocation of funds from the Environmental Trust Fund to provide or secure the training authorized by this Section.

Amended by Acts 1989, No. 392, § 1, eff. June 30, 1989.

[See main volume for text of B(2) and (3)]

Historical and Statutory Notes

1989 Legislation

The 1989 amendment, in par. B(1), substituted "the Environmental Trust Fund" for "the Environmental Emergency Response Fund" following "allocation of funds from".

§ 2038. Degradable or recyclable plastics; state agencies

A. (1) In order to enhance the beauty and quality of our environment; conserve and recycle our natural resources; prevent the spread of disease and the creation of nuisances; protect the public health, safety, and welfare; and provide a coordinated statewide solid waste resource recovery and management program, the legislature finds that inefficient and improper methods of managing solid waste create hazards to public health, cause pollution of air and water resources, constitute a waste of natural resources, have an adverse effect on land values, and create public nuisances. Problems of solid waste management have become a matter statewide in scope and necessitate state action to promote more efficient methods of solid waste collection and disposal. The economic and

population growth of our state and the improvements in the standard of living enjoyed by our population have required increased industrial production together with related commercial and agricultural operations to meet our needs, which have resulted in a rising tide of unwanted and discarded materials. The failure or inability to economically recover material and energy resources from solid waste results in the unnecessary waste and depletion of our natural resources, and, therefore, maximum resource recovery from solid waste and maximum recycling and reuse of such resources must be considered goals of the state.

(2) It is declared to be the purpose of this Section to provide a program for state agencies to use degradable or recyclable plastics in the most economically feasible, cost-effective, and environmentally safe manner the storage, collection, transport, separation, processing, recycling, and disposal of solid waste in order to protect the public safety, health, and welfare and enhance the environment for the people of this state.

B. State agencies are hereby requested and authorized to use in their daily operations degradable or recyclable plastic materials in those instances when it is appropriate and economically feasible. Any such agency shall consult with the Department of Environmental Quality to determine the degradable or recyclable plastic materials available to be used.

C. The Department of Environmental Quality is hereby directed upon request by a state agency to assist in that agency's use of degradable or recyclable plastics where appropriate and economically feasible. The Department of Environmental Quality shall provide a plan for use of degradable or recyclable plastics to any state agency requesting assistance to convert to the use of degradable or recyclable plastics.

Added by Acts 1989, No. 572, § 1, eff. July 6, 1989.

Historical and Statutory Notes

In subsec. A of this section as enacted in 1989, "Legislative findings and purpose" was deleted as a subsection heading and "finds that inefficient" was substituted for "finds that: Inefficient" in the first sentence of par. A(1), all on authority of R.S. 24:253.

§ 2039. Recordation of notice of solid or hazardous waste site by landowner

A. If a landowner has actual or constructive knowledge that his property:

(1) Has been used for the disposal of hazardous waste or as a solid waste landfill, except as provided in rules, and such wastes remain on the property, and if recording of the notice provided for herein is required by the Louisiana Solid Waste Regulations or the Louisiana Hazardous Waste Regulations; or

(2) Has been identified by the department as an inactive or abandoned solid waste landfill or hazardous waste site,

he shall cause notice of the identification of the location of the waste site to be recorded in the mortgage and conveyance records of the parish in which the property is located. Such notice shall be made in a form approved by the secretary and within the time specified by the secretary. If a landowner fails or refuses to record such notice, the secretary may, if he determines that the public interest requires, and after due notice and an opportunity for a hearing has been given to a landowner, cause such notice to be recorded. The clerk of court shall forward to the Department of Environmental Quality a copy of each notice recorded by a landowner in accordance with this Subsection.

B. (1) If any person wishes to remove such notice, he shall notify the secretary prior to requesting the removal from the clerk of court in the parish where the property is located. The request shall specify the facts supporting removal of the notice, including any evidence that the waste no longer poses a potential threat to health or the environment. Upon finding that the waste no longer poses a potential threat to health or the environment, the secretary shall approve removal of the notice.

(2) If approval is granted by the secretary, the request may be made by affidavit to the clerk of court for the removal of the notice and it shall be removed. Within ten days after removal, the clerk of court shall send a notice of the removal to the secretary. If the secretary objects to the removal of such notice, or fails to make a final determination

~~upon the request within ninety days, the person desiring to have the notice removed may~~ petition the court in the parish where the property is located for removal of the notice and after a contradictory hearing between the landowner, the clerk of court, and the secretary or his designee, the court may grant such relief upon adequate proof by the petitioner that the property no longer contains the waste which may pose a potential threat to health or to the environment.

C. This Section shall not apply to any facility which is operating under a permit issued by the department until such time as such notice is required by an order of the secretary, by a permit, or by rule or regulation applicable to such facility.

D. The failure of a landowner to file the required notice may constitute grounds for an action in redhibition under the applicable provisions of Civil Code Articles 2520 et seq., unless the purchaser has actual or constructive knowledge that the property has been used for such purposes.

E. Any action under this Section must be commenced within one year from the date the purchaser first knows of the existence of the fact which gives rise to the action, but in any event within three years of the date upon which the purchaser acquired his ownership interest in the property. Venue shall be in any parish in which the property or any portion thereof is located.

R.S. 30:2157, added by Acts 1989, No. 749, § 1. Amended by Acts 1990, No. 505, § 1, eff. Sept. 7, 1990 and redesignated as R.S. 30:2039. Amended by Acts 1991, No. 851, § 1.

Applicability

Section 3 of Acts 1990, No. 505 (§ 1 of which amends R.S. 30:2157; redesignated as this section) provides:

"The provisions of this Act shall not apply to property transfers made prior to the effective date of this Act [Sept. 7, 1990]."

Historical and Statutory Notes

1990 Legislation

The 1990 amendment inserted "actual or constructive" preceding "knowledge" in the introductory clause of subsec. A; inserted, in par. A(1), "or as a solid waste landfill, except as provided in rules," following "hazardous waste"; in the same paragraph, inserted a comma following "property" and inserted "recording of the notice provided for herein is" preceding "required"; in subsec. B (formerly subsec. C, redesignated pursuant to § 2 of Act 505, see note, post) deleted "at least thirty days" in the first sentence preceding "prior to", inserted the second, third, and fifth sentences, rewrote the fourth sentence, which formerly read, "If no objection is made by the secretary within the thirty-day notice period, the request may be made by affidavit to the clerk of court of the removal of the notice and it shall be removed.", and inserted in the sixth sentence, "or fails to make a final determination upon the request within ninety days," following "such notice"; and added subsecs. D and E.

Pursuant to § 2 of Acts 1990, No. 505, this section, originally added by Acts 1989, No. 749, § 1 as R.S. 30:2157, was redesignated by the Louisiana State Law Institute as R.S. 30:2039.

On the same authority, subsec. B was redesignated as subsec. C, and subsec. C was redesignated as subsec. B after paragraphs were designated therein.

Section 2 of Acts 1990, No. 505 read:

"The Louisiana State Law Institute is hereby authorized and requested to redesignate R.S. 30:2157 as R.S. 30:2039 and to reverse the order of Subsections B and C."

In the first sentence of par. A(2) as amended in 1990, a comma was substituted for a semicolon, following "hazardous waste site" on authority of R.S. 24:253.

Another R.S. 30:2039, relating to siting disposal facilities in Rapides Parish, was enacted by Acts 1990, No. 1037, § 1 and was redesignated as R.S. 30:2040 on authority of R.S. 24:253.

1991 Legislation

The 1991 amendment, in subsec. A, added a new final sentence regarding notification of the Department of Environmental Quality.

§ 2040. Siting disposal facilities in Rapides Parish

The secretary shall not authorize or permit within Rapides Parish any new commercial solid or hazardous waste disposal facility or new commercial solid waste or sanitary landfill within two miles of the corporate limits of any municipality or the nearest boundary line of any property on which is located a public elementary or secondary school or health care facility licensed by the state.

~~Added by Acts 1990, No. 1037, § 1.~~

ted immediately following the vote of the Commission, by the chairman to the governor of the affected party state, all other governors of the party states, and the Congress of the United States.

f. This compact shall become effective after enactment by at least three eligible states and after consent has been given to it by the Congress. The Congress shall have the opportunity to withdraw such consent every five years. Failure of the Congress to withdraw its consent affirmatively shall have the effect of renewing consent for an additional five-year period. The consent given to this compact by the Congress shall extend to any future admittance of new party states under Sections (b) and (c) of this Article and to the power to ban the exportation of waste pursuant to Article III.

g. The withdrawal of a party state from this compact under Section (d) of this Article or the revocation of a state's membership in this compact under Section (e) of this Article shall not affect the applicability of this compact to the remaining party states.

h. This compact shall be terminated when all party states have withdrawn pursuant to Section (d) of this Article.

ARTICLE VIII. PENALTIES

a. Each party state, consistent with its own law, shall prescribe and enforce penalties against any person for violation of any provision of this compact.

b. Each party state acknowledges that the receipt by a regional facility of waste packaged or transported in violation of applicable laws and regulations can result in sanctions which may include suspension or revocation of the violator's right of access to the regional facility.

ARTICLE IX. SEVERABILITY AND CONSTRUCTION

The provisions of this compact shall be severable and if any phrase, clause, sentence or provision of this compact is declared by a court of competent jurisdiction to be contrary to the Constitution of any participating state or of the United States or the applicability thereof to any government, agency, person or circumstance is held invalid, the validity of the remainder of this compact and the applicability thereof to any government, agency, person or circumstance shall not be affected thereby. If any provision of this compact shall be held contrary to the Constitution of any state participating therein, the compact shall remain in full force and effect as to the state affected as to all severable matters. The provisions of this compact shall be liberally construed to give effect to the purpose thereof.

Amended by Acts 1991, No. 133, § 1, eff. June 30, 1991.

[1] 42 U.S.C.A. §§ 2021b to 2021d.
[2] 42 U.S.C.A. § 2014.

Historical and Statutory Notes

1991 Legislation

The 1991 amendment rewrote the section (see main volume for prior text).

CHAPTER 8. LOUISIANA SOLID WASTE MANAGEMENT AND RESOURCE RECOVERY LAW

Section		Section	
2157.	Blank.	2158.	Sanitary landfills; regional establishment; planning.

§ 2151. Citation

Law Review Commentaries

The private enforcement of environmental law. Michael S. Greve, 65 Tul.L.Rev. 339 (1990).

§ 2153. Definitions

As used in this Chapter, the following terms shall have the meaning ascribed to them in this Section, unless the context clearly indicates otherwise:

(1) "Solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include or mean solid or dissolved material in domestic sewage or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under R.S. 30:2074, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. § 2011 et seq.), or hazardous waste subject to permits under R.S. 30:2171 et seq. The definition of solid waste shall not include uncontaminated scrap metal materials which are purchased for resale to be recycled or reused and are not destined for disposal.

Amended by Acts 1991, No. 379, § 1.

[See main volume for text of (2) to (7)]

Historical and Statutory Notes

1991 Legislation

The 1991 amendment substituted, in the first sentence of par. (1), "(42 U.S.C. § 2011 et seq.)" for "(42 U.S.C. § 2011, et seq.)"; and added, to the same paragraph, the second sentence, excluding from the definition of solid waste, certain scrap metal materials purchased for resale to be recycled or reused.

Pursuant to the statutory revision authority of the Louisiana State Law Institute, in this section as amended in 1991, a comma was inserted following "pollution control facility" in the first sentence of par. (1).

§ 2154. Powers; duties; restrictions

[See main volume for text of A]

B. The secretary is hereby directed:

(1) To adopt and promulgate rules, regulations, and standards for the transportation, processing, resource recovery, and disposal of solid wastes consistent with the general solid waste management plan adopted by the office. Such rules and regulations shall include but not be limited to the disposal site location, construction, operation, compliance deadlines, siting of stations for the off-loading and trans-loading of treated solid waste and sewage sludges, and maintenance of the disposal process as necessary to implement the purpose and intent of this Chapter.

Amended by Acts 1990, No. 1010, § 1, eff. July 26, 1990.

[See main volume for text of B(2) to (6)]

(7) To adopt and promulgate rules, regulations, and standards for the advance notification of those local governing authorities whose jurisdiction may be affected by the siting of stations for the off-loading and trans-loading of treated solid waste and sewage sludges.

Added by Acts 1990, No. 1010, § 1, eff. July 26, 1990.

(8) (a) To prohibit the disposal of solid waste, except as exempted by regulation, on the site of disposal without written authorization by the Department of Environmental Quality and notice by the department to the local governing authority and the public as provided in this Paragraph. Such authorization shall contain the types of items authorized for the on-site disposal. Any such closure shall require delivery by the department of written notice of the authorization to the parish governing authority and municipal governing authority, if applicable, in which the solid waste is to be disposed at least fifteen days prior to the closure, and publication, at the expense of the person granted the authorization, of the notice of authorization in the official journal of the parish in which the waste is to be disposed at least fifteen days prior to the disposal.

(b) This Paragraph shall not apply to closure at a solid waste disposal facility operating pursuant to a permit or an order of the department or a solid waste management facility

~~regulated pursuant to Chapter 8 or 18 of this Subtitle. This Paragraph shall not apply to~~ maintenance of public utility rights of way.

Added by Acts 1990, No. 1074, § 1, eff. July 26, 1990.

C. (1) Notwithstanding any other provision of the law to the contrary, the secretary shall not issue any permit or promulgate any rule or regulation which would allow the construction or operation of a medical waste incinerator disposal facility of any type in this state until such rules and regulations are specifically authorized by law.

(2) The prohibition in this Subsection shall not apply to the regulation or permitting of any such facility possessing a permit or interim permit on April 16, 1990 nor to an application which was pending and had not been denied prior to July 1, 1990.

(3) In no event shall any such permit be issued without prior notification of legislators representing the area which includes the proposed site of the facility and prior public hearing in that area.

(4) The department shall promulgate necessary rules and regulations for the permitting of medical waste incinerator disposal facilities within one hundred eighty days after being specifically authorized by law.

Added by Acts 1990, No. 716, § 1, eff. July 20, 1990.

Suspension in part

Senate Concurrent Resolution No. 171 of the 1991 Regular Session provides:

"WHEREAS, the legislature during the 1990 Regular Session did enact legislation that called for the development of a plan for the orderly establishment of regional sanitary landfills; and

"WHEREAS, such plan was to be based on considerations such as eliminating the proliferation of alternate sites, minimization of environmental hazards to the citizens of this state, minimization of hazards to the environment, and the regional need for solid waste disposal; and

"WHEREAS, the legislature in its wisdom also saw fit to enact legislation which prohibits such facilities, in certain regions of the state, from being located within two miles of the corporate limits of any municipality or the nearest boundary line of any property on which is located a public elementary or secondary school or health care facility licensed by the state; and

"WHEREAS, there have been non-legislative attempts to circumvent the spirit of those legislative enactments.

"THEREFORE, BE IT RESOLVED that the Legislature of Louisiana suspends that portion of R.S. 30:2154(B) and any other law insofar as it allows the secretary of the Department of Environmental Quality, or his designee, to authorize, amend, approve, transfer, or grant a permit for any new public solid or hazardous waste disposal facility or new public solid waste or sanitary landfill within two miles of the corporate limits of any municipality or the nearest boundary line of any property on which is located a public elementary or secondary school or health care facility licensed by the state in Rapides Parish.

"BE IT FURTHER RESOLVED that this suspension shall become effective upon adoption of this Resolution and shall extend until January 1, 1992 and shall not apply to the expansion or modification of any existing facility.

"BE IT FURTHER RESOLVED that a copy of this Resolution be transmitted to the secretary of the Department of Environmental Quality."

Historical and Statutory Notes

1990 Legislation

Acts 1990, No. 716, § 1, effective July 20, 1990, added "; restrictions" to the section heading, ~~and added subsec. C.~~

Acts 1990, No. 1010, § 1, effective July 26, 1990, in subsec. B deleted a comma, in par. (1), in the second sentence, following "regulations shall include;"; in the same sentence inserted "siting of stations for the off-loading and transloading of treated solid waste and sewage sludg~~e~~

es," following "compliance deadlines"; and added par. B(7).

Acts 1990, No. 1074, § 1, effective July 26, 1990, added par. (7) to subsec. B (redesignated as par B(8), see note, post).

Acts 1990, No. 1074, which amended this section, became effective without the signature of the governor. It was delivered to the governor on July 6, 1990 and became effective July 26, 1990 pursuant to Const. Art. 3, § 18.

In subsec. B as amended by Acts 1990, No. 1074, § 1, eff. July 26, 1990, par. B(7) was redesignated par. B(8) and format changes made on authority of R.S. 24:253.

Notes of Decisions

1. Permits

While municipality cannot set geological or engineering standards stricter than those established by Department of Environmental Quality (DEQ) for issuance of its permits, factors other than geological ones, such as those involving aesthetics, population density, and accessibility govern selection of landfill site, and these factors are appropriate subject of local land use planning. Palermo Land Co., Inc. v. Planning Com'n of Calcasieu Parish, Sup.1990, 561 So.2d 482, rehearing denied.

§ 2157. [Blank]

Historical and Statutory Notes

Pursuant to § 2 of Acts 1990, No. 505, R.S. 30:2157, as added by Acts 1989, No. 749, § 1 and amended by Acts 1990, No. 505, § 1, was redesignated by the Louisiana State Law Institute as R.S. 30:2039.

§ 2158. Sanitary landfills; regional establishment; planning

A. (1) The office of solid and hazardous waste shall, in cooperation with parish and municipal governing authorities and the Louisiana Resource Recovery and Development Authority, develop a plan for the orderly establishment of regional sanitary landfills.

(2) Such plan shall be based on consideration of the following:

(a) Regional need for solid waste disposal.

(b) Available sites which will minimize hazards to the environment and which are consistent with the overall plan established pursuant to R.S. 30:2154(A)(1).

(c) Ability of those who would be served by such regional sites to finance and manage such facilities.

(d) Minimizing the amount of waste which cannot be recycled.

(e) The concerns of local governments, private industry, and environmental groups.

(f) The potential for eliminating the proliferation of alternate sites by the establishment of such a regional system.

(g) Ensuring adequate competition within any region developed or implemented pursuant to such plan.

(3) The secretary shall develop and adopt certain siting criteria for regional commercial solid waste disposal facilities by rules and regulations by January 1, 1991.

(4) A notice of any expansion of the areas to be serviced by a regional sanitary landfill shall be given to the local governing authority of the parish in which the landfill is located by the secretary. Upon request by the local governing authority, a public hearing shall be held to review the appropriateness of such changes.

B. The plan required by this Section shall be prepared and submitted to the natural resource committees of the Senate and House of Representatives for their review and input no later than March 15, 1991.

Added by Acts 1990, No. 1001, § 1.

~~Siting of Commercial Solid or Hazardous Waste Facilities~~

Acts 1990, No. 1001 (§ 1 of which enacted this section) provided in § 2:

"On the effective date of this Act [September 7, 1990], Section 4 of Senate Bill 1028 of the 1990 Regular Session of the Legislature shall be null and void and without effect of law."

Senate Bill 1028 of the 1990 Regular Session was enacted as Acts 1990, No. 974, eff. July 1, 1990. Acts 1990, No. 974, § 1 amended R.S. 30:2205, relating to the Hazardous Waste Site Cleanup Fund, and § 4 of Acts 1990, No. 974 provided:

"Notwithstanding the provision of this Act or any other Act passed during the 1990 Regular Session of the legislature, the siting of commercial solid or hazardous waste facilities shall be based upon the laws in effect on July 1, 1990."

Historical and Statutory Notes

In the first sentence of par. A(4) as enacted in 1990, "servived" was changed to "serviced" on authority of R.S. 24:253.

CHAPTER 9. HAZARDOUS WASTE CONTROL LAW

Section

2207. Blank.

Law Review Commentaries

A primer on environmental damage insurance under comprehensive general liability policies. Joseph E. LeBlanc, Jr. and Eric E. Darrell, 38 La.B.J. 85 (1990).

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

Louisiana Environmental Law Cases and Louisiana Environmental Law Administrative Decisions are available on WESTLAW databases: LAENV-CS and LAENV-ADMIN.

United States Code Annotated

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), see 42 U.S.C.A. §§ 9601 to 9675.

Toxic Substances Control Act, see 15 U.S.C.A. § 2601 et seq.

§ 2171. Citation

Cross References

Hazardous materials transportation and motor carrier safety, see R.S. 32:1501 et seq.

Taxation of disposal and storage of hazardous waste, see R.S. 47:821 et seq.

Law Review Commentaries

Federal facilities and environmental compliance: Toward a solution. Stan Millan, 36 Loy. L.Rev. 319 (1990).

The private enforcement of environmental law. Michael S. Greve, 65 Tul.L.Rev. 339 (1990).

§ 2173. Definitions

As used in this Chapter, the following terms shall have the meaning ascribed to them in this Section, unless the context of use clearly indicates otherwise:

[See main volume for text of (1)]

(2) "Hazardous waste" means any waste, or combination of wastes, which because of its quantity, concentration, physical, or chemical characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise

managed. Such definition shall be applied only to those wastes identified and designated as such by the department, consistent with applicable federal laws and regulations.

Amended by Acts 1990, No. 1012, § 1.

[See main volume for text of (9) to (10)]

(11) "Reusable material" means any waste material which is destined for reuse or reprocessing, but which because of quantity, concentration, or physical or chemical characteristics may:

Amended by Acts 1990, No. 1012, § 1.

[See main volume for text of (11)(a) and (b); and (12)]

Historical and Statutory Notes

1990 Legislation

The 1990 amendment substituted "physical, or chemical characteristics" for "physical, chemical, or infectious characteristics" preceding "may cause" in the first sentence of par. (2) defining hazardous waste; and, in par. (11) defining reusable material, substituted "quantity, concentration, or physical or chemical characteristics" for "quantity concentration, physical, chemical, or infectious characteristics" following "because of" in the introductory paragraph.

Acts 1990, No. 1012 (§ 1 of which amends this section) provides in § 3:

"If House Bill No. 1933 becomes effective, the provisions of this bill shall supercede those of House Bill No. 1933 to the extent the two bills are determined to be in conflict."

House Bill No. 1933 of the 1990 Regular Session was not enacted into law.

Cross References

Transportation of hazardous waste as defined in this section, see R.S. 32:1502, 32:1519.

§ 2174. Administration; interim authority

Notes of Decisions

2. Conflicting administrative powers

Commission on Ethics for Public Employees v. IT Corp., App.1982, 423 So.2d 695, appeal after remand 453 So.2d 251, affirmed 464 So.2d 284 [Main Volume] concurred with in part, dissented in part 483 So.2d 141.

§§ 2176, 2177. Repealed by Acts 1989, No. 776, § 2, effective July 9, 1989

Historical and Statutory Notes

The title of Acts 1989, No. 776 reflected an intent, inter alia, "to delete the Hazardous Waste Advisory Board".

See main volume for text of the sections prior to repeal.

Section 1 of Acts 1989, No. 776 amended R.S. 30:2178. Section 2 of the Act repealed R.S. 30:2176 and 30:2177. Section 3 of Act 776, which became effective July 9, 1989, upon signature by the governor, provides:

"Nothing in this Act shall require a permitted facility, a Resource Conservation and Recovery Act permitted facility, or an interim status facility operating on the effective date of this Act to meet the new requirements enacted by this Act. However, such facilities shall meet all siting criteria required by law or department rules adopted pursuant thereto which are in effect immediately prior to the effective date of this Act."

See, now, generally, R.S. 30:2178.

§ 2178. Authority of the secretary to assess location

A. The secretary shall prior to the issuance of any permit for a commercial hazardous waste treatment, storage, or disposal facility, assess the impact of the location of the facility on the citizens in the surrounding area, the local infrastructure, and on the environment. He shall adopt rules and regulations consistent with this Section establishing criteria for making this determination and prior to any determination on the permit issue a report summarizing his findings. He shall also request from the local governmental subdivision a report detailing the impact of the facility on the local infrastructure including but not limited to roads and transportation systems, schools, medical institutions, police and fire departments, and such other matters as the local government may determine will be impacted by the facility.

B. (1) The secretary may determine an additional fee schedule applicable to commercial hazardous waste facilities not to exceed five percent of the hazardous waste permit application fee by rule in accordance with the Administrative Procedure Act. A portion of

~~this additional permit application fee shall be allocated to the local governmental subdivi~~ sion for the preparation of an infrastructure assessment report as determined by the secretary. When siting a commercial facility, the secretary shall determine whether the local governmental subdivision should be compensated for any reasonable and necessary cost for preparation of the infrastructure report. The purpose of the report shall be to adequately assess the capability of the local communities to effectively manage and monitor the ongoing operations of the proposed commercial facility and to respond to emergencies which may potentially threaten the health, safety, or welfare of the communities or any of their inhabitants. The report may propose alternate siting for the facility and propose actions to mitigate any infrastructure deficiencies found by the report.

(2) With regard to the siting area of the proposed commercial facility, the report prepared by the secretary shall include a determination of whether or not:

(a) The area is environmentally sensitive. An area may be deemed environmentally sensitive for the following nonexclusive reasons:

(i) The area is a wetland or immediately adjacent to a wetland.

(ii) The area is in close proximity to any wildlife management area or wildlife preserve.

(iii) The area is, or is adjacent to, any aquifer recharge zone.

(b) The facility or proposed commercial facility poses undue health risks because of potential human exposure. A facility or proposed facility may be deemed to pose undue health risks for the following nonexclusive reasons:

(i) Proximity of the facility or proposed commercial facility to schools or day care centers.

(ii) Proximity of the facility or proposed commercial facility to hospitals or nursing homes.

(iii) Proximity of the facility or proposed commercial facility to any facility or structure used to store or contain any foodstuffs for human or animal consumption.

(iv) Proximity of the facility or proposed commercial facility to public buildings or entertainment facilities.

(v) Proximity to a residential area.

(vi) Proximity to a prison.

(vii) The number and density of existing hazardous waste disposal facilities, solid waste disposal facilities, and inactive and abandoned hazardous waste sites in the area.

(viii) The number and density of existing industrial facilities that discharge hazardous or toxic substances into the air or water.

(ix) The existence of any community health problem that may be aggravated by the operation of a commercial hazardous waste disposal facility.

(c) Siting of the facility in the area may reasonably be determined to preclude the economic development of the area by businesses or industries because of undue risk associated with establishing such operations of such entities adjacent to said facility.

C. The secretary shall consider the local infrastructure report and may deny an application for a commercial hazardous waste disposal permit if he finds that the proposed siting area is environmentally sensitive, the facility or proposed facility poses undue health risks, the siting of the facility may preclude economic development of the area by businesses or industries, or the facility or proposed facility fails to meet the criteria established by the rules and regulations adopted pursuant to this Section.

Amended by Acts 1989, No. 776, § 1, eff. July 9, 1989.

Historical and Statutory Notes

1989 Legislation

The 1989 amendment changed the section heading form "Impact assistance program; local ~~infrastructure report~~", rewrote subsec. A, made extensive changes in subsec. B, and added a new subsec. C. See main volume for prior text.

Section 2 of Acts 1989, No. 776 (§ 1 of which amended this section) repealed R.S. 30:2176 and ~~30:2177. Section 3 of Act 776, which became~~

effective July 9, 1989, upon signature of the governor, provides:

"Nothing in this Act shall require a permitted facility, a Resource Conservation and Recovery Act permitted facility, or an interim status facility operating on the effective date of this Act to meet the new requirements enacted by this Act. However, such facilities shall meet all siting criteria required by law or department rules adopted pursuant thereto which are in effect immediately prior to the effective date of this Act."

§ 2180. **General powers and duties of the secretary**

A. In addition to any other authority or responsibility vested in him by this Chapter, the secretary shall have the following powers:

(1) From time to time to adopt, amend, or repeal the standards and regulations authorized by this Chapter; however, all rules and regulations made pursuant to this Part shall be submitted to the natural resources committee of the House of Representatives and the environmental quality committee of the Senate and shall be approved by the committees within fifteen days of the submission of these rules and regulations to the committees. If the committees should object, they shall do so in writing to the governor. The governor shall have five days in which to disapprove the action taken by the committees. If the action of the committees is not disapproved by the governor within five calendar days from the day the committee report is delivered to him, such proposed rule change shall not be adopted by the agency until such proposed rule has been changed or modified and has been found acceptable by the committees or has been approved by the legislature by concurrent resolution. If however, the committees make no determination with respect to a proposed rule change as provided in R.S. 49:953 or if the governor disapproves the action by the committees as provided herein, the proposed rule change may be adopted.

Amended by Acts 1991, No. 21, § 1, eff. June 14, 1991.

[See main volume for text of A(2) to (8); B and C]

D.(1) The secretary shall promulgate rules in accordance with the Administrative Procedure Act,[1] to regulate the transportation, incineration, and disposal of infectious waste.

Amended by Acts 1988, No. 233, § 1, eff. June 26, 1989; Acts 1989, No. 583, § 1, eff. July 6, 1989; Acts 1990, No. 1012, § 1.

(2) The rules adopted pursuant to this Subsection shall provide for the following:

[See main volume for text of D(2)(a) to (e)]

(f) The treatment of infectious waste by steam sterilization, incineration, thermal inactivation, chemical disinfection, irradiation sterilization, or any other method, technique, or process designed to change the biological character or composition of the waste and the use of biological indicators to monitor the treatment. The rules shall not, however, require that incinerators used for the disposal of infectious waste have a temperature range capability greater than sixteen hundred to two thousand degrees Fahrenheit and a gas phase retention time in the secondary chamber greater than one and one-half seconds.

Amended by Acts 1989, No. 583, § 1, eff. July 6, 1989.

[See main volume for text of D(2)(g) and (h)]

(3) Repealed by Acts 1990, No. 1012, § 2.

(4)(a) Notwithstanding any other provision of the law to the contrary, the secretary shall not issue any permit or promulgate any rules and regulations which would allow the construction or operation of any medical waste incinerator disposal facility of any type in this state until such rules and regulations are specifically authorized by law.

(b) The prohibition in this Subsection shall not apply to the regulation or permitting of any such facility possessing a permit or interim permit on April 1, 1990, nor to an application which was pending and had not been denied prior to July 1, 1990.

~~(c) In no event shall any such permit be issued without prior notification of legislators~~ representing the area which includes the proposed site of the facility and prior public hearing in that area.

(d) The department shall promulgate necessary rules and regulations for the permitting of medical waste incinerator disposal facilities within one hundred eighty days after being specifically authorized by law.

Added by Acts 1990, No. 1006, § 1, eff. July 26, 1990.

[1] In par. D(1), R.S. 49:950 et seq.

Historical and Statutory Notes

1989 Legislation

Acts 1989, No. 233, § 1, effective June 26, 1989, in par. D(1), substituted "January 15, 1990" for "July 1, 1989" in the first and final sentences.

Acts 1989, No. 583, § 1, effective July 6, 1989, substituted, in the first sentence of par. D(1), "shall promulgate rules" for "shall, no later than July 1, 1989, adopt rules"; added, to the second sentence of par. D(1), ", including but not limited to the recommendations contained in the final report to the United States Congress by the Environmental Protection Agency as required by the Medical Waste Tracking Act of 1988"; deleted the fourth sentence of the same paragraph which read: "The rules required herein shall become effective on July 1, 1989."; added the second sentence of subpar. D(2) (f) relating to incinerator temperature range capability and gas phase retention time; and added par. D(3).

Acts 1989, No. 233, § 2 provides:

"In the event that both House Bill No. 1204 and House Bill No. 597 become law; then, to the extent that the provisions conflict, the provisions of House Bill No. 597 shall control."

House Bill No. 1204 was enacted as Acts 1989, No. 233, and House Bill No. 597 was enacted as Acts 1989, No. 583.

Acts 1989, No. 233, § 1 and Acts 1989, No. 583, § 1 both amended par. D(1). On authority of Acts 1989, No. 233, § 2 and R.S. 24:253, par. D(1) was printed as set forth in Act 583.

1990 Legislation

Acts 1990, No. 1006, § 1, effective July 26, 1990, added par. (4) to subsec. D.

Acts 1990, No. 1012, § 1 rewrote par. D(1), which had read:

"D. (1) The secretary in conjunction with the state health officer shall promulgate rules in accordance with the Administrative Procedure Act, to regulate the packaging, storage, treatment, transportation, and disposal of infectious waste. The rules shall conform to the recommendations of the United States Environmental Protection Agency regarding infectious waste management, including but not limited to the recommendations contained in the final report to the United States Congress by the Environmental Protection Agency as required by the Medical Waste Tracking Act of 1988. 'Infectious waste' means waste which contains pathogens with sufficient virulence and quantity so that exposure to the waste by a susceptible host could result in an infectious disease."

Acts 1990, No. 1012, § 2 repealed par. D(3), which, as added by Acts 1989, No. 583, § 1, had read:

"D. (3)(a) The secretary shall promulgate the rules required herein within one hundred eighty days after either of the following have occurred:

"(i) The publication of the final report to the United States Congress by the Environmental Protection Agency as required by the Medical Waste Tracking Act of 1988; or

"(ii) The certification by the secretary, the state health officer, and the state epidemiologist that the regulations provided for herein are necessary to protect the health and safety of the citizens of Louisiana.

"(b) In no event shall the state of Louisiana petition into the demonstration program under the provisions of the Medical Waste Tracking Act of 1988. No funds, regardless of the source, which are appropriated to the department shall be used for the purpose of participating in the demonstration program under the provisions of the Medical Waste Tracking Act of 1988."

Acts 1990, No. 1012 (§ 1 of which amends this section) provides in § 3:

"If House Bill No. 1933 becomes effective, the provisions of this bill shall supercede those of House Bill No. 1933 to the extent the two bills are determined to be in conflict."

House Bill No. 1933 of the 1990 Regular Session was not enacted into law.

1991 Legislation

The 1991 amendment substituted "natural resources committee of the House of Representatives and the environmental quality committee of the Senate" for "natural resources committees" in the first sentence of par. A(1).

§ 2183. Notice; permits and licenses; enforcement; violations; penalties; notification

[See main volume for text of A to G(2)]

(3) Any person who knowingly omits any material information or knowingly and ~~intentionally makes any false statement, representation, or certification in any application,~~

record, label, manifest, report, plan, or other document filed or required to be maintained under this Chapter, or under any permit, rule, or regulation issued under this Chapter, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method to be maintained under this Chapter, or under any permit, rule, or regulation issued under this Chapter, shall upon conviction be punished by a fine of not more than twenty-five thousand dollars or imprisonment for not more than six months, or both.

Added by Acts 1990, No. 988, § 1.

[See main volume for text of H to J]

Historical and Statutory Notes

1990 Legislation

The 1990 amendment, in subsec. G, added par. (3).

§ 2192. Treatment, storage, and disposal facilities

[See main volume for text of A]

B. The regulations at a minimum shall require:

[See main volume for text of B(1) to (3)]

(4) A surety bond in favor of the state, a certificate of public liability insurance, payments into the Environmental Trust Fund, other financial assurance, or any combination thereof, sufficient to assure financial responsibility for damages resulting from accidents or negligence, when corrective action is required or as specified in the permit, and to assure closure and post-closure care, said assurance to be consistent with the degree and duration of risks associated with the treatment, storage, or disposal of the type of hazardous waste handled.

Amended by Acts 1989, No. 392, § 1, eff. June 30, 1989.

(5) Repealed by Acts 1989, No. 392, § 3, eff. June 30, 1989.

[See main volume for text of B(6) and (7); C]

Historical and Statutory Notes

1989 Legislation

Acts 1989, No. 392, § 1 substituted "the Environmental Trust Fund" for "a State Hazardous Waste Protection Fund" following "payments into" in par. B(4) and deleted "; exceptions" from the end of the heading.

Section 3 of Acts 1989, No. 392 repealed par. B(5), effective June 30, 1989. See main volume for text of the paragraph prior to repeal.

§ 2193. Land disposal of hazardous waste; restrictions; prohibition

[See main volume for text of A]

B. As used in this Section, the following terms shall have the meaning ascribed to them in this Subsection, unless the context clearly indicates otherwise:

[See main volume for text of B(1) and (2)]

(3) "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt-dome formation, salt-bed formation, underground mine or cave, or placement in a concrete vault or bunker intended for disposal purposes.

Amended by Acts 1989, No. 485, § 1.

[See main volume for text of B(4) and C]

D. (1) Not later than January 1, 1986, the secretary shall determine what economically and technically feasible and environmentally sound alternatives are available in the state for processing, treating, destroying, recycling, reducing, or neutralizing the hazardous waste as identified in Subsection C.

(2) Between January 1, 1986, and June 1, 1992, any hazardous waste for which there is no alternative disposal, destruction, reduction, or recycling method in the state shall be land disposed only after stabilization, solidification, containment, encapsulation, or ap-

proved land treatment techniques in a manner and with a material sufficient to prevent the leaching potential of such wastes except that the secretary may, upon a showing that no other reasonable alternative exists, permit the injection of hazardous waste in an injection well. The burden of proof shall rest with the generators of such hazardous waste that they cannot meet the requirements of this Subsection, and the secretary shall determine the sufficiency and adequacy of such proof and evidence presented by generators.

Amended by Acts 1990, No. 979, § 1, eff. July 25, 1990.

E. (1) Effective June 1, 1992, and thereafter, the land disposal of hazardous waste shall be prohibited, except as provided in this Subsection and by regulations promulgated by the secretary pursuant to Subsection C of this Section.

(2) Any person seeking an exemption from the prohibition on the land disposal of hazardous waste shall file a written request for such exemption with the secretary. The secretary, after considering reasonable economic and environmental alternatives, may allow the land disposal of certain hazardous waste if in his determination:

(a) The best available technology cannot further reduce the toxicity, corrosiveness, virulent or infectious character, or volume of the hazardous waste.

(b) The waste cannot be further reduced through production modifications.

(c) The waste or specific constituents of the waste cannot be reclaimed and reused.

(d) The waste can be permanently confined within a department-approved hazardous waste containment system.

(e) The land disposal of the hazardous waste does not and will not endanger public health or the environment.

(f) No reasonable alternative exists to the injection of hazardous waste in an injection well.

(3) The burden of proof that the conditions of Paragraph (2) of this Subsection have been met shall rest with the person requesting the exemption.

(4) Hazardous waste or residues thereof which have been treated to the level of or by a method specified in regulations promulgated under Subsection C of this Section shall not be subject to any prohibition promulgated under this Subsection, and may be disposed of in a land disposal facility which meets the requirement of this Subtitle.

(5) Hazardous waste or residues thereof which have been granted a case-by-case extension, emergency variance, or variance pursuant to the regulations promulgated under Subsection C are not prohibited and may be disposed of in a land disposal facility which meets the requirements of this Subtitle.

(6) Newly listed hazardous waste or residues thereof which have no treatment standard are not prohibited and may be disposed of in a land disposal facility which meets the requirements of this Subtitle until standards are established pursuant to the regulations promulgated under Subsection C.

Amended by Acts 1990, No. 649, § 1; Acts 1990, No. 979, § 1, eff. July 25, 1990.

[See main volume for text of F]

Historical and Statutory Notes

1989 Legislation

The 1989 amendment rewrote par. B(3), defining "land disposal" (see main volume for prior text).

1990 Legislation

Acts 1990, No. 649, § 1 added pars. E(4), E(5), and E(6), providing for hazardous wastes and residues which have been treated.

Acts 1990, No. 979, § 1, effective July 25, 1990 substituted "June 1, 1992" for "January 1, 1991", in the second sentence of subsec. D and in par. E(1); added "and by regulations promulgated by the secretary pursuant to Subsection (C) of this Section", to par. E(1); substituted "an exemption from" for "to appeal" and "such exemption" for "a determination on such", in the first sentence of par. E(2); and substituted "exemption" for "determination by the secretary", at the end of par. (3).

In subsec. D as amended in 1990, format changes were made; and in par. E(1), "Subsection (C)" was changed to "Subsection C", both on authority of R.S. 24:253.

~~§ 2194. Underground storage tanks; registration~~

[See main volume for text of A]

B. As used in R.S. 30:2194 through R.S. 30:2195.10, the following terms shall have the meaning ascribed to them in this Subsection, unless the context clearly indicates otherwise:

(1) "Bulk facility" means a facility, including pipeline terminals, refinery terminals, motor fuel distribution terminals, rail and barge terminals, and associated tanks, connected or separate, from which motor fuels are withdrawn from bulk and delivered into a cargo tank or a barge used to transport these materials.

(2) "Cargo tank" means an assembly that is used for transporting, hauling, or delivering liquids and that consists of a tank having one or more compartments mounted on a wagon, truck, trailer, railcar, or wheels.

(3) "Eligible participant" means any owner of an underground storage tank that has registered said tank with the department and shall have met the financial responsibility requirements imposed by R.S. 30:2195.9.

(4) "Hazardous substance" means:

(a) Those substances defined or identified as hazardous substances pursuant to R.S. 30:2272(4)(a) and regulations thereunder, and

(b) Petroleum, including crude oil or any fraction thereof which is liquid as standard conditions of temperature and pressure, 60 degrees Fahrenheit and 14.7 pounds per square inch absolute.

(5) "Motor fuels" shall be defined as all grades of gasoline including but not limited to gasohol, No. 1 diesel, No. 2 diesel, kerosene, and all aviation fuels. Liquid petroleum (LP) gas shall not be included in this definition of motor fuel. This term shall include new and used motor oil that is used for lubricating engines of motor vehicles. If, however, used oil is determined to be a hazardous waste by the United States Environmental Protection Agency, used oil shall no longer be included in this term.

(6) "Response action" means any activity, including but not limited to assessment, planning, design, engineering, construction, operation of recovery system, or ancillary services which are carried out in response to any discharge or release or threatened release of motor fuels into the groundwater or subsurface soils.

(7) "Response action contractor" means a person who has been approved by the department and is carrying out any response action, including a person retained or hired by such person to provide services relating to a response action.

(8) "Substantial compliance" shall mean that an owner of an underground storage tank has registered that tank with the department, has complied with the state and federal laws and regulations applicable to underground storage tanks, and the rules and regulations adopted pursuant thereto, and shall have met the financial responsibility requirements imposed by R.S. 30:2195.9, and shall have promptly notified the secretary of any third party claim or suit made against him.

(9) "Third party claim" means any civil action brought or asserted by any person against any owner of any underground storage tank for damages to person or property when damages are the direct result of the contamination of groundwater and/or subsurface soils by motor fuels released during operation of storage tanks covered under this Chapter.

(10) "Underground motor fuel storage tank" means an underground storage tank used only to contain an accumulation of motor fuels.

(11) "Underground storage tank" means any one or combination of tanks and their attendant product piping which is used to contain an accumulation of hazardous substances, and the volume of which is ten percent or more beneath the surface of the ground. Such term may be further defined by regulations adopted under this Subtitle.

~~(12) "Withdrawal from bulk" means the removal of a motor fuel from a bulk facility~~ storage tank directly into a cargo tank or a barge to be transported to another location other than another bulk facility and deposit into an underground storage tank for distribution, direct consumption, or sale in this state.

Amended by Acts 1989, No. 513, § 1; Acts 1990, No. 1014, § 1, eff. Sept. 1, 1990; Acts 1991, No. 890, § 1.

C. The secretary shall promulgate regulations requiring the registration of all commercial underground storage tanks with a capacity equivalent to or in excess of one thousand one hundred gallons which contain hazardous substances. The secretary may adopt rules and regulations to require the registration of certain underground storage tanks; establish requirements for ensuring sound underground storage tank management for preventing, controlling, remediating, and abating actual or potential groundwater or subsurface contamination; establish requirements for reporting of known releases and for taking corrective action in response to known releases from underground storage tank systems; and establish a certification program for persons installing, repairing, or closing underground storage tank systems. For the purpose of this Section, "underground storage tank" shall not include a:

Amended by Acts 1990, No. 1014, § 1, eff. Sept. 1, 1990; Acts 1991, No. 223, § 1.

[See main volume for text of C(1) to (9) and D]

Nonseverability of Acts 1990, No. 1014

Acts 1990, No. 1014 (§ 1 of which amends this section and R.S. 30:2195.1, 30:2195.2, 30:2195.3 and 30:2195.4, and § 2 of which repeals R.S. 30:2195.3(C)) provides in § 4:

"The provisions of this Act are hereby declared to be nonseverable."

Historical and Statutory Notes

1989 Legislation

The 1989 amendment added par. B(9), defining "Eligible participant".

On authority of R.S. 24:253.1, par. B(9) as enacted in 1989 was redesignated as par. B(1) and existing pars. B(1) to B(8) were redesignated as pars. B(2) to B(9).

1990 Legislation

The 1990 amendment rewrote subsec. C to omit authority for imposition of registration fees (see main volume for prior text); added pars. B(10), B(11) and B(12) defining bulk facilities, cargo tanks and withdrawal from bulk; deleted "and fees" from the end of the heading; and rewrote pars. B(1) and B(6), which had read:

"(1) 'Eligible participant' means any owner of an underground motor fuels storage tank that has registered said tank with the department and is fully paid into the trust in compliance with the payment schedule set forth by the private legal entity, and shall have met the financial responsibility requirements imposed by R.S. 30:2195.9."

"(6) 'Substantial compliance' shall mean that an owner of an underground storage tank has registered that tank with the department, has timely paid the annual tank fee, has complied with the state and federal laws and regulations applicable to underground storage tanks, and the rules and regulations adopted pursuant thereto, and is fully paid into the trust in compliance with the payment schedule set forth by the private legal entity, and shall have met the financial responsibility requirements imposed by R.S. 30:2195.9, and shall have promptly notified the secretary of any third party claim or suit made against him."

In subsec. B as amended in 1990, the paragraphs were renumbered to place the defined terms in alphabetical order on authority of R.S. 24:253.1; and at the end of par. B(1) "R.S. 20:2195.9" was changed to "R.S. 30:2195.9" on authority of R.S. 24:253.

1991 Legislation

Acts 1991, No. 890, § 1, in the definition of "motor fuels" in par. B(5), added new penultimate and final sentences relating to lubricating oil.

Acts 1991, No. 223, § 1, in the introductory paragraph of subsec. C, deleted, from the first sentence, "regardless of capacity, and other underground storage tanks" preceding "with a capacity"; and inserted the second sentence of the same paragraph, which sentence provides for the adoption of rules and regulations relating to the registration of certain underground storage tanks.

§ 2195.1. Underground motor fuel storage tank remediation agreements

[See main volume for text of A]

B. The secretary is hereby authorized pursuant to the Louisiana Constitution, Article VII, Section 9(A) and R.S. 30:2031 to enter into an agreement with a private legal entity to

~~receive and administer a trust fund for the purpose of providing financial responsibility~~ for underground motor fuel storage tanks which shall constitute a grant under such terms and conditions as the department and the private legal entity shall agree. The funds received shall be placed in a special trust fund in the custody of the state treasury to be used only in accordance with the terms and conditions of said grant and of R.S. 30:2194 through R.S. 30:2195.10 and shall not be placed in the general fund but shall be subject to the appropriation process of the legislature. The funds provided to the department pursuant to this Section and to the said agreement shall at all times be and remain the private funds of the private legal entity. Such funds shall constitute a trust fund which shall be administered by the secretary of the Department of Environmental Quality in accordance with the following sections, terms, and conditions.

Amended by Acts 1990, No. 1014, § 1, eff. Sept. 1, 1990.

[See main volume for text of C]

Nonseverability of Acts 1990, No. 1014

Acts 1990, No. 1014 (§ 1 of which amends this section and R.S. 30:2194, 30:2195.2, 30:2195.3, and 30:2195.4, and § 2 of which repeals R.S. 30:2195.3(C)) provides in § 4:

"The provisions of this Act are hereby declared to be nonseverable."

Historical and Statutory Notes

1990 Legislation

The 1990 amendment, in subsec. B, substituted "but shall be subject to the appropriation process of the legislature" for "nor subject to appropriation by the legislature in accordance with Louisiana Constitution, Article VII, Section 9(A) and R.S. 49:308.3(B)(2) and (B)(6)" following "general fund" at the end of the second sentence.

§ 2195.2. Uses of the trust

[See main volume for text of A]

B. Whenever in the secretary's determination incidence of groundwater or subsurface soils contamination resulting from the storage of motor fuels may pose a threat to the environment or the public health, safety, and welfare and the owner of the underground storage tank has been found to be an eligible participant the department shall obligate monies available in the trust to provide for the following response actions:

(1) Investigation and assessment of sites shown to be contaminated by a release into the groundwater or subsurface soils from an underground motor fuels storage tank.

(2) Interim replacement and permanent restoration of potable water supply where it has been demonstrated that the supply was contaminated by a leak from an underground motor fuels storage tank.

(3) (a) Rehabilitation and remediation of sites contaminated by a leak into the groundwater or subsurface soils in an underground motor fuels storage tank, which may consist of cleanup of affected soil, groundwater, and inland surface waters, using cost effective methods that are technologically feasible and reliable, while insuring adequate protection of the public health, safety, and welfare and minimizing environmental damage, in accordance with the site selection and cleanup criteria established by the department.

(b) Nothing herein shall be construed to authorize or require the department to obligate funds for payment of costs which may be associated with, but are not integral to, site rehabilitation, such as the cost of retrofitting or purchases of equipment needed in assisting cleanup operations.

(c) The funds in the trust shall be used for the replacement of leaking underground storage tanks and attendant product piping as provided in this Paragraph. Said funds shall be allocated on a match basis of twenty-five percent of the replacement cost of the leaking tanks and piping, provided the tanks are double wall construction of continuous glass filament winding, comply with all applicable state and federal standards, and are manufactured in the state of Louisiana by a corporation whose domicile and corporate ~~headquarters are in Louisiana.~~

~~(d) The monies expended from the trust for any of the above approved costs shall be~~ spent only up to such sum as that which is necessary to satisfy federal petroleum underground storage tank financial responsibility requirements (40 CFR Part 280.93).

Amended by Acts 1989, No. 513, § 1; Acts 1990, No. 1014, § 1, eff. Sept. 1, 1990.

C. Whenever costs have been incurred by the department for taking response actions with respect to the release of motor fuels from an underground storage tank, or the department has expended funds from the trust for response costs or third party liability claims, the owner of the underground motor fuels storage tank shall be liable to the department for such costs only if the owner was not an eligible participant or in substantial compliance on the date of discharge of the motor fuels which necessitates the cleanup; otherwise liability is limited to the provisions contained in R.S. 30:2195.9. The expenditure of funds to reimburse any party for costs otherwise authorized by this Subsection shall be expressly prohibited if the costs were incurred as the result of a release of motor fuels which occurred prior to July 15, 1988. Nothing contained herein shall be construed so as to authorize the expenditure from the trust on behalf of any owner of an underground storage tank who is not an eligible participant on the last anniversary date of the trust for any third party liability.

Amended by Acts 1989, No. 513, § 1; Acts 1991, No. 890, § 1.

[See main volume for text of D]

E. The trust may be used to reimburse the private legal entity for any costs associated with the review of applications for reimbursement from the trust, legal fees associated with the collection of costs from parties not in substantial compliance, audits of the trust, accounting and reporting to the private legal entity regarding the uses of the trust. The trust will also reimburse the Department of Environmental Quality for costs associated with administering the underground storage tank program in accordance with R.S. 30:2195.3(A)(9) up to the amount appropriated pursuant to R.S. 30:2195.1(B).

Amended by Acts 1990, No. 1014, § 1, eff. Sept. 1, 1990.

F. The trust may be used to make payments to a third party who brings a third party claim against any owner of an underground motor fuel storage tank because of damages sustained by a release into the groundwater or subsurface soils and who obtains a final judgment in said action enforceable in this state against the owner if and only if it has been satisfactorily demonstrated that the owner was an eligible participant at the time that the release occurred as defined in R.S. 30:2194(B)(1). The indemnification limit of the trust with respect to satisfaction of third party claims shall be that which is necessary to satisfy federal petroleum underground storage tank financial responsibility requirements.

Amended by Acts 1989, No. 513, § 1.

Nonseverability of Acts 1990, No. 1014

Acts 1990, No. 1014 (§ 1 of which amends this section and R.S. 30:2194, 30:2195.1, 30:2195.3, and 30:2195.4, and § 2 of which repeals R.S. 30:2195.3(C)) provides in § 4:

"The provisions of this Act are hereby declared to be nonseverable."

Historical and Statutory Notes

1989 Legislation

The 1989 amendment substituted, in subsec. B, "found to be an eligible participant" for "found to be in substantial compliance with the rules and regulations of"; changed semicolons to periods at the ends of pars. B(1) and B(2); changed "paragraph" to "Paragraph" in the second sentence of par. B(3); substituted, in the fifth sentence of par. B(3), "that which is necessary to satisfy federal petroleum underground storage tank financial responsibility requirements (40 CFR Part 280.93)" for "will cause the Resource Conservation and Recovery Act, Subtitle I, the ~~Superfund Amendments and Reauthorization~~ Act of 1986, and any other federal laws governing disbursement of federal funds for cleanup and/or third party claims to come into effect"; inserted, in the first sentence of subsec. C, "or third party liability claims" following "response costs"; deleted, from the same sentence "response" preceding "costs" and following "such"; substituted, in the second sentence of subsec. C, "who is not an eligible participant" for "who has not paid the required fees and was not in substantial compliance"; substituted, in the first sentence of subsec. F, "was an eligible participant" for "was in substantial compliance with the laws, rules, and regulations", and changed ~~the reference at the end of the sentence from~~

R.S. 30:2194(B) (5)" to "R.S. 30:2194(B) (9)", and substituted, in the second sentence of subsec. F, "federal petroleum underground storage tank financial responsibility requirements." for "underground storage tank owner financial responsibility requirements of Subtitle I of the Resource Conservation and Recovery Act, U.S. Code."

In subsec. F as amended in 1989, "R.S. 30:2194(B)(1)" was substituted for "R.S. 30:2194(B)(9)" on authority of R.S. 24:253.

1990 Legislation

The 1990 amendment rewrote subsec. E (see main volume for prior text) and par. B(3), which had read:

"(3) Rehabilitation and remediation of sites contaminated by a leak into the groundwater or subsurface soils in an underground motor fuels storage tank, which may consist of cleanup of affected soil, groundwater, and inland surface waters, using cost effective methods that are technologically feasible and reliable, while insuring adequate protection of the public health, safety, and welfare and minimizing environmental damage, in accordance with the site selection and cleanup criteria established by the department. Nothing herein shall be construed to authorize or require the department to obligate funds for payment of costs which may be associated with, but are not integral to, site rehabilitation, such as the cost of retrofitting or purchases of equipment needed in assisting cleanup operations; however, subject to the provisions of Subsections C and D, the funds in the trust shall be used for the replacement of leaking underground storage tanks and attendant product piping as provided in this Paragraph. No trust funds shall be used to replace leaking underground storage tanks or attendant product piping unless the tanks are double wall construction of continuous glass filament winding, void of dishend seams or welds and comply with all applicable state and federal standards. Said funds shall be allocated on a match basis of twenty-five percent of the replacement cost of the leaking tanks and piping. The monies expended from the trust for any of the above approved costs shall be spent only up to such sum as that which is necessary to satisfy federal petroleum underground storage tank financial responsibility requirements (40 CFR Part 280.93)."

In par. B(3) as amended in 1990, format changes were made on authority of R.S. 24:253.

At the end of the first sentence of subpar. B(3)(c) of this section as amended in 1990, "Paragraph" was substituted for "paragraph" pursuant to the statutory revision authority of the Louisiana State Law Institute.

1991 Legislation

The 1991 amendment, in subsec. C, inserted "an eligible participant or" following "the owner was not" and inserted a new penultimate sentence regarding releases of motor fuels occurring prior to July 15, 1988.

§ 2195.3. Source of funding; limitations on disbursements from the trust; limit on amount in trust

A. (1)(a) A fee is imposed on the first sale or delivery of a motor fuel upon withdrawal from bulk of that fuel. This fee shall not, however, apply to new or used motor oil. Each operator of a bulk facility on withdrawal from bulk of a motor fuel shall either retain or collect from the person who ordered the fuel a fee in an amount determined as follows:

(i) Thirteen dollars and fifty cents for each separate withdrawal of nine thousand gallons.

(ii) For withdrawals either greater or smaller than nine thousand gallons, the fee shall be adjusted by the cent-per-gallon conversion equivalent calculated according to the fee established in Item A(1)(a)(i) of this Section.

(b) However, those persons ordering the withdrawal of motor fuel from a bulk facility into a cargo tank which is directly transported and completely unloaded into either tanks exempted from registration requirements as provided by R.S. 30:2194(C) or those underground storage tanks exempted from taxation pursuant to R.S. 47:715 and 720 shall not be required to pay the fees established by this Paragraph. These fees shall also not apply to exchanges between bulk facilities.

(2) The fee required under this Section shall be computed on the net (60 degrees fahrenheit) amount of a motor fuel delivered into a cargo tank.

(3) Any person who imports motor fuel in a cargo tank or a barge destined for delivery into an underground storage tank, shall pay to the secretary a fee on a number of gallons imported, computed as provided by Paragraph (A)(1) of this Section. If a bulk facility operator imports motor fuel in a cargo tank or a barge, the bulk facility operator is not required to pay the fee on that imported motor fuel if the motor fuel is delivered to a bulk facility from which the motor fuel will be withdrawn from bulk.

(4) Each operator of a bulk facility and each person covered by Paragraph (3) of this Subsection shall file an application with the secretary for a permit to deliver motor fuels into a cargo tank destined for delivery into underground storage tanks, regardless of whether these tanks are exempted from the registration requirements of R.S. 30:2194(C). All applications shall be filed utilizing a form approved by the secretary. A permit issued by the secretary under this Subsection is valid on and after the date of its issuance and until the permit is surrendered by the holder or cancelled by the secretary.

(5) Fees required by this Section shall not apply to a delivery of motor fuel destined for export from this state.

(6) All invoices or transaction statements issued by operators of bulk facilities for the transfer of motor fuels into a cargo tank shall clearly indicate whether or not the transaction was a withdrawal from bulk as defined by R.S. 30:2194(B)(12).

(7) Each operator of a bulk facility shall list, as a separate line item on an invoice, the amount of the fees due under this Section, and on or before the twenty-fifth day of the month following the end of each calendar month, file a report with the secretary and remit the amount of fees required to be collected or paid during the preceding month. Said reports shall be filed on a form approved by the secretary.

(8) All invoices, reports, and any other records required under this Section as well as rules adopted by the secretary pursuant to this Section, or copies thereof, shall be retained for a period of four years after the date on which the document is prepared.

(9) Eighty percent of fees collected each month as required by this Section shall be deposited directly into the trust. The remaining twenty percent shall be deposited directly into the Environmental Trust Fund as provided by R.S. 30:2015. Monies so deposited in the Environmental Trust Fund shall be used to defray the cost to the state of administering the underground storage tank program and the cost of investigation, testing, containment, control, and cleanup of releases from underground storage tanks containing hazardous substances. These monies shall also be used to provide money or services as the state share of matching funds for federal grants involving underground storage tanks. At the end of each fiscal year, all monies that were deposited into the Environmental Trust Fund in this fashion which remain unspent, including all accrued interest, shall be transferred to the trust.

(10) Fees imposed by this Section shall not be collected or required to be paid on or after the first day of the second month following a determination that has been made by the board that the unobligated balance in the trust equals or exceeds twenty million dollars. If the board determines that the unobligated balance in the trust falls below six million dollars, the fee shall be reinstated effective on the first day of the second month following this determination. For these purposes, the unobligated balance in the trust shall be determined by subtracting from the cash balance in the trust at the end of each month the sum of the total estimates made by the board of eligible payment requests pending review.

(11) A bulk facility operator may retain an amount not to exceed three percent of the monthly fee collected pursuant to Paragraph (1) of this Subsection by that operator as compensation for collecting and remitting the fee.

B. All owners of underground motor fuel storage tanks storing new or used motor oil shall pay to the private legal entity a fee not to exceed two hundred seventy-five dollars per eligible underground motor fuel storage tank per year. Said fee shall be paid within thirty days following receipt of an invoice from the department.

C. The secretary shall not make any disbursements from the trust to any person who has not complied with and paid the fee assessment as required by the private legal entity, except payments to third parties as provided in R.S. 30:2195.2(F).

Amended by Acts 1989, No. 513, § 1; Acts 1990, No. 1014, § 1, eff. Sept. 1, 1990; Acts 1991, No. 890, § 1.

Nonseverability of Acts 1990, No. 1014

Acts 1990, No. 1014 (§ 1 of which amends this section and R.S. 30:2194, 30:2195.1, 30:2195.2, and 30:2195.4, and § 2 of which repeals subsec. C of this section) provides in § 4:

"The provisions of this Act are hereby declared to be nonseverable."

Historical and Statutory Notes

1989 Legislation

The 1989 amendment changed the statutory reference in subsec. B from "R.S. 30:2195.2(D)" to "R.S. 30:2195.2(F)"; and deleted the second sentence of the subsection (see main volume for text of the deleted sentence).

1990 Legislation

Acts 1990, No. 1014, § 1 rewrote subsec. A (see main volume for prior text).

Acts 1990, No. 1014, § 2 repealed subsec. C (see main volume for repealed text).

In par. A(1) as amended in 1990, format changes were made; and in item A(1)(a)(ii), "Subparagraph A(1)(a)" was changed to "Item A(1)(a)(i)", all on authority of R.S. 24:253.

1991 Legislation

The 1991 amendment inserted a new penultimate sentence into the introductory paragraph of subpar. A(1)(a) exempting new or used motor oil; inserted a new subsec. B regarding storage of new or used motor oil; and redesignated existing subsec. B as subsec. C. A prior subsec. C was repealed in 1990; see note, ante.

§ 2195.4. **Procedures for disbursements from the fund trust**

A. Monies held in the trust established hereunder shall be disbursed by the secretary in the following manner:

[See main volume for text of A(1) and (2)]

(3) Except in cases of emergency, no disbursement from the trust may be made by the secretary until such time that the secretary obtains verification from the legal entity that the owner applicant is an eligible participant in compliance with the law and this agreement.

Amended by Acts 1989, No. 513, § 1.

B. Payments shall be made to third parties who bring suit against the secretary in his official capacity as representative of the trust and the owner of an underground motor fuel storage tank who is an eligible participant as stated in R.S. 30:2194 and such third party obtains a final judgment in that action enforceable in this state. The owner above stated shall pay the amount required by R.S. 30:2195.9 toward the satisfaction of said judgment and after that payment has been made, the trust will pay the remainder of said judgment. The attorney general of the state of Louisiana is hereby responsible to appear in said suit for and in behalf of the secretary as representative of the trust and the secretary as representative of the trust is a necessary party in any suit that is brought by any third party which would allow that third party to collect from this trust; and the secretary must be made a party to the initial proceedings. Payment shall be made to the third party claimant if and only if the judgment is against an owner who was an eligible participant on the date of the incident which gave rise to the claim occurred. The costs of defending these suits by the attorney general or those assistants employed by the secretary, or appointed by the attorney general to assist, shall be recovered from the trust. In the event the trust is insufficient to make payments at the time the claim is filed, such claims shall be paid in the order of filing at such time as monies are paid into the trust. The amount of money in this trust, the method of collecting the trust, nor any of the particulars involved in setting up this trust shall be admissible as evidence in any trial where suit is brought when the judgment rendered could affect the trust.

Amended by Acts 1989, No. 513, § 1.

C.(1) For any month during which the collection of fees assessed pursuant to R.S. 30:2195.3 is suspended, the treasurer shall transfer an amount equal to twenty percent of the average monthly fee amount collected according to the schedule specified in R.S. 30:2195.3(A)(1) from the trust into the Environmental Trust Fund for use as provided by R.S. 30:2195.3(A)(9).

(2) If in the secretary's determination the funds deposited on a monthly basis into the Environmental Trust Fund pursuant to R.S. 30:2195.3(A)(9) are insufficient relative to the legislatively approved fiscal appropriation for the Underground Storage Tank Division during a given year, the secretary may order the treasurer to transfer from the trust to the Environmental Trust Fund only that amount necessary to reach the authorized ceiling.

Added by Acts 1990, No. 1014, § 1, eff. Sept. 1, 1990.

Nonseverability of Acts 1990, No. 1014

Acts 1990, No. 1014 (§ 1 of which amends this section and R.S. 30:2194, 30:2195.1, 30:2195.2, and 30:2195.3, and § 2 of which repeals R.S. 30:2195.3(C)) provides in § 4:

"The provisions of this Act are hereby declared to be nonseverable."

Historical and Statutory Notes

1989 Legislation

The 1989 amendment substituted, in par. A(3), "an eligible participant in compliance" for "in substantial compliance"; substituted, in the first and fourth sentences of subsec. B, "an eligible participant" for "who is in substantial compliance" and "who was in substantial compliance", respectively.

1990 Legislation

The 1990 amendment added subsec. C.

§ 2203. Remediation; evidence; prohibitions

Law Review Commentaries

State and federal notification requirements for spills and releases. Robert E. Holden, 38 La.B.J. 77 (1990).

United States Code Annotated

Clean Water Act notification requirements for spills and releases, see 33 U.S.C.A. § 1321.

Comprehensive Environmental Response, Compensation and Liability Act notification requirements for spills and releases, see 42 U.S.C.A. § 9601.

Emergency Planning and Community Right to Know Act requirements for spills and releases, see 42 U.S.C.A. § 11001 et seq.

§ 2204. Hazardous waste sites; cleanup

[See main volume for text of A(1) and (2)]

(3) The goal of such regulations is to eliminate those releases that may reasonably pose a threat to human health or the environment and to remediate contaminated media, taking into consideration current and expected uses.

Added by Acts 1991, No. 666, § 1, eff. July 17, 1991.

[For text of B and C, see main volume]

Historical and Statutory Notes

1991 Legislation

The 1991 amendment added par. A(3) regarding regulatory goals.

§ 2205. Hazardous Waste Site Cleanup Fund

A. (1) All sums recovered through judgments, settlements, assessments of civil or criminal penalties, funds recovered by suit or settlement from potentially responsible parties for active or abandoned site remediation or cleanup, or otherwise under this Subtitle, or other applicable law, each fiscal year for violation of this Subtitle, shall be paid into the state treasury and shall be credited to the Bond Security and Redemption Fund. After a sufficient amount is allocated from that fund to pay all obligations secured by the full faith and credit of the state which become due and payable within any fiscal year, the treasurer, prior to placing such remaining funds in the state general fund, shall pay into a special fund, which is hereby created in the state treasury and designated as the "Hazardous Waste Site Cleanup Fund", twenty-five percent of those funds generated by the hazardous waste tax under the provisions of Chapter 7-A of Title 47 of the Louisiana Revised Statutes of 1950 and the sums recovered through all judgments, settlements, assessments of civil or criminal penalties, funds recovered by suit or settlement from potentially responsible parties for active or abandoned site remediation or cleanup, or otherwise, for violation of this Subtitle, except as provided in R.S. 30:2025 and R.S. 30:2198; however, the balance in the fund shall not exceed three million dollars for fiscal year 1990-91 and four million dollars each year thereafter at any time and upon the accumulation of three million dollars in fiscal year 1990-91 and four million dollars each year thereafter in the fund the treasurer shall pay all remaining sums provided for in this Subsection into the Environmental Trust Fund, R.S. 30:2015.

Amended by Acts 1989, No. 392, § 1, eff. June 30, 1989; Acts 1990, No. 974, § 1, eff. July 1, 1990.

[See main volume for text of A(2)]

~~(3) Not less than sixty-five percent of the funds deposited, plus any accrued interest~~ thereon in the Hazardous Waste Site Cleanup Fund, shall be used to fund programs provided for by this Subtitle for which matching federal funds are available pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C.A. 9601), or used to fund programs provided for by this Subtitle for investigation and remedial work at sites not covered by that Act.

Added by Acts 1989, No. 392, § 1, eff. June 30, 1989.

[See main volume for text of B and C]

D. The monies in the site cleanup fund shall be used to defray the cost of investigation, testing, containment, control, and cleanup of hazardous waste sites, to provide money or services as the state share of matching funds for federal grants, and to defray the cost of securing and quarantining hazardous waste sites, including the acquisition of rights of way, easements, or title when necessary. Interest earned through investment of the fund capital shall be credited to the Hazardous Waste Site Cleanup Fund.

Amended by Acts 1989, No. 392, § 1, eff. June 30, 1989.

[See main volume for text of E]

Suspension in part

House Concurrent Resolution No. 8 of the 1989 Second Extraordinary Session provides:

"WHEREAS, Act 20 of the 1989 Regular Session of the Legislature contains no appropriation from the Hazardous Waste Site Cleanup Fund; and

"WHEREAS, the lack of such appropriation will mean that the Department of Environmental Quality will have no funds for Fiscal Year 1989–90 for the remediation of hazardous waste sites; and

"WHEREAS, suspension of the creation of the fund will enable monies received from judgments, settlements, assessments of civil or criminal penalties, and funds recovered by suit or settlement from potentially responsible parties for active or abandoned sites to be placed into the Environmental Trust Fund which will enable such funds to be available for use in the remediation of hazardous waste sites.

"THEREFORE, BE IT RESOLVED that the Legislature of Louisiana hereby suspends R.S. 30:2205 insofar as that statute creates the Hazardous Waste Site Cleanup Fund.

"BE IT FURTHER RESOLVED that this suspension shall become effective upon adoption of this Resolution and shall extend until July 1, 1990.

"BE IT FURTHER RESOLVED that the Legislature of Louisiana does hereby authorize and direct the Department of Environmental Quality to take all necessary actions to expend funds in accordance with the provisions of the Hazardous Waste Site Cleanup Fund in R.S. 30:2205 as it was enacted by House Bill No. 1362 of the 1989 Regular Session."

House Bill No. 1362 of the 1989 Regular Session was enacted as Acts 1989, No. 392. Among other statutory changes, Act 392 amended R.S. 30:2205(A)(1) and (D) and enacted 30:2205(A)(3).

Historical and Statutory Notes

1989 Legislation

The 1989 amendment added par. A(3) and rewrote par. A(1) and subsec. D (see main volume for prior text).

In par. A(1) as amended in 1989, "Hazardous Waste Site Cleanup Fund" was enclosed in quotation marks in the second sentence on authority of R.S. 24:253.

1990 Legislation

The 1990 amendment, in par. A(1), inserted a comma, in the first sentence, following "under this Subtitle"; inserted "twenty-five percent of those funds generated by the hazardous waste tax under the provisions of Chapter 7-A of Title 47 of the Louisiana Revised Statutes of 1950 and", in the second sentence; and in the provisions establishing the maximum amount in the fund and providing for excess funds, the amount was changed from "two million dollars" to three

million dollars in 1990-91 and four million dollars thereafter.

Acts 1990, No. 1001, § 2 provides:

"On the effective date of this Act [September 7, 1990], Section 4 of Senate Bill 1028 of the 1990 Regular Session of the Legislature [Acts 1990, no. 974] shall be null and void and without effect of law."

Section 4 of Acts 1990, No. 974, effective July 1, 1990, (§ 1 of which amended this section) provided as follows:

"Notwithstanding the provision of this Act or any other Act passed during the 1990 Regular Session of the legislature, the siting of commercial solid or hazardous waste facilities shall be based upon the laws in effect on July 1, 1990".

§ 2207. [Blank]

Conditional Enactment

Acts 1990, No. 273, § 1 enacts R.S. 30:2207. Section 2 of Acts 1990, No. 273 provides:

"The provisions of this Act shall become effective on January 1, 1991, unless the United States 11th Circuit Court of Appeals renders an opinion that Act No. 89-788 of the Alabama Statutes is declared unconstitutional in the matter entitled "National Solid Waste Management Association, et al. v. The Alabama Department of Environmental Management, Civil Action No. 890g-1722-W" presently pending before that court, but only to the extent that the provisions of the said Alabama Act are determined to be declared unconstitutional."

Historical and Statutory Notes

In *National Solid Wastes Management Association v. Alabama Department of Environmental Management*, 910 F.2d 713 (11th Cir. 1990), the Court held that an Alabama statute restricting the treatment of hazardous waste generated outside of Alabama was unconstitutional as a violation of the commerce clause. The court found that hazardous waste is an "object of Commerce", and that the Alabama law was a protectionist measure not based adequately on legitimate local concern.

Acts 1990, No. 273, § 1, effective January 1, 1991, enacted R.S. 30:2207 subject to the United States 11th Circuit Court of Appeals holding that an Alabama statute was constitutional. The United States 11th Circuit Court of Appeals held that the Alabama statute was unconstitutional.

Act 273 set forth text of R.S. 30:2207 as follows:

"§ 2207. Treatment of out-of-state hazardous waste

"A. The legislature finds that:

"(1) The generation, management, and disposal of hazardous wastes is a cause of continuing concern to the citizens of this state.

"(2) The state of Louisiana has a responsibility to protect the public health, welfare, and safety of its citizens by and through the enactment of laws designed to protect and preserve the environment from the health risks and endangerments associated with the treatment and disposal of hazardous wastes.

"(3) The United States Congress, recognizing the serious health threats and risks posed by the treatment and disposal of hazardous wastes to public health and the environment, enacted the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") 42 U.S.C. 9604(c)(9), as amended, which requires that each state demonstrate by October 17, 1989, that it has adequate capacity to treat, destroy, or secure disposition of all hazardous wastes reasonably expected to be generated within the state over the next twenty years through the establishment of a hazardous waste treatment or disposal facility located within its borders, or through the use of a hazardous waste treatment or disposal facility located outside the state in accordance with an interstate agreement or regional agreement or authority.

"(4) In enacting the capacity assurance requirements, the United States Congress recognized that local pressures have impeded the siting of new hazardous waste treatment and disposal facilities in the nation in the past several years, and that if the federal Resource Conservation and Recovery Act as amended ("RCRA") and CERCLA are to work properly, such additional sites must be made available. Since Louisiana is already bearing far more than its fair share of the burden of managing hazardous wastes, it is only equitable that new capacity be developed in other states which have failed to assume their own obligations to site such facilities.

"(5) Both the United States Congress and the U.S. Environmental Protection Agency have recognized that the capacity assurance provisions of CERCLA would be used to force the development of new capacity to manage hazardous wastes. Implicit in the CERCLA capacity-assurance procedure is a recognition that an importing state might refuse to enter into an agreement with an exporting state, requiring the exporting state to create available capacity through waste reduction or through siting new

~~acilities, or enter into an agreement with anoth-~~ ~~ponsibly provide for hazardous waste treatment,~~
~~r state to manage these wastes.~~

"(6) The state of Louisiana has enacted and implemented an approved program for the handling and disposal of hazardous wastes within its borders, known as the "Louisiana Hazardous Waste Control Law", and has established regulations and guidelines for the treatment, storage, and disposal of all hazardous wastes generated within the state, and continues to evaluate and update those regulations and guidelines.

"(7) The state of Louisiana has had an adequate capacity for the destruction, treatment, or secure disposition of all hazardous wastes that are reasonably expected to be generated within the state over the next twenty years through the establishment and continued existence of commercial hazardous waste facilities within the state.

"(8) The state of Louisiana has accepted for treatment and disposal, disproportionate amounts of hazardous wastes generated within the borders of other states which have not taken steps to provide the assurance required by 42 U.S.C. 9604(c)(9).

"(9) The constant influx of large volumes of hazardous wastes entering this state over and through congested state, parish, and municipal highways and roads, coupled with the ever increasing potential for traffic accidents and mishaps involving hazardous waste transporters, and the likelihood of leaks, spills, or explosions of said hazardous wastes resulting therefrom, altogether pose an unreasonable and unjustifiable risk to the health, safety, and welfare of Louisiana's citizens.

"(10) The state of Louisiana lacks the financial resources and trained personnel necessary to cope with the serious dangers and risks associated with the transportation within this state of the ever increasing volumes of hazardous wastes generated out of state and, as a consequence, it can no longer adequately insure the safety and protection of its citizens from these hazards.

"(11) While the use of landfills for the disposal of hazardous wastes is presently an approved method of hazardous waste management, the federal and state governments are implementing phased bans on land disposal and CERCLA describes the landfilling of wastes as the least desirable regulatory technology.

"(12) The state of Louisiana has a genuine and significant interest in protecting its citizens and its environment from the unencumbered influx of hazardous waste generated in states which do not responsibly provide for the treatment, storage, and disposal of hazardous wastes within their own borders or which refuse to enter into an interstate or regional agreement to share the responsibilities of safe and effective hazardous waste management as required by CERCLA, as amended.

"(13) The state of Louisiana is compelled by the actions of other states which refuse to responsibly provide for hazardous waste treatment, storage, and disposal within their own borders or fail to cooperate in an interstate or regional plan for hazardous waste management, to enact legislation establishing a comprehensive waste management program in compliance with CERCLA, and which safeguards against the irresponsibility of other states which do not have adequate hazardous waste management programs by prohibiting the treatment, storage, or disposal of hazardous waste in Louisiana which are generated in a state which does not allow hazardous waste treatment or disposal facilities within that state or which has not entered into an interstate or regional agreement to assure availability of hazardous waste treatment or disposal facilities.

"(14) The imposition of the requirements contained in this legislation will encourage the development of new waste disposal facilities in other states in accordance with the intentions of the United States Congress in enacting 42 U.S.C. 9604(c)(9), and will have the beneficial effect of reducing, in an orderly manner, the nation's dependence on landfilling as a methodology for disposing of hazardous wastes.

"B. The Department of Environmental Quality is authorized to promulgate, and may revise when appropriate, rules and regulations, guidelines, and criteria and standards for all hazardous waste management practices.

"C. It is unlawful for any person who owns or operates a commercial hazardous waste treatment or disposal facility within this state to dispose or treat any hazardous wastes generated in any state outside the state of Louisiana which:

"(1) Prohibits by law or regulation the treatment or disposal of hazardous wastes within that state and which has no facility permitted or existing within that state for the treatment or disposal of hazardous wastes; or

"(2) Has no facility permitted or existing within that state for the treatment or disposal of hazardous wastes; unless that state has entered into an interstate or regional agreement for the safe disposal of hazardous wastes pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act.

"D. The department shall establish, maintain, and publish in the Louisiana Register, a list of states from which hazardous wastes cannot be accepted for treatment or disposal pursuant to this Section and there shall be no liability for disposal of wastes from a state until fifteen days after the list has been published in the register. Such list shall be publicly available and set forth the reasons why each state is listed. The date on which a state is included on such list shall be provided. The list of states shall be revised monthly. The state of generation as shown on the hazardous waste manifest shall be used in determining whether a person has treated or disposed of waste in violation of this Section. ~~No person shall alter the state of generation on~~

any manifest or misrepresent the state of generation of any hazardous waste for the purpose of circumventing this Section.

"E. No commercial hazardous waste treatment or disposal facility operating in this state may contract with states other than the state of Louisiana in order to satisfy the capacity assurance programs required by 42 U.S.C. 9604(c)(9) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended.

"F. For the purpose of this Section, the following terms are defined:

"(1) 'Agreement' means any interstate or regional contract or agreement made pursuant to capacity assurance requirements of Section 42 U.S.C. 9604(c)(9) of CERCLA and which one of the signatories to such contract or agreement is the state of Louisiana.

"(2) 'Commercial hazardous waste treatment or disposal facility' means a facility which receives for disposal only, or for treatment and disposal, hazardous wastes that are not generated on-site and to which facility a fee is paid or other consideration given for such treatment or disposal.

"(3) 'Operator' means the person responsible for overall operations of a commercial hazardous waste treatment or disposal facility.

"(4) 'Region(al)' means any or all of the following states: Arkansas, Louisiana, Texas, New Mexico, and Oklahoma.

"(5) 'State of generation' means a state of the United States in which the hazardous waste is generated in the form in which it is received by a commercial hazardous waste treatment or disposal facility located in Louisiana for treatment or disposal."

CHAPTER 10. INACTIVE AND ABANDONED HAZARDOUS WASTE SITES

§ 2221. Citation

Law Review Commentaries

Federal facilities and environmental compliance: Toward a solution. Stan Millan, 36 Loy. L.Rev. 319 (1990).

Response strategies for potentially responsible parties at hazardous waste sites. Roger A. Stetter, 37 La.B.J. 71 (1989).

The private enforcement of environmental law. Michael S. Greve, 65 Tul.L.Rev. 339 (1990).

§ 2222. Policy and purpose; duties

[See main volume for text of A]

B. In order to eliminate the hazards associated with inactive and abandoned hazardous waste sites, it is in the public interest and within the police power of this state to establish an inactive and abandoned hazardous waste site program and to establish a Hazardous Waste Site Cleanup Fund to provide for the control, prevention, abatement, and cleanup of inactive and abandoned hazardous waste sites through administrative or legal action and expenditures from the Hazardous Waste Site Cleanup Fund and to provide for the recovery of all monies so expended therefrom.

Amended by Acts 1989, No. 232, § 1, eff. June 26, 1989.

C. The secretary shall assign the duties, responsibilities, and authority provided for by this Chapter to an appropriate office within the department.

Added by Acts 1989, No. 232, § 1, eff. June 26, 1989.

Historical and Statutory Notes

1989 Legislation

The 1989 amendment added subsec. C; and, in subsec. B, substituted "program" for "division within the office of solid and hazardous wastes" following "inactive and abandoned hazardous waste site" and made nonsubstantive changes in wording. See main volume for prior text.

§ 2223. Definitions

As used in this Chapter, the following terms shall have the meaning ascribed to them in this Section, unless the context or use clearly indicates otherwise:

[See main volume for text of (1) and (2)]

(3) Categories based on levels of organic and inorganic constituents in the compost.

C. These rules shall establish methods for measuring:

(1) Compost maturity.

(2) Particle size.

(3) Moisture content.

(4) Average levels of organic and inorganic constituents, including heavy metals, for such classes of compost as the department establishes, and the analytical methods to determine those levels.

D. The rules shall also prescribe:

(1) The total quantity of organic and inorganic constituents, including heavy metals, allowed to be applied through the addition of compost to the soil per acre per year.

(2) The allowable uses of compost based on maturity and type of compost.

E. If compost is produced that does not meet the criteria prescribed by the department for agricultural and other uses, the compost must be reprocessed or disposed of in a manner approved by the department, unless a different application is specifically permitted by the department.

F. The department shall work with the Louisiana Department of Agriculture and Forestry in developing the standards and in seeking ways to promote the use and development of markets for composted materials.

G. The provisions of this Section shall not apply to compost produced by an individual for his own use.

Added by Acts 1989, No. 185, § 1, eff. Sept. 1, 1989.

Historical and Statutory Notes

In subsec. A of this section as enacted in 1989, "September 1, 1989" was substituted for "the effective date of this Section" on authority of R.S. 24:253.

§ 2417. Used oil recycling program; Used Oil Recycling Trust Fund

A. It is the intent of the legislature to reduce the amount of illegally disposed used oil by providing incentives to increase the number of used oil collection facilities for used oil recovery, and consequently recover more of this valuable natural resource and concurrently enhance the state's environment. On or before January 1, 1992, the secretary shall promulgate regulations and guidelines for a used oil recycling program to promote and encourage the proper collection and reuse of used oil. The regulations and guidelines shall provide for but not be limited to:

(1) Awarding grants, subsidies, and loans to municipalities, parishes, and other political subdivisions to establish and provide continuous operation of collecting services and facilities for used oil.

(2) Establishing and maintaining a used oil information program.

(3) Maintaining an "800+" telephone information program to inform the public of used oil collection locations.

(4) Encouraging the voluntary establishment of used oil collection and recycling programs by public interest groups, automotive service facilities, and others, and providing technical assistance to such program organizers.

(5) Establishing standards, requirements, and certification procedures for used oil transporters and recyclers. Requirements shall include proof of liability insurance on an amount to be determined by the Department of Environmental Quality or other evidence of financial responsibility for any liability that may be incurred in the transport or recycling of used oil.

(6) Issuing permits and establishing standards for used oil collection facilities which accept used oil from the public including standards for used oil storage tanks and containers and minimum requirements for supervision and operation.

(7) Establishing requirements regarding appropriate tracking documents to be utilized in the used oil collection, recycling, and reuse program and recordkeeping and reporting requirements with respect thereto.

B. Any appropriations, gifts, grants, or other monies received for used oil recycling purposes shall be remitted to the state treasurer in compliance with Article VII, Section 9(B) of the Constitution of Louisiana within ten days after receipt by the Department of Revenue and Taxation and shall be deposited to the credit of the Used Oil Recycling Trust Fund, which is hereby established in the state treasury. The monies in the Used Oil Recycling Trust Fund shall be invested by the state treasurer in the same manner as monies in the state general fund. All interest earned on money from this fund and invested by the state treasurer shall be credited to the Used Oil Recycling Trust Fund.

C. The secretary shall administer the Used Oil Recycling Trust Fund and the monies shall be used to:

(1) Provide technical assistance, grants, subsidies, and loans to local government for programs to encourage collection, reuse, and proper disposal of used oil.

(2) Provide technical assistance and incentives for the collection and recycling of used oil to nongovernment collection or recycling facilities.

(3) Provide for public education and research, including advertising, training, unique incentives, and other programs, provided, however, that no more than thirty-five percent of the monies may be used for this type of activity during any fiscal year.

D. The secretary shall develop guidelines to award grants, subsidies, and low interest loans to local government to encourage the establishment and maintenance of programs and facilities to reduce the improper disposal of used oil, which may include the following in the order of priority to be supported:

(1) Establishing publicly operated used oil collection facilities at landfills and other public places.

(2) Curbside pickup of used oil containers by a local government or its designee.

(3) Retrofitting solid waste equipment to promote curbside pickup or disposal of used oil at designated collection facilities.

(4) Providing containers and other materials and supplies that the public can use to store in an environmentally safe manner used oil for pickup or delivery to a collection facility.

E. The following activities are prohibited:

(1) No person may knowingly collect, transport, store, recycle, use, or dispose of used oil in any manner which endangers the public health or welfare.

(2) No person may knowingly discharge or cause to be discharged used oil into sewers, drainage systems, septic tanks, or any waters or lands of the state.

(3) After July 1, 1991, no person may knowingly mix or commingle used oil with solid waste that is to be disposed of in landfills or directly knowingly dispose of used oil in solid waste landfills within the state of Louisiana unless specifically approved by the department.

(4) No person may knowingly mix or commingle used oil with hazardous substances.

(5) Used oil shall not be used for road oiling, dust control, weed abatement, or other similar uses that have the potential to release used oil into the environment.

F. The department shall develop incentives for the reuse, recycling, and marketing of used oil. Such incentives may include a program to encourage individuals who change their own oil to return used oil to a used oil collection facility.

G. As of July 1, 1992, no person shall knowingly dispose of used oil in any manner other than at a permitted used oil collection facility, unless specifically approved by the department. Exempt from this requirement are entities which only burn used oil generated by the burner, provided such burning is done in compliance with applicable rules of the Louisiana Department of Environmental Quality.

H. Nothing herein shall be construed to prohibit the collection, transportation, or disposal of used oil mixed or commingled with solid waste by any person engaged in the collection, transportation, and/or disposal of solid waste, unless it can be demonstrated that such person knew that such used oil had been mixed or commingled with the solid waste collected, transported, or disposed of and unless it can be demonstrated that it is economically and environmentally feasible to remove and recover such used oil from the solid waste collected, transported, or disposed of.

I. When purchasing lubricating oils, every person acting as purchasing agent for any agency, board, commission, or department of the state shall give preference to rerefined oil which meets manufacturer's warranty, provided the cost of rerefined oil does not exceed by more than five percent the cost of other oils, and so long as the product contains at least twenty-five percent rerefined oil.

J. For the purposes of this Section, the owner or operator of a used oil collection facility which accepts used oil from the public may presume that a quantity of no more than five gallons of used oil accepted from any member of the public is not mixed with a hazardous substance, provided that such owner or operator acts in good faith and provided that the recycled or used oil:

(1) Has been removed from the engine of a light duty motor vehicle, farm equipment, or a household appliance by the owner of such vehicle, equipment, or appliance.

(2) Is presented by such owner to the dealer for collection, accumulation, and delivery to an oil recycling facility.

(3) The owner or operator is not knowingly accepting used oil which has been mixed with any listed or characteristic hazardous waste or hazardous substance.

K. No person, including the state of Louisiana or any political subdivision thereof, may recover under R.S. 30:2276 from a permitted used oil collection facility for any response costs or damages resulting from a release or threatened release of any collected used oil if such used oil:

(1) Is not knowingly mixed with any other hazardous substance.

(2) Is stored, treated, transported, or otherwise managed in compliance with:

(a) The regulatory standards established by the secretary hereunder.

(b) The terms and conditions of the collection facility's permit.

L. The limitation of liability provided for in Subsection K of this Section shall not relieve a permitted used oil collection facility from the responsibility of responding to and taking appropriate remedial action in response to a discharge at the used oil collection facility.

Added by Acts 1989, No. 185, § 1, eff. Sept. 1, 1989. Amended by Acts 1991, No. 964, § 1.

Historical and Statutory Notes

1991 Legislation

The 1991 amendment rewrote the section, which had read:

"§ 2417. Used oil; collection, recycling, and reuse

"A. The secretary shall have the authority to provide by rule a permitting system for the establishment of public used oil collection facilities in areas of the state as he may determine necessary.

"B. The secretary shall have the authority by rule to establish by rule the following:

"(1) Standards, requirements, and certification procedures for used oil transporters.

"(2) Permits and standards for voluntary used oil collection facilities which accept used oil from the public.

"(3) Requirements regarding appropriate tracking documents to be utilized in the used oil collection, recycling, and reuse program.

"C. The following activities are prohibited:

"(1) No person may knowingly and intentionally collect, transport, store, recycle, use, or dispose of used oil in any manner which endangers the public health or welfare.

"(2) No person may knowingly and intentionally discharge or cause to be discharged used oil into sewers, drainage systems, septic tanks, or any waters or lands of the state.

"(3) After July 1, 1990, no person may knowingly and intentionally mix or commingle used oil with solid waste that is to be disposed of in landfills or directly knowingly and intentionally dispose of used oil in solid waste landfills within the state of Louisiana unless specifically approved by the department.

EPA APPROVED LOUISIANA REGULATORY REQUIREMENTS APPLICABLE TO THE HAZARDOUS WASTE MANAGEMENT PROGRAM
June 1997

Includes authorization for Louisiana through the March 28, 1996 authorization Federal Register notice (61 FR 13777). Copies of the Louisiana regulations that are incorporated by reference are available from Office of the State Register, P.O. Box 94095, Baton Rouge, LA 70804-9095

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LOUISIANA ADMINISTRATIVE CODE

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Materials and Hazardous Waste

Certified by the Office of the State Register

Edited and compiled through June 1995
(Last amended June 1995)

Edwin W. Edwards
Governor

Raymond Laborde
Commissioner of Administration

* * * * * CORRECTION NOTICE * * * * *

It has come to our attention that final rules (HW43 and HW44F) published in the *Louisiana Register* in March 1995 contained some changes which inadvertently referenced some Appendices incorrectly. The *Louisiana Register* has been notified and are in the process of correcting these citations in the Louisiana Administrative Code (LAC).

These corrections have been made to the Environmental Regulatory Code (ERC) (October 17, 1995) and the corrections listed below should be made in your copy of the March 1995 Supplement of the Hazardous Waste Regulations.

LAC 33:V.3001.C.3.a. The hazardous wastes listed in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendices XI and XII.....

LAC 33:V.3001.C.3.a.i. a waste listed in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix XI must...., a waste listed in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~L~~ XII must.....

LAC 33:V.3001.C.3.b. the administrative authority.....listed in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~K~~ XI or ~~L~~ XII.....

LAC 33:V.3001.C.3.b.iii. whether the.....in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~D~~ IV or ~~E~~ V may be exceeded.....

LAC 33:V.3009.B.2. CO and oxygen .....Waste" in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix IX.

LAC 33:V.3009.B.3. HC shall be .....Waste" in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix IX.....

LAC 33:V.3009.E.1. during the trial.....Sources", in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix IX;

LAC 33:V.3013.B.2.a. The feed rates.....specified in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~A~~ I. The feed rate.....specified in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~A~~ I, shall.....
where:

FRSL = feed rate screening limit provided by 40 CFR 266.Appendix I ~~of this Part~~ for metal "i"

LAC 33:V.3013.C. Tier II.....specified in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~A~~ I as a.....

LAC 33:V.3013.C.2. Carcinogenic.....specified in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~A~~ I. The emission.....specified in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~A~~ I shall not.....
where:

ERSL = emission rate screening limit provided by ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~A~~ I, for metal "i".

LAC 33:V.3013.E. Adjusted Tier.....provided by ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~A~~

I to account.....provided by ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendices ~~D~~ IV and ~~E~~ V using.....

LAC 33:V.3015.B.2. Tier II.....specified in ~~LAC 33:V. Chapter 30~~ 40 CFR 266.Appendix ~~C~~ III.....

LAC 33:V.3015.E. Adjusted Tier I.....provided by ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~B~~ II, to account.....provided by ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~D~~ IV, using.....

LAC 33:V.3019.A.2.d.i. for the.....listed in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~D~~ IV, the levels established in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~D~~ IV;

LAC 33:V.3019.A.2.d.ii. for the.....listed in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~E~~ V, the.....established in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~E~~ V, cannot.....; and

LAC 33:V.3019.A.2.d.iii. for.....in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendices ~~D~~ IV or ~~E~~ V, 0.1 micrograms per cubic meter.

LAC 33:V.3025.B.1. Comparison.....compounds listed in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix ~~H~~ VIII, that may be generated.....

LAC 33:V.3025.B.1.a. Normal Residue.....Determinations" in ~~LAC 33:V.Chapter 30~~ 40 CFR 266.Appendix IV;

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Title 33
ENVIRONMENTAL QUALITY

Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 1. General Provisions and Definitions

~~§101. Authority~~

~~Rules and regulations for a hazardous waste management system are hereby established by the Department of Natural Resources as mandated by Act 449 of the 1979 Legislature as amended, which is the state's response to P.L. 94-580, the Resource Conservation and Recovery Act of 1976 (RCRA).~~

~~AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.~~

~~HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).~~

§103. Purpose

These rules and regulations serve a fourfold purpose:

A. first, to protect the health and well-being of the people of the state of Louisiana and to prevent damage to property or to the environment by the improper management of hazardous waste;

B. second, to provide incentives for the maximum recovery and reuse of substances in hazardous waste streams that are possible through the use of the most advanced technology;

C. third, to carefully consider the impact of the program on the economic vitality of the state and to achieve a proper balance that protects the health of the citizens and the environment of the state while meeting the needs of industry; and

D. fourth, to establish minimum state standards that define the acceptable management of hazardous waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§105. Program Scope

These rules and regulations apply to owners and operators of all facilities that generate, transport, treat, store, or dispose of hazardous waste, except as specifically provided otherwise herein. The procedures of these regulations also apply to denial of a permit for the active life of a hazardous waste management facility or TSD unit under LAC 33:V.706. Definitions appropriate to these rules and regulations, including "solid waste" and "hazardous waste," appear in LAC 33:V.109. Those wastes which are excluded from regulation are found in LAC 33:V.105.

A. Notification of Hazardous Waste Activity

1. Within 90 days after the promulgation of these regulations anyone subject to these regulations who has not previously notified the department on the Notification of Hazardous Waste Activity Form—HW-1, or whose notification on Form HW-1 is not approved, must notify the department using Form HW-1. Within 90 days after changes in waste characteristics or changes in these regulations that result in changes in the notification, interim status facilities must revise their notification form by resubmitting a corrected copy of Form HW-1.

2. All notifications received must be in accordance with EPA notification procedures and must receive an EPA identification number issued through the state of Louisiana.

3. All facilities with an active EPA identification number shall be subject to requirements in LAC 33:V.Subpart 1.

B. Classification of Hazardous Wastes. Hazardous wastes are classified into two categories:

1. Category I wastes are those known chemicals and process streams whose hazardous nature has been prescribed by prior determination and which are presented in LAC 33:V.Chapter 49.

2. Category II wastes are those wastes possessing any of the characteristics of the hazard classes listed in LAC 33:V.Chapter 49. Hazard classes of concern for these wastes are ignitability, corrosivity, reactivity and toxicity.

C. Control of Wastes. Wastes generated, transported, treated, stored, and/or disposed of in Louisiana are controlled by the state of Louisiana according to the appropriate statutes of the state of Louisiana as follows, and provided that nothing contained herein shall limit the authority granted to the Department of Natural Resources (hereinafter referred to as the department) under Title 30 of the Louisiana revised statutes or to its successor (scheduled to be the Department of Environmental Quality after February 1, 1984).

1. The department's hazardous waste program is responsible for the following, subject to these rules and regulations and to Title 30 of the Louisiana Revised Statutes:

a. surface installations and areas associated with the disposal of wastes in injection wells, excluding the injection well proper;

b. all wastes listed as hazardous in LAC 33:V.Chapter 49 or having the hazardous characteristics identified in LAC 33:V.Chapter 49, which are generated, treated, stored, and/or disposed of in Louisiana.

2. The Solid Waste Management Division is responsible for nonhazardous solid wastes treated, stored and/or disposed of in public and private solid waste facilities.

3. The Department of Natural Resources, Office of Conservation, which is under the authority of the commissioner, is subject to rules and regulations promulgated by the Office of Conservation. Their responsibilities include:

a. salt water injection wells including related surface installations, mud pits, and other areas associated with the exploration and production of oil and gas; and

b. injection wells, less related surface installations and areas, for industrial on-site or commercial disposal of hazardous wastes, until the effective date of Act 97 of 1983 (scheduled to be February 1, 1984), after which time they shall be regulated by the Department of Environmental Quality, Hazardous Waste Division in accordance with the provisions of Title 30 of the Louisiana Revised Statutes.

4. The Nuclear Energy Division is responsible for radioactive materials.

5. The Louisiana Department of Public Safety (LDPS) is responsible for transportation of wastes.

6. The Department of Agriculture is responsible for waste pesticides, including pesticide containers at point of mixing, loading, application, equipment cleansing or base of operation.

D. Exemptions, Exceptions, and/or Modifications to Otherwise Applicable Provisions of These Regulations

~~1. Reserved~~

2. A generator who temporarily stores hazardous wastes in an environmentally safe container or tank (see LAC 33:V.1109.E) on-site for 90 days or less is exempt from the permitting regulations except for the requirements of LAC 33:V.Chapter 11. Generators must record the date that storage began by proper marking of the container or by other methods acceptable to the administrative authority. Such temporary storage shall be in an environmentally sound manner in compliance with the technical requirements of LAC 33:V.1505, 1509.A, 1513-1517, 1525, and as applicable with LAC 33:V.1903.A and B, 1905-1913 and 1919, LAC 33:V.2103-2109.B, and 2111-2115.

3. The owner or operator of a facility permitted, licensed, or registered to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is exempted from regulation by LAC 33:V.Subpart 1.

4. The owner or operator of a facility managing recyclable materials described in LAC 33:V.4105.B and C (except to the extent that the requirements of these regulations are referred to in LAC 33:V.Chapters 40 and 41 and except as otherwise provided in LAC 33:V.Chapter 41) is only required to comply with LAC 33:V.Chapter 41.

5. A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in this Chapter or other standards in the LAC 33:V.Chapters 3, 5, 7, 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, 37, and 43 for those wastes, provided he triple rinses each emptied pesticide container in accordance with the provisions of LAC 33:V.109.*Empty Container*.3 and disposes of the pesticide residues in a manner consistent with the disposal instructions on the pesticide label.

6. The owner or operator of a totally enclosed treatment facility as defined by LAC 33:V.109 is exempt from these regulations.

7. The owner or operator of an elementary neutralization unit as defined by LAC 33:V.109 is exempt from these regulations.

8. Persons who respond immediately to contain or treat a spill of hazardous waste or material, which when spilled becomes a hazardous waste, are exempt from these regulations. The exception to such activities is the appropriate requirements of LAC 33:V.1511 and 1513. This Paragraph only applies to activities taken in immediate response to a spill. After the immediate response activities are completed, the applicable sections of these regulations apply fully to the management and disposal of any spill residue or debris which is a hazardous waste.

9. The addition of absorbent material to waste in a container (defined in LAC 33:V.109) or the addition of waste to absorbent material in a container are exempt from these regulations, provided that these actions occur at the time waste is first placed in the container and are in compliance with LAC 33:V.1517.B, 1903.B and 2105.

10. Household waste, including household waste that has been collected, transported, stored, treated, disposed of, recovered (e.g. refuse-derived fuel) or reused. "Household waste" means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this Subpart if such facility:

a. receives and burns only household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and

b. receives and burns solid waste from commercial or industrial sources that does not contain hazardous waste; and

c. does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

11. Solid wastes generated by growing and harvesting agricultural crops and raising animals, including animal manures which are returned to the soils as fertilizers, are exempt from these regulations.

12. Mining overburden returned to the mine site is exempt from these regulations.

13. Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, ~~except as provided in LAC 33:V.3025 for facilities that burn or process hazardous waste~~ are exempt from these regulations.

14. Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy are exempt from the regulations.

15. Wastes which fail the test for the Toxicity Characteristic because chromium is present or are listed in LAC 33:V.Chapter 49, because of the presence of chromium, which do not fail the test for the Toxicity Characteristic for any other constituent, or are not listed due to the presence of any other constituent and which do not fail the test for any other characteristic, are exempt from these regulations if it is shown by a waste generator or waste generators that:

a. the chromium in the waste is exclusively (or nearly exclusively) trivalent chromium;

b. the waste is generated from an industrial process which uses exclusively (or nearly exclusively) trivalent chromium and the process does not generate hexavalent chromium; and

c. the waste is typically and frequently managed in non-oxidizing environments.

16. The following specific wastes which meet the standard in LAC 33:V.105.D.15 (so long as they do not fail the test for the Toxicity Characteristic for any other constituent and do not exhibit any other characteristic) are exempt from these regulations:

a. chrome (blue) trimmings and shavings, buffing dust, sewer screenings, and wastewater treatment sludges generated by the leather tanning and finishing industry including hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retain/wet finish, no beamhouse, through-the-blue, and shearling;

b. wastewater treatment sludges generated by the leather tanning and finishing industry including hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, and through-the-blue;

c. waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries; and

d. wastewater treatment sludges from the production of TiO_2 pigment using chromium-bearing ores by the chloride process.

17. Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock and overburden from the mining of uranium ore), except as provided in LAC 33:V.3025 for facilities that burn or process hazardous waste is exempt from these regulations. For purposes of LAC 33:V.105.D.17, beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting and/or autoclaving and/or chlorination/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching. For the purposes of LAC 33:V.105.D.17, solid waste from the processing of ores and minerals will include only the following wastes:

a. slag from primary copper processing;

b. slag from primary lead processing;

c. red and brown muds from bauxite refining;

d. phosphogypsum from phosphoric acid production

e. slag from elemental phosphorus production;

f. gasifier ash from coal gasification;

g. process wastewater from coal gasification;

h. calcium sulfate wastewater treatment plant sludge from primary copper processing;

i. slag tailings from primary copper processing;

j. fluorogypsum from hydrofluoric acid production;

k. process wastewater from hydrofluoric acid production;

l. air pollution control dust/sludge from iron blast furnaces;

m. iron blast furnace slag;

n. treated residue from roasting/leaching of chrome ore;

o. process wastewater from primary magnesium processing by the anhydrous process;

p. process wastewater from phosphoric acid production;

q. basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;

r. basic oxygen furnace and open hearth furnace slag from carbon steel production;

s. chloride process waste solids from titanium tetrachloride production; and

t. slag from primary zinc processing.

18. Cement kiln dust waste~~, except as provided in LAC 33:V.3025 for facilities that burn or process hazardous waste~~ is exempt from these regulations.

19. Solid waste that consists of discarded arsenical-treated wood or wood products which fails the test for the Toxicity Characteristic for Hazardous Waste Codes D004-D017 and which is not a hazardous waste for any other reason, if the waste is generated by persons who utilize the arsenical-treated wood and wood product for these materials' intended end use, is exempt from these regulations.

20. All hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit is exempt from these regulations, until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

21. Samples of solid waste, water, soil, or air, which are collected for the sole purpose of testing to determine characteristics or composition are exempt from these regulations, when:

a. the sample complies with LAC 33:V.105.D.22 and is being transported to a laboratory for the purpose of testing;

b. the sample is being transported back to the sample collector after testing;

c. the sample is being stored by the sample collector before transport to a laboratory for testing;

d. the sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

e. the sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

22. In order to qualify for the exemption in LAC 33:V.105.D.21, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

a. comply with LDPS, U.S. Postal Service (USPS), or any other applicable shipping requirements; or

b. comply with the following requirements if the sample collector determines that LDPS, USPS, or other shipping requirements do not apply to the shipment of the sample;

c. assure that the following information accompanies the sample:

i. the sample collector's name, mailing address, and telephone number;

ii. the laboratory's name, mailing address, and telephone number;

iii. the quantity of the sample;

iv. the date of shipment; and

v. a description of the sample.

d. package the sample so that is does not leak, spill, or vaporize from its packaging; and

e. this exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in LAC 33:V.105.D.21.

23. Spent pickle liquor which is reused in wastewater treatment at a facility holding an NPDES permit, or which is being accumulated, stored, or physically, chemically or biologically treated before such reuse is exempt from these regulations.

24. Effluent discharges from a properly permitted NPDES train are exempt from these regulations provided previously separated hazardous wastes are not intentionally added to the train and the facility meets the requirements of the NPDES permit.

25. Wastewaters covered under the mixture rule in LAC 33:V.4905.

26. The requirements of this Chapter apply to a person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act only to the extent that they are included in a hazardous waste permit granted to such a person. These regulations do apply to the treatment or storage of hazardous waste before it is loaded onto an ocean vessel for incineration or disposal at sea.

27. The requirements of this Chapter apply to the owner or operator of a POTW (Public Owned Treatment Works) which treats, stores, or disposes of hazardous waste only to the extent that they are included in a hazardous waste permit by rule granted to such a person under LAC 33:V.305.C.2.

28. In accordance with the standards and criteria below and the procedures in LAC 33:V.105.K, the administrative authority may determine on a case-by-case basis that the following recycled materials are not solid wastes. The

administrative authority may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled, as defined in LAC 33:V.109, if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed on an annual basis by filing a new application. The administrative authority's decision will be based on the following standards and criteria:

a. the manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);

b. the reason that the applicant has accumulated the material for one or more years without recycling 75 percent of the volume accumulated at the beginning of the year;

c. the quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

d. the extent to which the material is handled to minimize loss;

e. other related factors.

29. In accordance with the standards and criteria below and the procedures in LAC 33:V.105.K, the administrative authority may determine on a case-by-case basis that the following recycled materials are not solid wastes. The administrative authority may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original primary production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

a. how economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

b. the prevalence of the practice on an industry-wide basis;

c. the extent to which the material is handled before reclamation to minimize loss;

d. the time periods between generating the material and its reclamation and between reclamation and return to the original primary production process;

e. the location of the reclamation operation in relation to the production process;

f. whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

g. whether the person who generates the material also reclaims it;

h. other relevant factors.

30. In accordance with the standards and criteria below and the procedures in LAC 33:V.105.K, the administrative authority may determine on a case-by-case basis that the following recycled materials are not solid wastes. The administrative authority may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:

a. the degree of processing the material has undergone and the degree of further processing that is required;

b. the value of the material after it has been reclaimed;

c. the degree to which the reclaimed material is like an analogous raw material;

d. the extent to which an end market for the reclaimed material is guaranteed;

e. the extent to which the reclaimed material is handled to minimize loss;

f. other relevant factors.

31. In accordance with the standards and criteria in LAC 33:V.109 (definition of "boiler"), and the procedures in LAC 33:V.105.K the administrative authority may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in LAC 33:V.109 after considering the following criteria:

a. the extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

b. the extent to which the combustion chamber and energy recovery are of integral design; and

c. the efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

d. the extent to which exported energy is utilized; and

e. the extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids, or heated gases; and

f. other factors, as appropriate.

32. Additional regulation of certain hazardous waste recycling activities on a case-by-case basis. The administrative authority may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in LAC 33:V.4105.C.3 should be regulated under Subchapter A

of LAC 33:V.Chapter 41. The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained or because the materials being accumulated or stored together are incompatible. The procedures for this decision are set forth in LAC 33:V.105.L. In making this decision, the administrative authority will consider the following factors:

a. the types of materials accumulated or stored and the amounts accumulated or stored;

b. the method of accumulation or storage;

c. the length of time the materials have been accumulated or stored before being reclaimed;

d. whether any contaminants are being released into the environment, or are likely to be so released; and

e. other relevant factors.

33. The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of hazardous waste, unless they exhibit one or more of the characteristics of hazardous wastes:

a. waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC codes 331 and 332);

b. waste from burning any of the materials in LAC 33:V.4105.B.8, B.9, B.10, B.11, B.12, B.13, B.14.

~~c. nonwastewater residues, such as slag, resulting from high-temperature metals recovery (HTMR) processing of K061, K062, or F006 waste, in units identified as (1) rotary kilns, (2) flame reactors, (3) electric furnaces, (4) plasma arc furnaces, (5) slag reactors, (6) rotary hearth furnace/electric furnace combinations, (7) industrial furnaces (as defined in LAC 33:V.109), that are disposed of in subtitle D units (as defined in 40 CFR parts 257 and 258), provided that these residues meet the generic exclusion levels identified in the tables in this Paragraph for all constituents and exhibit no characteristics of hazardous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving, by clear and convincing evidence, that the residue meets all of the exclusion requirements.~~

~~Constituent~~	~~Maximum for any single composite sample-TCLP (mg/l)~~
Generic Exclusion Levels for K061 and K062 Nonwastewater HTMR Residues	
Antimony	0.10
Arsenic	0.050
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
(2)Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
~~Zinc~~	~~70~~

Constituent	Maximum for any single composite sample-TCLP (mg/l)
Generic Exclusion Levels for F006 Nonwastewater HTMR Residues	
Antimony	0.10
Arsenic	0.050
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

A one-time notification and certification must be placed in the facility's files and sent to the EPA region or authorized state for K061, K062, or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generators' or treaters' files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater needs only to notify the EPA region or an authorized state on an annual basis if such changes occur. Such notification and certification should be sent to the EPA region or authorized state by the end of the calendar year, but no later than December 31. The notification must include the following information:

i. the name and address of the subtitle D unit (as defined in 40 CFR Parts 257 and 258) receiving the waste shipment,

ii. the EPA hazardous waste number and treatability group at the initial point of generation, and

iii. the treatment standards applicable to the waste at the initial point of generation.

The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

34. Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless they are accumulated speculatively as defined in LAC 33:V.109, are exempt from these regulations.

35. Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in LAC 33:V.109 (see definition of solid waste), is exempt from otherwise applicable portions of these regulations, except that storage of such materials shall be in an environmentally sound manner.

36. In accordance with the standards and criteria below, the administrative authority may determine on a case-by-case basis that the following recycled materials are not solid waste; the administrative authority may grant a request for a variance from classifying as a solid waste those sludges and by-products that are being reclaimed which are a hazardous waste only because they exhibit a characteristic of a hazardous waste that is:

a. accumulated speculatively without sufficient amounts being recycled, as defined in LAC 33:V.109, if the applicant demonstrated that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed on an annual basis by filing a new application. The administrative authority's decisions will be based on the following standards and criteria:

i. the manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);

ii. the reason that the applicant has accumulated the material for one or more years without recycling 75 percent of the volume accumulated at the beginning of the year;

iii. the quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

iv. the extent to which the material is handled to minimize loss;

v. other related factors.

Or,

b. reclaimed and then reused as feedstock within the original primary production process in which the materials were generated if the reclamation operation is an essential part

of the production process. This determination will be based on the following criteria:

i. how economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

ii. the prevalence of the practice on an industry-wide basis;

iii. the extent to which the material is handled before reclamation to minimize loss;

iv. the time periods between generating the material and its reclamation and between reclamation and return to the original primary production process;

v. the location of the reclamation operation in relation to the production process;

vi. whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

vii. whether the person who generates the material also reclaims it;

viii. other relevant factors.

Or,

c. reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:

i. the degree of processing the material has undergone and the degree of further processing that is required;

ii. the value of the material after it has been reclaimed;

iii. the degree to which the reclaimed material is like an analogous raw material;

iv. the extent to which an end market for the reclaimed material is guaranteed;

v. the extent to which the reclaimed material is handled to minimize loss;

vi. other relevant factors.

Or,

d. secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

i. only tank storage is involved, and the entire process through completion or reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

ii. reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

iii. the secondary materials are never accumulated in such tanks for over 12 months without being reclaimed; and

iv. the reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.

37. Treatability Study Samples

a. Except as provided in LAC 33:V.105.D.37.b, persons who generate or collect samples for the purpose of conducting treatability studies as defined in LAC 33:V.109 are not subject to any requirement of LAC 33:V.Chapter 11, 13, or 49, or to the notification requirements of LAC 33:V.105.A, nor are such samples included in the quantity determinations of LAC 33:V.3903-3917 and LAC 33:V.1109.E.7 when:

i. the sample is being collected and prepared for transportation by the generator or sample collector; or

ii. the sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

iii. the sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

b. The exemption in LAC 33:V.105.D.37.a is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that the following requirements are met.

i. The generator or sample collector uses (in "treatability studies") no more than 1,000 kg of any non-acute hazardous waste, 1 kg of acute hazardous waste, or 250 kg of soils, water, or debris contaminated with acute hazardous waste for each process being evaluated for each generated waste stream.

ii. The mass of each sample shipment does not exceed 1,000 kg of non-acute hazardous waste, 1 kg of acute hazardous waste, or 250 kg of soils, water, or debris contaminated with acute hazardous waste.

iii. The sample is packaged so that it will not leak, spill, or vaporize from its packaging during shipment, and the requirements of LAC 33:V.105.D.37.b.iii.(a) or (b) are met.

(a). The transportation of each sample shipment complies with the shipping requirements of the Department of Transportation and Development or its successor agency and the U.S. Postal Service, or any other applicable shipping requirements.

(b). If the Department of Transportation and Development or its successor agency, the U.S. Postal Service, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:

(i). the name, mailing address, and telephone number of the originator of the sample;

(ii). the name, address, and telephone number of the facility that will perform the treatability study;

(iii). the quantity of the sample;

(iv). the date of shipment; and

(v). a description of the sample, including its EPA Hazardous Waste Number.

iv. The sample is shipped to a laboratory or testing facility that is exempt under LAC 33:V.105.D.38 or has an appropriate LAC 33:V.Subpart 1 permit or interim status.

v. The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

(a). copies of the shipping documents;

(b). a copy of the contract with the facility conducting the treatability study; and

(c). documentation showing:

(i). the amount of waste shipped under this exemption;

(ii). the name, address, and EPA identification number of the laboratory or testing facility that received the waste;

(iii). the date the shipment was made; and

(iv). whether or not unused samples and residues were returned to the generator.

vi. The generator reports the information required under LAC 33:V.105.D.37.b.v.(c) in its biennial report.

c. The administrative authority may grant requests on a case-by-case basis for quantity limits in excess of those specified in LAC 33:V.105.D.37.b.i for up to an additional 500 kg of non-acute hazardous waste, 1 kg of acute hazardous waste, and 250 kg of soils, water, or debris contaminated with acute hazardous waste to conduct further treatability study evaluation when there has been an equipment or mechanical failure during a treatability study; there is a need to verify the results of a previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment. The additional quantities allowed are subject to all the provisions in LAC 33:V.105.D.37.a and b.ii-vi. The generator or sample collector must apply to the administrative authority where the sample is collected and provide in writing the following information:

i. the reason why the generator or sample collector requires additional quantity of sample for the treatability study evaluation and the additional quantity needed;

ii. documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;

iii. a description of the technical modifications or change in specifications that will be evaluated and the expected results;

iv. if such further study is being required because of equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

v. such other information that the administrative authority considers necessary.

38. Samples Undergoing Treatability Studies at Laboratories and Testing Facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to LAC 33:V.Subpart 1 requirements) are not subject to any requirement of LAC 33:V.Chapters 3, 5, 11, 13, 15, 22, 41, and 43, or to the notification requirements of LAC 33:V.105.A, provided that the conditions of LAC 33:V.105.D.38.a-k are met. A mobile treatment unit may qualify as a testing facility subject to LAC 33:V.105.D.38.a-k. Where a group of mobile treatment units is located at the same site, the limitations specified in LAC 33:V.105.D.38.a-k apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

a. No less than 45 days before conducting treatability studies, the facility notifies the administrative authority in writing that it intends to conduct treatability studies under this Paragraph.

b. The laboratory or testing facility conducting the treatability study has an EPA identification number.

c. No more than a total of 250 kg of "as received" hazardous waste is subjected to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

d. The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 1,000 kg, the total of which may include 500 kg of soils, water, or debris contaminated with acute hazardous waste or 1 kg of acute hazardous waste. This quantity limitation does not include:

i. treatability study residues; and

ii. treatment materials (including nonhazardous solid waste) added to "as received" hazardous waste.

e. No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs.

f. The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

g. The facility maintains records for three years after completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

i. the name, address, and EPA identification number of the generator or sample collector of each waste sample;

ii. the date shipment was received;

iii. the quantity of waste accepted;

iv. the quantity of "as received" waste in storage each day;

v. the date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;

vi. the date the treatability study was concluded; and

vii. the date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number.

h. The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

i. The facility prepares and submits a report to the administrative authority by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:

i. the name, address, and EPA identification number of the facility conducting the treatability studies;

ii. the types (by process) of treatability studies conducted;

iii. the names and addresses of persons for whom studies have been conducted (including their EPA identification numbers);

iv. the total quantity of waste in storage each day;

v. the quantity and types of waste subjected to treatability studies;

vi. when each treatability study was conducted; and

vii. the final disposition of residues and unused sample from each treatability study.

j. The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under LAC 33:V.109. Hazardous Waste and, if so, are subject to LAC 33:V.Chapters 3, 5, 11, 13, 15, 22, 41, 43, and 49, unless the residue and unused samples are returned to the sample originator under the LAC 33:V.105.D.37 exemption.

k. The facility notifies the administrative authority by letter when the facility is no longer planning to conduct any treatability studies at the site.

39. Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic (Hazardous Waste Numbers D016-D043 only) and are subject to the corrective action regulations under Underground Storage Tanks rules and regulations (LAC 33:XI) are exempt from these regulations.

40. PCB wastes regulated under Toxic Substance Control Act: PCB-containing dielectric fluid and electric equipment containing such fluid authorized for use and regulated by the United States Environmental Protection Agency that are hazardous only because they fail the test for the Toxicity Characteristic (Hazardous Waste Numbers D018-D043 only) are exempt from regulation under LAC 33:V. Subpart 1.

41. Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerants are stored in an environmentally sound manner and are reclaimed for further use, are exempt from these regulations.

42. Injected groundwater that is hazardous only because it exhibits the Toxicity Characteristic (Hazardous Waste Codes D018-D043 only) in LAC 33:V.4903 that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines, and petroleum transportation spill sites until January 25, 1993. This extension applies to recovery operations in existence, or of which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, until January 1, 1993. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if:

a. operations are performed pursuant to a written state agreement that includes a provision to assess the groundwater

and the need for further remediation once the free phase ·overy is completed; and

b. a copy of the written agreement has been submitted to: Characteristics Section (OS-333), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

43. Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this Part:

a. domestic sewage and any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works (POTW) for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system;

b. industrial wastewater discharges that are point source discharges subject to regulation under section 402 of the Clean Water Act, as amended;

[Comment: This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored, or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.]

c. irrigation return flows;

d. source, special nuclear, or by-product material as ·efined by the Atomic Energy Act of 1954, as amended 42 .S.C. 2011 et seq.;

e. material subjected on in-situ mining techniques which are not removed from the ground as part of the extraction process; and

~~f. nonwastewater splash condenser dross residue from the treatment of K061 in high-temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.~~

~~44. EPA Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the Toxicity Characteristic (TC) specified in LAC 33:V.4903.E when, subsequent to generation, these materials are recycled to coke ovens to the tar recovery process as a feedstock to produce coal tar, or are mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens, tar recovery, or refining processes, or are mixed with coal tar.~~

45. Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose and wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

46. Non-terne-plated used oil filters that are not mixed with wastes listed in LAC 33:V.4901 if these oil filters have been gravity hot-drained using one of the following methods:

a. puncturing the filter anti-drain back valve or the filter dome end and hot-draining;

b. hot-draining and crushing;

c. dismantling and hot-draining; or

d. any other equivalent hot-draining method that will remove used oil.

47. Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

E. Judicial Review. Any person has the right to file a lawsuit to reverse any act or failure to act by the administrative authority pursuant to these regulations or the act in accordance with the provisions of the Administrative Procedure Act (R.S. 49:951 et seq.) or any other applicable provision of law.

F. Relationship to Interim Status Standards. A facility owner or operator who has fully complied with the requirements for interim status must comply with these regulations until final administrative disposition of his permit application is made. After the effective date of these regulations, the treatment, storage, or disposal of hazardous waste is prohibited except in accordance with a permit (standard or interim). The administrative authority may provide for the continued operation of an existing facility which meets the requirements of these regulations and certain conditions until final administrative disposition of the owner's or operator's permit application is made.

G. Imminent Hazard Action. Notwithstanding any other provisions of these regulations, enforcement actions may be brought pursuant to the Act.

H. General Procedures to Petition the Administrative Authority

1. Any person may petition the administrative authority to modify or revoke any provision in LAC 33:V.Subpart 1. This Subpart sets forth general requirements which apply to all such petitions. LAC 33:V.105.I sets forth additional requirements for petitions for equivalent testing or analytical methods.

2. Each petition must be submitted to the administrative authority by certified mail and must include:

a. the petitioner's name and address;

b. a statement of the petitioner's interest in the proposed action;

c. a description of the proposed action including (where appropriate) suggested regulatory language; and

d. a statement of the need and justification for the proposed action, including any supporting tests, studies, and other information.

3. The administrative authority will make a tentative decision to grant or deny a petition and will publish notice of such petition decision, either in the form of an advanced notice

of proposed rulemaking, a proposed rule, or a tentative determination to deny the petition, in the *Louisiana Register* for written public comment.

4. Upon the written request of any interested person, the administrative authority may, at its discretion, hold an informal public hearing to consider oral comments on the tentative decision. A person requesting a hearing must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The administrative authority may in any case decide on its own motion to hold an informal public hearing.

5. After evaluating all public comments, the administrative authority will make a final decision by publishing in the *Louisiana Register* a regulatory amendment or a denial of the petition.

I. Petitions for Equivalent Testing or Analytical Methods

1. Any person seeking approval of equivalent testing or analytical method may petition for a regulatory amendment under LAC 33:V.105.H and I. To be successful, the person must demonstrate to the satisfaction of the administrative authority that the proposed method is equal to or superior to the corresponding method prescribed in Method 1311, in 40 CFR Part 268 Appendix 1, in terms of its sensitivity, accuracy, and precision (i.e., reproducibility).

2. In addition to the information required by LAC 33:V.105.H.2 each petition must include,

a. a full description of the proposed method, including all procedural steps and equipment used in the method;

b. a description of the types of wastes or waste matrices for which the proposed method may be used;

c. comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846), latest edition, as amended;

d. an assessment of any factors which may interfere with or limit the use of the proposed method; and

e. a description of the quality control procedures necessary to ensure the sensitivity, accuracy, and precision of the proposed method.

3. After receiving a petition for an equivalent method, the administrative authority may request any additional information on the proposed method which it may reasonably require to evaluate the method.

J. Discharge Reporting Requirements

1. Emergency Conditions. For any unauthorized discharge of a Hazardous Waste, in contravention of the Louisiana Hazardous Waste Control Law (R.S. 30:2171 et seq.) or of the regulations, or of the terms and conditions of a permit or license issued thereunder, which results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property), the discharger shall immediately, but in no case later than one hour, notify the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (504) 925-6595 (collect calls accepted 24 hours a day) and in accordance with other provisions of LAC 33:I.Chapter 39.

~~2. Non-Emergency Conditions. For any unauthorized discharge of a hazardous waste which does not cause an emergency condition, the discharger shall notify the Hazardous Waste Division, Department of Environmental Quality within 24 hours of learning of the discharge and in accordance with other provisions of LAC 33:I.Chapter 39.~~

K. Procedures for Variances From Classification as a Solid Waste or to be Classified as a Boiler. The administrative authority will use the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed flame combustion devices as boilers as provided in LAC 33:V.105.D:

1. The applicant must apply to the administrative authority. The application must address the relevant criteria contained in LAC 33:V.105.D.28, 29, 30 or 31, and LAC 33:V.105.H.2.

2. The administrative authority will evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement and/or radio broadcast in the locality where the recycler is located. The administrative authority will accept comment on the tentative decision for 30 days and may also hold a public hearing upon request or at his discretion. The administrative authority will issue a final decision after receipt of comments and after a hearing (if any) and this decision may not be appealed to the administrative authority.

L. Procedures for Case-By-Case Regulation of Hazardous Waste Recycling Activities. The administrative authority will use the following procedures when determining whether to regulate hazardous waste recycling activities described in LAC 33:V.4105.C.3 under the provisions of Subchapter A of LAC 33:V.Chapter 41, rather than under the provisions of Subchapter C of LAC 33:V.Chapter 41 of these regulations.

1. If a generator is accumulating the waste, the administrative authority will issue a notice setting forth the factual basis for the decision and stating that the person must comply with the applicable requirements of LAC 33:V.1101, 1109.A, 1111.A, 1113.A.1 and 2. The notice will become final within 30 days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the administrative authority will hold a public hearing. The administrative authority will provide notice of the hearing to the public and allow public participation at the hearing. The administrative authority will issue a final order

after the hearing stating whether or not compliance with LAC 33:V.Chapter 11 is required. The order becomes effective 30 days after service of the decision unless the administrative authority specifies a later date or unless review by the administrative authority is requested. The order may be appealed to the administrative authority by any person who participated in the public hearing. The administrative authority may choose to grant or to deny the appeal. Final department action occurs when a final order is issued and department review procedures are exhausted.

2. If the person is accumulating the recyclable material as a storage facility, the notice will state that the person must obtain a permit in accordance with all applicable provisions of these regulations. The owner or operator of the facility must apply for a permit within no less than 60 days and no more than 180 days of notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the administrative authority's decision, he may do so in his permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reasons for the department's determination. The question of whether the administrative authority's decision was proper will remain open for consideration during the public comment period discussed under LAC 33:V.707 and in any subsequent hearing.

M. Petitions to Exclude a Waste Produced at a Particular Facility

1. Any person seeking to exclude a waste at a particular generating facility from the lists in LAC 33:V.4901 may petition for a regulatory amendment under this Subsection and LAC 33:V.105.H. To be successful:

a. the petitioner must demonstrate to the satisfaction of the administrative authority that the waste produced by a particular generating facility does not meet any of the criteria under which the waste was listed as a hazardous or an acutely hazardous waste; and

b. based on a complete application, the administrative authority must determine, where he has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A waste which is so excluded, however, still may be a hazardous waste by operation of LAC 33:V.4903.

2. If the waste is listed with codes "I", "C", "R", or "E", in LAC 33:V.4901,

a. the petitioner must show that the waste does not exhibit the relevant characteristic for which the waste was listed as defined in LAC 33:V.4903 using any applicable methods prescribed therein. The petitioner also must show that the waste does not exhibit any of the other characteristics defined in LAC 33:V.4903 using any applicable methods prescribed therein;

b. based on a complete application, the administrative authority must determine, where he has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A waste which is so excluded, however, still may be a hazardous waste by operation of LAC 33:V.4903.

3. If the waste is listed with code "T" in LAC 33:V.4901,

a. the petitioner must demonstrate that the waste:

i. does not contain the constituent or constituents (as defined in LAC 33:V.4901.G.Table 6) that caused the administrative authority to list the waste, using the appropriate test methods prescribed in LAC 33:V.4901.Appendix A; or

ii. although containing one or more of the hazardous constituents (as defined in LAC 33:V.4901.G. Table 6) that caused the administrative authority to list the waste, does not meet the criterion of LAC 33.V.4907.A.3 when considering the factors used by the administrative authority in LAC 33:V.4907.A.3.a-k under which the waste was listed as hazardous; and

b. based on a complete application, the administrative authority must determine, where he has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste; and

c. the petitioner must demonstrate that the waste does not exhibit any of the characteristics defined in LAC 33:V.4903 using any applicable methods prescribed therein;

d. a waste which is so excluded, however, still may be a hazardous waste by operation of LAC 33:V.4903.

4. If the waste is listed with the code "H" in LAC 33:V.4901,

a. the petitioner must demonstrate that the waste does not meet the criterion of LAC 33:V.4907.A.2; and

b. based on a complete application, the administrative authority must determine, where he has a reasonable basis to believe that additional factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste; and

c. the petitioner must demonstrate that the waste does not exhibit any of the characteristics defined in LAC 33:V.4903 using any applicable methods prescribed therein;

d. a waste which is so excluded, however, still may be a hazardous waste by operation of LAC 33:V.4903.

5. The procedures in LAC 33:V.105.H and M may also be used to petition the administrative authority for a regulatory

amendment to exclude from LAC 33:V.109.*Hazardous Waste*.2.c or 4, a waste which is described in LAC 33:V.109.*Hazardous Waste*.2.c or 4 and is either a waste listed in LAC 33:V.4901, or is derived from a waste listed in LAC 33:V.4901. This exclusion may only be issued for a particular generating, storage, treatment, or disposal facility. The petitioner must make the same demonstration as required by LAC 33:V.105.M.1. Where the waste is a mixture of solid waste and one or more listed hazardous wastes or is derived from one or more hazardous wastes, his demonstration must be made with respect to the waste mixture as a whole. Analyses must be conducted for not only those constituents for which the listed waste contained in the mixture was listed as hazardous, but also for factors (including additional constituents) that could cause the waste mixture to be a hazardous waste. A waste which is so excluded may still be a hazardous waste by LAC 33:V.4903.

6. Demonstration samples must consist of enough representative samples, but in no case less than four samples, taken over a period of time sufficient to represent the variability or the uniformity of the waste.

7. Each petition must include, in addition to the information required by LAC 33:V.105.H.2:

a. the name and address of the laboratory facility performing the sampling or tests of the waste;

b. the names and qualifications of the persons sampling and testing the waste;

c. the dates of sampling and testing;

d. the location of the generating facility;

e. a description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;

f. a description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;

g. pertinent data on and discussion of the factors delineated in the respective criterion for listing a hazardous waste, where the demonstration is based on the factors in LAC 33:V.4907.A.3;

h. a description of the methodologies and equipment used to obtain the representative samples;

i. a description of the sample handling and preparation techniques, including techniques used for extraction, containerization and preservation of the samples;

j. a description of the tests performed (including results);

k. the names and model numbers of the instruments used in performing the tests; and

l. the following statement signed by the generator of the waste or his authorized representative:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

8. After receiving a petition for an exclusion, the administrative authority may request any additional information which he may reasonably require to evaluate the petition.

9. An exclusion will only apply to the waste generated at the individual facility covered by the demonstration and will not apply to waste from any other facility.

10. The administrative authority may exclude only part of the waste for which the demonstration is submitted where he has reason to believe that variability of the waste justifies a partial exclusion.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq. et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790 (November 1988), LR 15:181 (March 1989), LR 16:47 (January 1990), LR 16:217 (March 1990), LR 16:220 (March 1990), LR 16:398 (May 1990), LR 16:614 (July 1990), LR 17:362 (April 1991), LR 17:368 (April 1991), LR 17:478 (May 1991), LR 17:883 (September 1991), LR 18:723 (July 1992), LR 18:1256 (November 1992), LR 18:1375 (December 1992), amended by the Office of the Secretary, LR 19:1022 (August 1993), amended by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 20:1000 (September 1994), LR 21:266 (March 1995).

§107. Enforcement

A. Failure 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.

B. Investigations into Reports of Violations

1. Upon the receipt of any information concerning a violation of the requirements of the Act or these regulations, the administrative authority shall cause an investigation to be conducted into the alleged violation within seven days.

2. All facts concerning any violation developed in such an investigation shall be fully documented in a report of investigation and presented to the administrative authority within seven days of completion of the investigation. A copy of this report shall be furnished to the Louisiana Department

of Justice for use in any civil or criminal proceedings under the Act.

. Upon receipt of any report of investigation which substantiates a violation of the requirements of the Act or these regulations, the administrative authority shall commence enforcement proceedings under the Act.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§109. Definitions

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

Aboveground Tank—a device meeting the definition of *tank* in LAC 33:V.1109 and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

Accumulated Speculatively—a material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that—during the calendar year (commencing on January 1)—the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under LAC 33.V.105.D.20 are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

Act—Act 449 of the 1979 Louisiana Legislature which established Sections 1051 et seq., Title 30 of the Louisiana Revised Statutes of 1950 and any subsequent amendments to these sections.

Active Life—of a facility means the period from the initial receipt of hazardous waste at the facility until the administrative authority receives certification of final closure.

Active Portion—that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after August 1, 1979, and which is not a closed portion. (See also "closed portion" and "inactive portion.")

Administrative Authority—the Department of Environmental Quality, Secretary, or any person designated to act for them. After the effective date of Act 97 of 1983 (Scheduled to be February 1, 1984), the administrative authority shall be the secretary of the Department of Environmental Quality.

Ancillary Equipment — any device including, but not limited to, such devices as piping, fittings, flanges, valves and pumps that is used to distribute, meter, or control the flow or hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site.

Aquifer—a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

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

Authorized Representative—the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent, or person of equivalent responsibility.

Barrier—a physical separation by natural or constructed means which prevents or restricts the penetration to adjacent areas of the harmful effects of hazardous wastes.

Basin—any uncovered area constructed to retain hazardous wastes.

Boiler—an enclosed device using controlled flame combustion and having the following characteristics:

1. The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

a. the unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

b. while in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

c. the unit must export and utilize at least 75 percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

2. The unit is one which the administrative authority has determined, on a case-by-case basis, to be a boiler, after considering the standards in LAC 33:V.105.D.31.

By-product—a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a coproduct that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

~~*Carbon Regeneration Unit*—any enclosed thermal treatment device used to regenerate spent activated carbon.~~

Category I Wastes—chemicals and process streams whose hazardous nature has been prescribed by prior determination and which are presented in LAC 33:V.Chapter 49, i.e., from non-specific sources, specific sources, acute hazardous wastes and toxic wastes.

Category II Wastes—wastes possessing any of the characteristics of the hazard classes listed in LAC 33:V.Chapter 49. Hazard classes of concern for these wastes are ignitability, corrosivity, reactivity and toxicity. Analytical protocols are detailed in LAC 33:V.Chapter 49.

Caretaker Management—management by the administrative authority, through an appointed manager to operate a hazardous waste facility during the time the permit of the facility is revoked.

Closed Portion—that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion.")

Closure—the act of securing and rendering harmless a site which has been used to treat, store or dispose of a hazardous waste so that it will pose no significant threat to human health or the environment.

Closure Plan—the plan for closure prepared in accordance with the requirements of LAC 33:V.Chapter 35.

~~*Commercial Boiler*—an industrial boiler that recycles hazardous waste for a fee by means of combustion.~~

Commercial Facility—a hazardous waste treatment, storage or disposal facility which receives, treats, stores or disposes of waste for a fee or other consideration.

~~*Commercial Industrial Furnace*—an industrial furnace that recycles hazardous waste for a fee by means of combustion.~~

Compliance Schedule—remedial measures including an enforceable sequence of events, operations, or milestone actions leading to compliance with these rules and regulations and the Act.

Component—either the tank or ancillary equipment of a tank system.

Component—any constituent part of a unit or any group of constituent parts of a unit which are assembled to perform a specific function (e.g., a pump seal, pump, kiln liner, kiln thermocouple).

Confined Aquifer—an aquifer bounded above and below by aquicludes or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.

~~*Consignee*—the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste will be sent.~~

Constituent or Hazardous Waste Constituent—any substance specified as a hazardous waste in any list in these rules and regulations.

Container—any portable device in which a material is stored, transported, treated, disposed of or otherwise handled.

~~*Containment Building*—a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of LAC 33:V.1801 or 4701.~~

Contingency Plan—a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

Corrective Action Management Unit or CAMU—an area within a facility that is designated by the administrative authority under LAC 33:V.2601 for the purpose of implementing corrective action requirements under LAC 33:V.3322 and RCRA 3008(h). A CAMU shall only be used for the management of remediation wastes pursuant to implementing such corrective action requirements at the facility.

Corrosion Expert—a person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing in the state of Louisiana that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

Corrosive Waste—a waste subject to these regulations pursuant to provisions of LAC 33:V.4903.B which, because of such properties as acidity or alkalinity, would tend to weaken or erode a common construction material.

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

Current Closure Cost Estimate—the most recent of the estimates prepared in accordance with LAC 33:V.3705.

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.

Current Plugging and Abandonment Cost Estimates—the most recent cost estimate for plugging and abandonment of disposal wells prepared for 40 CFR 144.62, Office of Conservation, or other substantially equivalent state program(s).

Current Post-closure Cost Estimate—the most recent of the estimates prepared in accordance with LAC 33:V.3709.

Date of Issuance of the Hazardous Waste Permit—the date shown on the hazardous waste permit as the date of issue.

Department—Department of Natural Resources, or after February 1, 1984, Department of Environmental Quality, pursuant to Act 97 of 1983.

~~*Designated Facility*—a hazardous waste treatment, storage, or disposal facility that:~~

~~1. has received a permit (or interim status) in accordance with the requirements of LAC 33:V.Chapters 1, 3, 5, 7, 27, 31, and 43;~~

~~2. has received a permit (or interim status) from a state authorized in accordance with 40 CFR 271, or~~

~~3. is regulated under LAC 33:V.4115.B or 4143, and~~

~~4. that has been designated on the manifest by the generator pursuant to LAC 33:V.105.H.~~

~~If a waste is destined for a facility in an authorized state that has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving state to accept such waste.~~

Dike—an embankment, levee, or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids or other materials.

Discarded—a material is "discarded" if it is abandoned (and not used, re-used, reclaimed, or recycled) by being disposed of; or burned or incinerated, except where the material is being burned as a fuel for the purpose of recovering usable energy; or physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed of.

Discharge or Hazardous Waste Discharge—the placing, spilling, releasing, percolating, draining, seeping, disposing, bypassing, or other escaping of pollutants into the air, waters, subsurface water, or the ground as the result of a prior act or omission; or the placing of pollutants into natural or man-made pits or drums, barrels or similar containers under conditions and circumstances that leaking, seeping, draining or escaping of the pollutants can be reasonably anticipated.

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 hazardous waste into or on any land or water so that such hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters of the state.

Disposal Facility—a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water and at which the waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

Disposer—any person or agency who operates a treatment, storage and/or disposal facility.

Domestic Sewage—untreated sanitary wastes that pass through a sewer system.

Drip Pad—an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

Elementary Neutralization Unit—a device that:

1. is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in LAC 33:V.4903.C, or they are listed in LAC 33:V.4901 only for this reason; and

2. meets the definition of tank, tank system, container, transport vehicle, or vessel in LAC 33:V.109.

Emergency Action—a situation in which there is no feasible alternative, other than the extraordinary actions authorized, to avoid loss of life, serious injury to human health or the environment, or severe damage to property.

Empty Container—

1. A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acutely hazardous waste listed in LAC 33:V.4901.B, C or E is empty if:

a. all wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating; and

b. no more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner; or

c. no more than three percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size; or

d. no more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

2. A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

3. A container or an inner liner removed from a container that has held an acutely hazardous waste listed in LAC 33:V.4901.B, C or E, is empty if:

a. the container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

b. the container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

c. in the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

~~*EPA Acknowledgement of Consent*—the cable sent to the EPA from the United States Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.~~

EPA Hazardous Waste Number—the number assigned by EPA to each hazardous waste (see LAC 33:V.Chapter 49).

EPA Identification Number—the number assigned by EPA to each generator, transporter, and treatment, storage, or disposal facility.

Equivalent Method—any testing or analytical method approved by the administrative authority.

Existing Facilities—hazardous waste facilities in operation or for which construction commenced on or before August 1, 1979. A facility has commenced construction if the owner or operator has obtained the federal, state and local approvals or permits necessary to begin physical construction; and either: a continuous on-site, physical construction program has begun; or the owner or operator has entered into contractual obligations (which cannot be canceled or modified without substantial loss) for physical construction of the facility to be completed within a reasonable time.

Existing Hazardous Waste Management (HWM) Facility or *Existing Facility*—a facility which was in operation or for which construction commenced on or before November 19, 1980. A facility has commenced construction if:

1. the owner or operator has obtained the federal, state and local approvals or permits necessary to begin physical construction; and either

a. a continuous on-site, physical construction program has begun; or

b. the owner or operator has entered into contractual obligations (which cannot be canceled or modified without substantial loss) for physical construction of the facility to be completed within a reasonable time.

Existing Portion—that land surface area of an existing waste management unit, included in the original Part I permit application, on which wastes have been placed prior to the issuance of a permit.

Existing Tank System or *Existing Component*—a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation has commenced on or prior to July 14, 1986. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either (1) a continuous on-site physical construction or installation program has begun, or (2) the owner or operator has entered into contractual obligations-which cannot be canceled or modified without substantial loss-for physical construction of the site or installation of the tank system to be completed within a reasonable time.

Facilities—a group of units (each an individual facility) on a site operated to treat, store, and/or dispose of hazardous waste.

Facility—

1. all contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, etc.); or

2. for the purpose of implementing corrective action under LAC 33:V.3322, all the contiguous property under the control of the owner or operator seeking a permit under subtitle C of RCRA. This definition also applies to facilities implementing corrective actions under RCRA section 3008(h).

Facility Mailing List—the mailing list for a facility maintained by the department in accordance with LAC 33:V.717.A.5.

Fault—a fracture along which rocks or soils on one side have been displaced with respect to those on the other side.

Federal Agency—any department, agency, or other instrumentality of the federal government, any independent agency or establishment of the federal government including any government corporation, and the Government Printing Office.

Federal, State, and Local Approvals or Permits Necessary to Begin Physical Construction—permits and approvals required under federal, state, or local statutes, regulations or ordinances.

Final Closure—means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities under LAC 33:V.Chapters 15, 19, 21, 23, 25, 27, 29, 31, 33, 35 and 43 are no longer conducted unless subject to provisions of 1109.

Final Permit—same as permit.

Food-Chain Crops—tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

Foreign Source—any hazardous waste originating from other than the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, or any other territory or protectorate.

Freeboard—the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

Free Liquids—liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

Fresh-Water Aquifer—water-bearing formations capable of yielding usable quantities of groundwater with dissolved minerals less than 10,000 mg/l to drinking water wells, pumps, springs, or streams.

Functionally Equivalent Component—a component that performs the same function or measurement and that meets or exceeds the performance specifications of another component.

Generator—any person, by site, whose act or process produces hazardous waste identified or listed, or whose act first causes a hazardous waste to become subject to regulation.

Groundwater—water in the saturated zone beneath the land surface.

Hazardous Material—a material designated under Louisiana Department of Public Safety regulations or its successor agency to be capable of posing an unreasonable risk to health, safety, or property when transported.

Hazardous Waste—a solid waste, as defined in LAC 33:V.109, is a hazardous waste if:

1. it is not excluded from regulation as a hazardous waste under LAC 33:V.105.D.10-19, 33, or 43; and

2. it meets any of the following criteria:

a. it exhibits any of the characteristics of hazardous waste identified in LAC 33:V.4903, except that any mixture of a waste from the extraction, beneficiation, or processing of ores and minerals excluded under LAC 33:V.105.D.17 and any other solid waste exhibiting a characteristic of hazardous waste under LAC 33:V.4903 is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred; or if it continues to exhibit any of the characteristics exhibited by the nonexcluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in LAC 33:V.4903.E.Table 5 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

b. it is listed in LAC 33:V.4901 and has not been excluded from the lists in LAC 33:V.4901 by the Environmental Protection Agency.

c. it is a mixture of a solid waste and a hazardous waste that is listed in LAC 33:V.4901 solely because it exhibits one or more of the characteristics of hazardous waste identified in LAC 33:V.4903 unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in LAC 33:V.4903; or unless the solid waste is excluded from regulation under LAC 33:V.105.D.17 and the resultant mixture no longer exhibits any characteristic of hazardous waste identified in LAC 33:V.4903 for which the hazardous waste listed in LAC 33:V.4901 was listed. (However, nonwastewater mixtures are still subject to the requirements of LAC 33:V.Chapter 22, even if they no longer exhibit a characteristic at the point of land disposal.)

d. it is a mixture of solid waste and one or more hazardous wastes listed in LAC 33:V.4901 and has not been excluded by EPA. The mixtures of solid wastes and hazardous wastes listed in LAC 33:V.4901 are not hazardous wastes (unless they exhibit the characteristics of a hazardous waste in LAC 33:V.4903 or are listed in LAC 33:V.4901) if the generator can demonstrate that the mixture consists of wastewater excluded under LAC 33:V.4905.A.

e. Rebuttable Presumption for Used Oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in LAC 33:V.4901. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from LAC 33:V.Chapter 49.Appendix A to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in LAC 33:V.3105.Table 1).

i. The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed.

ii. The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

3. A solid waste which is not excluded from regulation under LAC 33:V.105.D.10-19, 33, or 43 becomes a hazardous waste when:

a. in the case of a waste listed in LAC 33:V.4901 when the waste first meets the listing description set forth in LAC 33:V.4901;

b. in the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in LAC 33:V.4901 is first added to the solid waste;

c. in the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in LAC 33:V.4903.

4. Unless and until a hazardous waste no longer exhibits the characteristics of a hazardous waste identified in LAC 33:V.4903; or in the case of a waste which is listed under LAC 33:V.4901, contains a waste listed in LAC 33:V.4901, or is derived from a waste listed in LAC 33:V.4901, unless and until it also has been excluded from the lists in LAC 33:V.4901 as a hazardous waste by the Environmental Protection Agency, a hazardous waste will remain a hazardous waste.

5. Except as otherwise provided in LAC 33:V.105.D.33, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from solid waste and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

6. Any solid waste described in LAC 33:V.105.D.33 or 109. Hazardous Waste.5 is not a hazardous waste if it meets the following criteria:

a. In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in LAC 33:V.4903.

b. In the case of a waste which is a listed waste under LAC 33:V.4901, contains a waste listed under LAC 33:V.4901, or is derived from a waste listed in LAC 33:V.4901, it also has been excluded from LAC 33:V.105.D.33 or 109.Hazardous Waste.5 under LAC 33:V.105.H and M.

~~7. Notwithstanding LAC 33:V.105.D and Hazardous Waste, as defined in LAC 33:V.109 and provided the debris as defined in LAC 33:V.Chapter 22 does not exhibit a characteristic identified at LAC 33:V.4903.B-E, the following materials are not subject to regulation under LAC 33:V.Subpart 1:~~

~~a. hazardous debris as defined in LAC 33:V.Chapter 22 that has been treated using one of the required extraction or destruction technologies specified in LAC 33:V.Chapter 22.Appendix Table 8. Persons claiming this exclusion in an enforcement action will have the burden of proving, by clear and convincing evidence, that the material meets all of the exclusion requirements; or~~

~~b. debris as defined in LAC 33:V.Chapter 22 that the administrative authority, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.~~

Hazardous Waste Management—the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery and disposal of hazardous wastes.

Hazardous Waste Management Unit—is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

Hazardous Waste Permit—same as permit.

Health Care Waste—infectious or other hazardous waste resulting from operations of a health care facility.

Holocene—the most recent epoch of the quarternary period extending from the end of the Pleistocene to the present.

Household Waste—any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels).

Ignitable Waste—a waste subject to these regulations pursuant to provisions of LAC 33:V.4903.A of such properties as to constitute a potential fire hazard during its management.

Inactive Portion—that portion of a facility which is not operated after August 1, 1979. (See also "active portion" and "closed portion.")

Incinerator—any enclosed device that:

1. uses controlled flame combustion that neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace;

~~or~~

~~2. meets the definition of infrared incinerator or plasma arc incinerator.~~

Incompatible Waste—a waste unsuitable for commingling with another waste or material if the commingling might result in the generation of: extreme heat or pressure; fire; explosion or violent reaction; substances which are shock-sensitive, friction-sensitive, or which otherwise have the potential of reacting violently; toxic dusts, mists, fumes, gases, or other chemicals; volatilized ignitable or toxic chemicals due to heat generation in such a manner that the likelihood of contamination of groundwater, or escape of the substances into the environment, is increased; or any other similar reactions, or where its placement in a particular device or facility may cause corrosion or decay of containment materials.

Individual Generation Site—the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the property is contiguous.

Industrial Furnace—any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:

1. cement kilns;

2. lime kilns;

3. aggregate kilns;

4. phosphate kilns;

5. coke ovens;

6. blast furnaces;

7. smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machine, roasters, and foundry furnaces);

8. titanium dioxide chloride process oxidation reactors;

9. methane reforming furnaces;

10. pulping liquor recovery furnaces;

11. combustion devices used in the recovery of sulfur values from spent sulfuric acid;

~~12. halogen acid furnaces (HAFs) for the production of~~ acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least three percent, the acid product is used in a manufacturing process and, except for hazardous waste burned as a fuel, hazardous waste fed to the furnace has a ~~minimum halogen content of 20 percent as generated;~~

13. such other devices as the administrative authority, after notice and comment, adds to this list on the basis of one or more of the following factors:

a. the design and use of the device primarily to accomplish recovery of material products;

b. the use of the device to burn or reduce raw materials to make a material product;

c. the use of the device to burn or reduce secondary materials as effective substitutes for raw materials in processes using raw materials as principal feedstocks;

d. the use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

e. the use of the device in common industrial practice to produce a material product; and

f. other factors as appropriate.

Infectious Waste—a waste which has the potential to endanger humans or other living organisms by the communication of diseases caused by microorganisms and/or viruses.

~~*Infrared Incinerator*—any enclosed device that uses electric~~ powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and ~~which is not listed as an industrial furnace.~~

Inground Tank—a device meeting the definition of *tank* in LAC 33:V.109 whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

Injection Well—those wells, intended or used for disposal of hazardous waste, drilled to a strata below any fresh-water aquifer and permitted, or required to be permitted, by the Office of Conservation or after February 1, 1984, by the Department of Environmental Quality.

In Operation—a facility which is treating, storing or disposing of hazardous waste.

Inner Liner—a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.

Installation Inspector—a person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

Interim Status—all facilities that have met the requirements established by §3005e of the Resource Conservation and Recovery Act et seq. and as such has been recognized by the U.S. Environmental Protection Agency (EPA) and approved by the administrative authority in accordance with the Louisiana Environmental Affairs Act.

Interim Permit—the hazardous waste permit issued by Louisiana to facilities with interim status.

International Shipment—the transportation of hazardous waste into or out of the jurisdiction of the United States.

Lab Pack—an overpacked container (such as a drum) containing small, tightly-sealed containers of hazardous waste with an absorbent material filling the voids in the outer container (drum).

Lagoon—a shallow sound, channel, or pond near, or communicating with, a larger body of water, either natural or man-made.

Landfarm—a facility for the application of waste onto land and/or incorporation into the surface soil for the purpose of biological reduction and soil attenuation, including the use of such waste as a fertilizer or soil conditioner.

Landfill—a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, land treatment facility, surface impoundment, underground injection well, salt dome formation, salt bed formation, underground mine, cave, or corrective action management unit.

Landfill Cell—a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

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—any liquid, including any suspended components in the liquid, that has percolated through, or drained from hazardous waste.

Leak-Detection System—a system capable of detecting the failure of either the primary or secondary containment structure by the detection of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure by the detection of a release of hazardous waste into the secondary containment structure.

Liner—a continuous layer of natural or man made materials, beneath and on the sides of a surface impoundment, landfill, or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.

Management or Hazardous Waste Management—the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery and disposal of hazardous waste.

Manifest—the form used for identifying the quantity, description, and the origin, transporter and destination of hazardous waste during its transportation from the point of generation to the point of off-site disposal, treatment or storage.

Manifest Document Number—the serially increasing number assigned to the manifest by the generator for recording and reporting purposes.

Mining Overburden Returned to the Mine Site—any material overlying an economic mineral deposit, which is removed to gain access to that deposit and is then used for reclamation of a surface mine.

Miscellaneous Unit—a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well (with appropriate technical standards under 40 CFR part 146, 1988, pp. 674-694), ~~containment building,~~ corrective action management unit, or unit eligible for a research, development, and demonstration permit under LAC 33:V.329.

Monitoring—inspection and collection of data following a predesigned schedule and system on operational parameters of the facility or on the quality of the environment including the air, groundwater, surface water or soils.

New Hazardous Waste Management Facility or New Facility—a facility which began operation, or for which construction commenced after August 1, 1979.

New Tank System or *New Tank Component*—a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation has commenced after July 14, 1986; except, however, for purposes of LAC 33:V.1907.G.2 and 4435, a new tank system is one for which construction commences after July 14, 1986. (See, also, "existing tank system.")

One-Hundred Year Flood—a flood that has a one percent chance of being equalled or exceeded in any given year.

One-Hundred Year Floodplain—the lowland and relatively flat areas adjoining inland and coastal areas of the mainland and off-shore islands, including, at a minimum, areas subject to a one percent or greater chance of flooding in any given year.

Onground Tank—a device meeting the definition of *tank* in LAC 33:V.109 and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

On-Site—the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties, owned by the same person, but connected by a right-of-way which he controls and to which the public does not have access, are also considered on-site property.

Open Burning—the combustion of any material without the following characteristics: 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 emission of the gaseous combustion products.

Operator, Owner, Licensee, Manager, etc.—whoever has legal authority and responsibility for a facility that generates, transports, treats, stores or disposes of any hazardous waste.

Owner—the person who owns a facility or part of a facility.

Parent Corporation—a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

~~*Partial Closure*—means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of Chapters 9, 11, 12 13, 14, 15, 16, 17, 18, 19 and 23 at a facility that contains other active hazardous waste management units. For example, a partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.~~

Permit—the permit issued by the state of Louisiana to a facility to treat, store, and/or dispose of hazardous waste under the conditions specified in the permit and the conditions required by the Act and these regulations.

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

Personnel or Facility Personnel—all persons who work at or oversee the operations of a hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements of LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, 37, and 43.

Petition—a written request made to the administrative authority.

Pile—any noncontainerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage ~~and that is not a containment building.~~

~~*Plasma Arc Incinerator*—any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.~~

Point Source—any discernible, confined, and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

Pond—a confined body of standing water usually smaller than a lake, either natural or man-made.

Post-closure Plan—the plan for the post-closure care prepared in accordance with the requirements of LAC 33:V.Chapter 35.

Potable-Water Aquifer—water-bearing formations capable of yielding usable quantities of groundwater with dissolved minerals less than 10,000 mg/l to drinking water wells, pumps, springs or streams.

~~*Primary Exporter*—any person who is required to originate the manifest for a shipment of hazardous waste in accordance with LAC 33:V.1107, which specifies a treatment, storage or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.~~

Proper—a qualifying adjective requiring consistency with any operating procedures published by the department.

Public Water Supply Well—a well of piped water for consumption by the public if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Publicly-Owned Treatment Works or POTW—any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by the state, parish, municipality, or other governmental subdivision. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to POTW providing treatment.

Qualified Groundwater Scientist—a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university courses that enable that individual to make sound professional judgements regarding groundwater monitoring and contaminant fate and transport.

Reactive Waste—a waste subject to these regulations pursuant to provisions of LAC 33:V.4903.C which is normally unstable or which may endanger life or property in the presence of other substances likely to be encountered in the management of waste.

~~*Receiving Country*—a foreign country to which a hazardous waste is sent for the purpose of treatment, storage, or disposal (except short-term storage incidental to transportation).~~

Reclaimed Material—a material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

Reclaimer—any person or agency who processes materials or wastes to recover a usable product or who regenerates materials or wastes.

Recyclable Material—a recyclable material is a material meeting the definition of a solid waste and which is used, reused, recycled, or reclaimed.

Remediation Waste—all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic and are managed for the purpose of implementing corrective action requirements under LAC 33:V.3322 and RCRA Section 3008(h). For a given facility, remediation waste may originate only from within the facility boundary, but may include waste managed in implementing RCRA Section 3005 (v) or 3008 (h) for releases beyond the facility boundary.

Replacement Unit—a landfill, surface impoundment, or waste pile unit from which all or substantially all of the waste is removed and that is subsequently reused to treat, store, or dispose of hazardous waste. "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or EPA- or state-approved corrective action.

Representative Sample—a sample of a universe or whole (e.g., waste pile, lagoon, groundwater) which can be expected to exhibit the average properties of the universe or whole.

Resource Recovery—recovery of useful material or energy from hazardous waste.

Reused Material—see used material.

Run-Off—any rainwater, leachate, or other liquid that drains overland from any part of a facility.

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

Rural—all areas zoned rural or not zoned at all by a municipality or parish.

Saturated Zone or Zone of Saturation—that part of the earth's crust in which all voids are filled with water.

Scrap Metal—"scrap metal" is bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

SIC—Standard Industrial Classification Code.

Site—land area and appurtenances, thereon and thereto, used for the treatment, storage, and/or disposal of hazardous waste.

Sludge—any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

~~*Sludge Dryer*—any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet weight basis.~~

Small Quantity Generator—a generator who generates less than 100 kg of hazardous waste in a calendar month.

~~*Solid Waste*~~

1. any discarded material that is not excluded by LAC 33:V.105.D.24, 34, 35, or 36.d or that is not excluded by a variance granted under LAC 33:V.105.D. A discarded material is any material which is abandoned, recycled, or considered inherently waste-like, as explained below.

2. materials are solid waste if they are abandoned by being:

a. disposed of; or

b. burned or incinerated; or

c. accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated;

3. materials are solid wastes if they are recycled—or accumulated, stored, or treated before recycling—as specified in this Paragraph and detailed below:

a. used in a manner constituting disposal;

i. Materials noted with a "*" in Column 1 of Table 1 in this Chapter are solid wastes when they are applied to or placed on the land in a manner that constitutes disposal; or used to produce products that are applied to or placed on the land (in which cases the product itself remains a solid waste).

ii. However, commercial chemical products listed in LAC 33:V.4901.D and E are not solid wastes if they are applied to the land and that is their ordinary manner of use.

b. burning for energy recovery;

i. Materials noted with a "*" in column 2 of Table 1 in this Chapter are solid wastes when they are: burned to recover energy; used to produce a fuel; contained in fuels (in which case the fuel itself remains a solid waste).

ii. However, commercial chemical products listed in LAC 33:V.4901.D and E are not solid wastes if they are themselves fuels.

c. *reclaimed*—Materials noted with a "*" in column 3 of Table 1 in this Chapter are solid wastes when reclaimed;

d. *accumulated speculatively*—Materials noted with a "*" in column 4 of Table 1 in this Chapter are solid wastes when accumulated speculatively;

4. Inherently Waste-like Materials. The following materials are solid wastes when they are recycled in any manner:

a. Hazardous Waste Nos. F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028;

b. secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in LAC 33:V.4901 or 4903, except for brominated material that meets the following criteria:

i. the material must contain a bromine concentration of at least 45 percent;

ii. the material must contain less than a total of 1 percent of toxic organic compounds listed in LAC 33:V.3105.Table 1; and

iii. the material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping);

c. the administrative authority will use the following criteria to add wastes to that list:

i. the materials are ordinarily disposed of, burned or incinerated; or

ii. the materials contain toxic constituents listed in Table 1 of LAC 33:V.Chapter 31 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

iii. the material may pose a substantial hazard to human health and the environment when recycled.

5. Materials that are not Solid Waste when Recycled

a. Materials are not solid wastes when they can be shown to be recycled by being:

i. used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or

ii. used or reused as effective substitutes for commercial products; or

iii. returned to the original process from which they are generated, without first being reclaimed. The material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks.

b. The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in preceding paragraphs of this Section):

i. materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

ii. materials burned for energy recovery, used to produce a fuel, or otherwise contained in fuels or

c. materials accumulated speculatively; or

d. inherently waste-like materials.

6. Respondents in actions to enforce regulations who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. 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 a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

Table 1

	Use Constituting Disposal	Energy recovery/ fuel	Reclamation	Speculative Accumulation
	(1)	(2)	(3)	(4)
Spent Materials	•	•	•	•
Sludges (listed in LAC 33:V.4901)	•	•	•	•
Sludges exhibiting a characteristic of hazardous waste	•	•	.....	•
By-products (listed in LAC 33:V.4901)	•	•	•	•
By-products exhibiting a characteristic of hazardous waste	•	•	.....	•
Commercial chemical products listed in LAC 33:V.4901.E and F	•	•	.....	
Scrap Metal	•	•	•	•

Spent Material—a "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

Spill—the accidental or intentional spilling, leaking, pumping, pouring, emitting or dumping of hazardous wastes

or materials which, when spilled, become hazardous wastes into or on any land, air or water.

Standards—performance criteria established by department to govern the hazardous waste program.

Storage—the containment of hazardous waste for such time as may be permitted by regulations in such a manner as not to constitute disposal of hazardous waste.

Storage Facility—any environmentally sound facility used to store hazardous waste.

Sump—any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that, as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

Surface Impoundment or Impoundment—a facility or part of a facility, which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds and lagoons.

Tank—a stationary device designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

Tank System—a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

Temporary Storage—storage of a generator's waste on-site for less than 90 days.

Thermal Treatment—the processing of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "incinerator" and "open burning.")

Totally Enclosed Treatment Facility—a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

Toxic Waste—a waste subject to these regulations pursuant to provisions of LAC 33:V.4903.D which, by its chemical properties, has the potential to endanger human health or other living organisms by means of acute or chronic adverse effects, including poisoning, mutagenic, teratogenic, or carcinogenic effects.

Transfer Facility—any transportation-related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

~~*Transit Country*—any foreign country, other than a receiving country, through which a hazardous waste is transported.~~

Transporter—a person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

Transports or Transportation—the movement of hazardous waste from the point of generation or storage to the point of treatment, storage or disposal by any means of commercial or private transport. The term does not apply to the movement of hazardous wastes on the premises of a hazardous waste generator or on the premises of a permitted hazardous waste treatment, storage or disposal facility.

Transport Vehicle—a motor vehicle, aircraft, rail freight car, freight container, cargo tank, portable tank, or vessel used for the transportation of hazardous waste. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

Treatability Study—a study in which a hazardous waste is subjected to a treatment process to determine:

1. whether the waste is amenable to the treatment process,

2. what pretreatment (if any) is required,

3. the optimal process conditions needed to achieve the desired treatment,

4. the efficiency of a treatment process for a specific waste or wastes, or

5. the characteristics and volumes of residuals from a particular treatment process.

Also included in this definition for the purpose of the LAC 33:V.105.D.37 and 38 exemptions are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A "treatability study" is not a means of commercially treating or disposing of hazardous waste.

Treatment—(when used in connection with hazardous waste) any method, technique, or process, including neutralization, designed to change the physical or chemical character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

Treatment Zone—a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed or immobilized.

Type of Waste—waste description by category as classified in LAC 33:V.Chapter 49 to these rules and regulations.

Underground Injection—the subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (See also "injection well")

Underground Source of Drinking Water or USDW—an aquifer or its portion:

1. which supplies any public water system; or

2. which contains a sufficient quantity of groundwater to supply a public water system and

a. currently supplies drinking water for human consumption, or

b. contains fewer than 10,000 mg/l total dissolved solids; and

3. which is not an aquifer exempted by the Department of Natural Resources, Office of Conservation.

Underground Tank—a device meeting the definition of *tank* in LAC 33:V.109 whose entire surface area is totally below the surface of and covered by the ground.

Unfit for Use Tank System—a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

Unsaturated Zone or Zone of Aeration—the zone between the land surface and the water table.

Uppermost Aquifer—the geological formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer.

Used Oil—any oil that has been refined from crude oil or any synthetic oil that has been used and, as a result of such use, is contaminated by physical or chemical impurities.

Used or Reused Material—a material is "used or reused" if it is either:

1. employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

2. employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorus precipitant and sludge conditioner in wastewater treatment).

Vessel—any type of watercraft used, or capable of being used, as a means of transportation on the water.

Volatile Waste—hydrocarbon or other waste with a vapor pressure greater than or equal to 1.5 psia.

Washout—The movement of hazardous waste from the active portion of the facility as a result of flooding.

~~*Waste Reduction*—in-plant practices that reduce, avoid or~~ eliminate the generation of hazardous or solid waste so as to reduce the risks to human health and the environment.

1. When recycling is environmentally acceptable and is an integral part of the waste-generating industrial process or operation, such as a closed-loop application which returns potential waste as it is generated for reuse within the process, it shall be considered waste reduction. Recycling is not considered waste reduction if waste exits a process, exists as a separate identity, undergoes significant handling, or is transported from the waste-generating location.

2. Actions that reduce waste volume by concentrating the hazardous content of a waste or that reduce hazard level by diluting the hazardous content are not considered waste reduction.

3. Actions that change the chemical composition and the concentrations of the components of the waste, but do not change the degree of hazard of the waste are not considered ~~waste reduction.~~

Wastewater Treatment Unit—a device that:

1. is part of a wastewater treatment facility that is subject to regulation under either Section 402 or 307(b) of the Clean Water Act or subject to regulation under LAC 33:IX.Chapter 3; and

2. receives and treats or stores an influent wastewater that is a hazardous waste as defined in LAC 33:V.109, or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in LAC 33:V.109, or treats or stores a wastewater treatment sludge that is a hazardous waste as defined in LAC 33:V.109, and

3. meets the definition of a tank or tank system in LAC 33:V.109.

All sludges, floats, oils, residues, recovered organics, and inorganics from such units shall be considered to be hazardous and managed according to the applicable regulations, unless the wastes do not exhibit the characteristics of a hazardous waste, except for those specifically listed as hazardous, or the wastes are excluded under LAC 33:V.105.D.

Well—any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

Zone of Engineering Control—an area under the control of the owner/operator that, upon detection of a hazardous waste release, can be readily cleaned up prior to the release of

hazardous waste or hazardous constituents to groundwater or surface water.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790 (November 1988), LR 15:378 (May 1989), LR 15:737 (September 1989), LR 16:47 (January 1990), LR 16:220 (March 1990), LR 16:399 (May 1990), LR 16:614 (July 1990), LR 16:683 (August 1990), LR 17:362 (April 1991), LR 17:478 (May 1991), LR 18:723 (July 1992), LR 18:1375 (December 1992), repromulgated LR 19:626 (May 1993), amended LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:266 (March 1995).

§111. Use of Number and Gender in these Regulations

As used in these regulations:

A. words in the masculine gender also include the feminine and neuter genders; and

B. words in the singular include the plural; and

C. words in the plural include the singular.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990).

Chapter 3. General Conditions for Treatment, Storage, and Disposal Facility Permits

§301. Authority

A. The Louisiana Environmental Affairs Act (Acts 1979, 449) authorizes the department to administer this permit program.

B. This Chapter establishes general conditions for permit standards applicable to treatment, storage, and disposal (TSD) facilities. LAC 33:V.Chapter 5 establishes the contents of the permit application and LAC 33:V.Chapter 7 establishes the administrative procedures for receipt, evaluation, and issuance of TSD permits. LAC 33:V.Chapter 11 establishes standards applicable to generators of hazardous waste. LAC 33:V.Chapter 13 establishes standards applicable to transporters of hazardous waste. LAC 33:V.Chapter 15 establishes general standards for TSD facilities. LAC 33:V.Chapters 19-32 establish specific technical requirements for various disposal facility components.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§303. Overview of the Permit Program

A. General Application Requirements

1. Permit Application. Any person who is required to have a permit (including new applicants and permittees with expiring permits) shall complete, sign, and submit an application to the administrative authority as described in this Section and LAC 33:V.4301, 4303, and 4305. Persons currently authorized with interim status shall apply for permits when required by the administrative authority. Persons covered by permits by rule (LAC 33:V.305.D) need not apply. Procedures for applications, issuance, and administration of emergency permits are found exclusively in LAC 33:V.701 and 703. Procedures for application, issuance, and administration of research, development, and demonstration permits are found exclusively in LAC 33:V.329.

2. No later than 90 days after the promulgation or revision of these regulations, all generators and transporters of hazardous waste, and all owners or operators of hazardous waste treatment, storage, or disposal facilities must file or have on file a notification of that activity using Notification Form HW-1, available from the administrative authority. For generators of hazardous waste, the Notification Form HW-1 shall be deemed a registration upon acceptance and approval by the administrative authority.

3. The administrative authority shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit. See this Chapter and LAC 33:V.Chapter 5 for permit standards and requirements for the contents of permit applications.

4. Permit applications must comply with the signature and certification requirements of LAC 33:V.507 and 513.

B. Treatment, storage, or disposal of hazardous waste is prohibited by any person who has not received an interim status or a standard permit.

C. A hazardous waste permit application consists of two parts:

1. Part I requirements are listed in LAC 33:V.515.

2. Part II requirements are listed in LAC 33:V.517.

D. No facility may be used to treat, store, and/or dispose of hazardous waste without a permit for the specific activities, procedures, and classification of waste handled as outlined in their permit, or in emergency situations under the direction of the administrative authority as provided in LAC 33:V.701 or 703.

E. Requirements for Existing TSD Facilities

1. Owners and operators of existing TSD facilities must submit Part I of their permit application requirements listed in LAC 33:V.515 to the administrative authority no later than 30 days after the date they first become subject to the permitting standards set forth in LAC 33:V.Subpart 1. Generators

generating less than 100 kilograms of hazardous waste in a calendar month who treat, store, or dispose of these wastes on site must submit a Part I RCRA permit application by March 24, 1987.

2. The owner or operator of an existing TSD facility may be required to submit a permit application at any time. Any owner or operator shall be allowed at least six months from the date of request to submit the application. Any owner or operator of an existing TSD facility may voluntarily submit the application at any time.

3. The administrative authority may by compliance order extend the date by which the owner or operator of an existing TSD facility must submit a permit application. In no instance will the administrative authority grant an extension of permit submission for more than 180 days.

4. Failure to furnish a requested Part II application on time, or to finish in full the information required by the Part II application, is grounds for termination of interim status under LAC 33:V.Chapter 43.

F. Part II Formal Permit Application. The formal permit application must follow all outline, numbering system, and other format requirements established by the administrative authority.

G. Requirements for Interim Status Facilities. Facility owners and operators with interim status must comply with interim status standards set forth in LAC 33:V.Chapter 43.

H. Requirements for New TSD Facilities. Owners or operators of new TSD facilities must submit Part I and Part II of the permit application at least 180 days before physical construction is expected to commence except as provided in LAC 33:V.303.H.3.

1. No person shall begin physical construction of a new TSD facility or begin major modifications to an existing facility without having submitted Parts I and II of the permit application and received a final effective TSD permit.

2. An application for a permit for a new TSD facility (including both Parts I and II) may be filed any time after promulgation of these standards, applicable to such facility. The application shall be filed with the administrative authority.

3. Notwithstanding LAC 33:V.303.H.1, a person may construct a facility for the incineration of polychlorinated biphenyls pursuant to and after an approval issued by the administrative authority under Section (6) (e) of the Toxic Substances Control Act, and any person owning or operating such a facility shall, at any time after construction or operation of such a facility has begun, file an application for a RCRA permit to incinerate hazardous waste authorizing such facility to incinerate waste identified or listed under LAC 33:V.Chapter 49.

4. A new facility must obtain an EPA identification number. EPA identification numbers will be issued only by the EPA. However, application for an EPA Identification Number shall be made by completing the Hazardous Waste Notification form provided by the department.

I. No new facility or major modification of an existing facility may commence treatment, storage, or disposal of hazardous waste until the facility is complete and:

1. the permittee has submitted to the administrative authority by certified mail or hand delivery a letter signed by the permittee and an engineer licensed in Louisiana stating that the facility is complete and built in accordance with terms of the permit; and

2. the facility has been inspected by the department following a "request to make final inspection" by the operator, and an order to proceed is issued.

J. Timely Permit Submission. Failure to furnish a requested application on time or failure to furnish in full the information required by the application is grounds for termination of interim status.

K. Updating Permit Applications

1. If any owner or operator of a TSD facility has filed Part I of the permit application and has not yet filed a Part II permit application, the owner or operator shall file an amended Part I permit application.

2. The owner or operator of a facility who fails to comply with the updating requirements of LAC 33:V.303.K may be subject to termination of interim status with respect to those wastes not reported in duly filed notifications.

L. Incomplete Applications. Applications which lack information necessary for proper evaluation will be returned by the administrative authority to the operator within 60 days of receipt of application with a list of additional data required and the timeframe for submission of additional data.

M. Completeness. The administrative authority shall not issue a permit before receiving a complete application for a permit except for permits by rule, or emergency permits. An application for a permit is complete when the administrative authority receives an application form and any supplemental information which are completed to his or her satisfaction. An application for a permit is complete notwithstanding the failure of the owner or operator to submit the exposure information described in LAC 33:V.303.P. The administrative authority may deny a permit for the active life of a hazardous waste management facility or unit before receiving a complete application for a permit. Applications which are complete will be accepted for review. Operators will be notified of such acceptance for review within 60 days of receipt of application.

N. Reapplications. Any TSD facility with an effective permit shall submit a new permit application at least 180 days before the expiration date of the effective permit, unless permission for later filing is granted by the administrative authority. (The administrative authority shall not grant

permission for applications to be submitted later than the expiration date of the existing permit.)

O. Application Submitted

All formal permit applications (Part II) shall be submitted in quintuplicate in the form presented in LAC 33:V.515, 517, 519, and 521 and in conformance with all requirements established by the administrative authority. An additional 15 copies shall be provided for any application upon which an evidentiary hearing is to be held by the administrative authority.

P. Exposure Information

1. After August 8, 1985, any Part II permit application submitted by an owner or operator of a facility that stores, treats, or disposes of hazardous waste in a surface impoundment or a landfill must be accompanied by information, reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum, such information must address:

a. reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;

b. the potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described in LAC 33:V.303.P.1.a.; and

c. the potential magnitude and nature of the human exposure resulting from such releases.

2. By August 8, 1985, owners and operators of a landfill or a surface impoundment who have already submitted a Part II application must submit the exposure information required in LAC 33:V.303.P.1.

Q. Other Information. The administrative authority may require a permittee or an applicant to submit relevant information in order to establish permit conditions under LAC 33:V.311.E and 315.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 14:790 (November 1988), LR 16:220 (March 1990), LR 17:478 (May 1991), LR 17:658 (July 1991), LR 20:1000 (September 1994), LR 21:564.

§305. Scope of the Permit

~~A. Owners and operators of TSD units must have permits during the active life (including the closure period) of the unit, for any unit which closes after January 26, 1983, during any post-closure care period required under LAC 33:V.Chapter 35, and during any compliance period specified under LAC 33:V.Chapter 33, including any extension of the compliance period under LAC 33:V.Chapter 33. The denial of a permit for the active life of a hazardous waste management facility or TSD unit does not affect the requirement to obtain a post-closure permit.~~

B. Specific Inclusions. Owners and operators of certain facilities require hazardous waste permits as well as permits under other programs for certain aspects of the facility operation. Permits are required for:

1. facilities which treat, store, and/or dispose of hazardous wastes controlled by this program, as listed in LAC 33:V.105, less listed exclusions in LAC 33:V.105.D;

2. all associated surface facilities for injection wells that treat, store, and/or dispose of hazardous waste;

3. treatment, storage, or disposal of hazardous waste at facilities requiring a National Pollution Discharge Elimination System (NPDES) permit;

4. barges or vessels that dispose of hazardous waste under a valid federal permit by ocean disposal and onshore hazardous waste treatment, or storage facilities associated with an ocean disposal operation. However, the facility will be deemed to have a permit for ocean disposal from the barge or vessel itself if it complies with the requirements of LAC 33:V.305.C.

C. Exclusions. The following persons are not required to obtain a hazardous waste permit:

1. facilities with injection wells that dispose of hazardous waste. Those wells are regulated by the Office of Conservation prior to February 1, 1984. After that date, such permits shall be issued by the Department of Environmental Quality pursuant to Act 97 of 1983;

2. generators who accumulate hazardous waste in an environmentally sound manner, on-site for less than 90 days (see discussion of accumulation time in LAC 33:V.1109.E.);

3. farmers who dispose of hazardous waste pesticides from their own use as provided in LAC 33:V.105.D.5;

4. persons who own or operate facilities solely for the treatment, storage, or disposal of hazardous waste excluded by being small generators, if so specifically exempted by the administrative authority;

5. owners or operators of totally enclosed treatment facilities (see definition in LAC 33:V.Chapter 1);

6. owners and operators of elementary neutralization units or wastewater treatment units (see definitions in LAC 33:V.Chapter 1);

7. transporters storing manifested shipments of hazardous waste in containers meeting all applicable requirements at a transfer facility for a period of 10 days or less, if so approved by the administrative authority (see definition in LAC 33:V.109);

8. persons adding absorbent material to waste in a container and persons adding waste to absorbent material,

provided that this action occurs at the time waste is first placed in the container and that the action complies with all applicable sections in LAC 33:V.Chapter 21;

9. a person is not required to obtain a permit for those activities he carries out to immediately contain or treat a spill of hazardous waste or material which, when spilled, becomes a hazardous waste. This exclusion is intended to relieve persons of the necessity of obtaining a RCRA permit where the treatment or storage of hazardous waste is undertaken as part of an immediate response to a spill. After the immediate response activities are completed, any treatment, storage, or disposal of spilled material or spill residue or debris that is undertaken must be covered by interim status, permit or emergency permit;

10. owners or operators of facilities granted a research development and demonstration permit under §3005(g) of Subtitle C of RCRA, is so specifically exempted by the administrative authority.

D. RCRA Permits by Rule

1. Notwithstanding any other provision, the following shall be deemed to have a permit if the conditions listed are met:

a. The owner or operator of a barge or other vessel which accepts hazardous waste for ocean disposal, if he or she has a valid federal permit for ocean dumping which is duly authorized and meets permit conditions, hazardous waste regulations, identification numbers, uses the manifest system, reports manifest discrepancies, operating records, annual reports, and reports of any unmanifested waste. Where required by the administrative authority, evidence of the above conditions must be presented. On-shore storage or treatment facilities shall be permitted as required by LAC 33:V.Subpart 1.

b. The owner or operator of an injection well disposing of hazardous waste if he or she has a valid permit for underground injection issued under LAC 43:XVII.Subparts 1 and 2 and is in compliance with such permit and LAC 43:XVII.203.F, and associated surface facilities are permitted under LAC 33:V.Subpart 1. For underground injection permits issued after November 8, 1984, the owner or operator must comply with LAC 33:V.3322. Where the underground injection well is the only unit at a facility which requires a RCRA permit, the owner or operator must comply with LAC 33:V.516 and with the following information requirements for solid waste management units.

i. The following information is required for each solid waste management unit at a facility seeking a permit:

(a). the location of the unit on the topographic map;

(b). designation of type of unit;

(c). general dimensions and structural description (supply any available drawings);

(d). information on when the unit was operated; and

(e). specification of all wastes that have been managed at the unit, to the extent available.

ii. The owner or operator of any facility containing one or more solid waste management units must submit all available information pertaining to any release of hazardous wastes or hazardous constituents from such unit or units.

iii. The owner/operator must conduct and provide the results of sampling and analysis of groundwater, land surface, and subsurface strata, surface water, or air, which may include the installation of wells, where the administrative authority ascertains it is necessary to complete a RCRA Facility Assessment that will determine if a more complete investigation is necessary.

2. Publicly Owned Treatment Works. The owner or operator of a POTW can accept hazardous waste for treatment, if the owner or operator has an NPDES permit, complies with the conditions of that permit, and complies with the following regulations:

a. receives an identification number as provided in LAC 33:V.303.H.4;

b. receives all hazardous waste under a designated manifest system;

c. provides a mechanism by which discrepancies in manifested discharges and receipts can be reconciled;

d. maintains a description and quantity of each hazardous waste received and subsequent treatment including methods and dates;

e. submits annual reports summarizing activities relating to receptions and treatment of each hazardous waste;

f. submits a complete report within five days of any hazardous waste received on an unmanifested basis; and

g. complies with all recordkeeping requirements of LAC 33:V.Subpart 1;

h. for NPDES permits issued after November 8, 1984, complies with LAC 33:V.3322.

3. The owner or operator can accept the hazardous waste if it meets all federal, state, and local pretreatment requirements which would be applicable to the waste and if it is discharged into the POTW through a sewer, pipe, or similar conveyance.

E. Permits for Less Than an Entire Facility. The administrative authority may issue or deny a permit for one or more units at a facility without simultaneously issuing or denying a permit to all of the units at the facility. The interim status of any unit for which a permit has not been issued or denied is not affected by the issuance or denial of a permit to any other unit at the facility.

F. Closure by Removal. Owners/operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under LAC 33:V.Chapter 43 standards must obtain a post-closure permit unless they can demonstrate to the administrative authority that the closure met the standards for closure by removal or decontamination in LAC 33:V.2911, 2719.D.4, or 2315, respectively. The demonstration may be made in the following ways:

1. If the owner/operator has submitted an application for a post-closure permit, the owner/operator may request a determination, based on information contained in the application, that LAC 33:V.Subpart 1 closure-by-removal standards were met. If the administrative authority believes that LAC 33:V.Subpart 1 standards were met, he or she will notify the public of this proposed decision, allow for public comment, and reach a final determination according to the procedures in LAC 33:V.305.G.

2. If the owner/operator has not submitted a Part II application for a post-closure permit, the owner/operator may petition the administrative authority for a determination that a post-closure permit is not required because the closure met the applicable LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37 closure standards.

a. The petition must include data demonstrating that closure met removal or decontamination standards, or it must demonstrate that the unit was closed under state requirements that met or exceeded the applicable LAC 33:V.Subpart 1 closure-by-removal standards.

b. The administrative authority shall approve or deny the petition according to the procedures outlined in LAC 33:V.305.G.

G. Procedures for Closure Equivalency Determination

1. If a facility owner/operator seeks an equivalency demonstration under LAC 33:V.305.F, the administrative authority will provide the public through a newspaper notice, the opportunity to submit written comments on the information submitted by the owner/operator within 30 days from the date of the notice. The administrative authority will also, in response to a request or at his or her own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning the equivalence of the LAC 33:V.Chapter 43 closure to the LAC 33:V.Chapter 35 closure. The administrative authority will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.)

2. The administrative authority will determine whether the LAC 33:V.Chapter 43 closure met the requirements of LAC 33:V.Chapter 35 closure by removal or decontamination within 90 days of its receipt. If the administrative authority finds that the closure did not meet the applicable LAC 33:V.Chapter 35 standards, he or she will provide the owner/operator with a written statement of the reasons why the closure failed to meet LAC 33:V. Chapter 35 standards. The owner/operator may submit additional information in support of an equivalency demonstration within 30 days after receiving such written statement. The administrative authority will review any additional information submitted and make a final determination within 60 days.

3. If the administrative authority determines that the facility did not close in accordance with LAC 33:V.Chapter 35 closure-by-removal standards, the facility is subject to post-closure permitting requirements.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984) amended LR 10:496 (July 1984), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 17:658 (July 1991), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

§307. Effect of a Permit

A. Compliance with a RCRA permit during its term constitutes compliance, for purpose of enforcement, with 33:V.Subpart 1, except for those requirements not included in the permit which:

1. become effective by statute;

2. are promulgated under LAC 33:V.Chapter 22 restricting the placement of hazardous wastes in or on the land; or

3. are promulgated under LAC 33:V.Chapters 23, 25, and 29 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring, action, leakage rates, and response actoin plans and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

B. The issuance of a permit does not authorize any injury to persons or property, or invasion of other private rights, or any infringement of state or local law or regulations.

C. The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:614 (July 1990), LR 17:658 (July 1991), LR 21:266 (March 1995).

§309. Conditions Applicable to All Permits

Each permit shall include permit conditions necessary to achieve compliance with the Act and these regulations,

including each of the applicable requirements specified in LAC 33:V.Subpart 1. In satisfying this provision, the administrative authority may incorporate applicable requirements of LAC 33:V.Subpart 1 directly into the permit or establish other permit conditions that are based on LAC 33:V.Subpart 1. The following conditions apply to all hazardous waste permits. All conditions applicable to permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations must be given in the permit.

A. Duty to Comply. The permittee must comply with all conditions of this permit except that the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit. Any permit noncompliance constitutes a violation of the Act and any amendments and is grounds for enforcement action, permit termination, revocation and reissuance or modification, or denial of a permit renewal application.

B. Duty to Reapply. If the permittee wishes to continue an activity regulated by the permit after the expiration date of the permit, the permittee must reapply for the permit as required in LAC 33:V.303.N. If the administrative authority does not issue a final decision on the reapplication on or before the expiration date of the permit, it shall remain in effect until the administrative authority issues a final decision.

C. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

E. Proper Operation and Maintenance

1. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures.

2. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

F. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

G. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

H. Duty to Provide Information. The permittee shall furnish to the administrative authority, within a reasonable time, any information which may be requested to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish, upon request, copies of records required to be kept by this permit.

I. Inspection and Entry. The permittee shall allow the administrative authority, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

1. enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate act, any substances or parameters at any location.

J. Monitoring and Records

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, the certification required by LAC 33:V.1529.B.19, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, certification, or application. This period may be extended by request of the administrative authority at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facilities, and for disposal facilities for the post-closure care period as well.

3. Records of monitoring information shall include:

a. the date, exact place, and time of sampling or measurements;

b. the individual(s) who performed the sampling or measurements;

c. the date(s) analyses were performed;

d. the individual(s) who performed the analyses;

e. the analytical techniques of methods used; and

f. the results of such analyses.

K. Signatory Requirement. All applications, reports, or information submitted to the administrative authority shall be signed and certified (see also LAC 33:V.507).

L. Reporting Requirements

1. Planned Changes. The permittee shall give notice to the administrative authority, as soon as possible, of any planned physical alterations or additions to the permitted facility.

2. Anticipated Noncompliance. The permittee shall give advance notice to the administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. For a new facility, the permittee may not treat, store, or dispose of hazardous waste; and for a facility being modified, the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility except as provided in LAC 33:V.321.C until:

a. the permittee has submitted to the administrative authority by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

b. the administrative authority has inspected the newly modified facility and finds it is in compliance with the conditions of the permit or within 15 days of the date of receipt of the letter in LAC 33:V.303.I.1, the permittee has not received notice from the administrative authority of his or her intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

4. Transfers. The permit is not transferable to any person except with the written approval of the administrative authority. The administrative authority may require modification, or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary. In some cases, modification, or revocation and reissuance could be mandatory under LAC 33:V.Subpart 1.

5. Monitoring Reports. Monitoring results shall be reported at the intervals specified elsewhere in LAC 33:V.Subpart 1.

6. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted no later than 14 days after each schedule date.

7. The permittee shall report any noncompliance which may endanger health or the environment within 24 hours except as more immediate notification is required by the "Notification Regulations and Procedures for Unauthorized Discharges" (see LAC 33:I.Chapter 39). At a minimum such notification must include:

a. information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies;

b. any information of a release or discharge of hazardous waste or of a fire or explosion from the HWM facility, which could threaten the environment or human health outside the facility;

c. the description of the occurrence and its cause shall include:

i. name, address, and telephone number of the owner or operator;

ii. name, address, and telephone number of the facility;

iii. date, time, and type of incident;

iv. name and quantity of material(s) involved;

v. the extent of injuries, if any;

vi. an assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

vii. estimated quantity and disposition of recovered material that resulted from the incident.

d. a written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance. The administrative authority may waive the five day written notice requirement in favor of a written report within 15 days.

8. Manifest Discrepancy Report. If a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy. If not resolved within five days, the permittee must submit a letter report including a copy of the manifest to the administrative authority.

9. Unmanifested Waste Report. An unmanifested waste report must be submitted to the administrative authority within five days of receipt of unmanifested waste.

10. Annual Report. An annual report must be submitted covering facility activities during the previous calendar year.

11. Other Noncompliance. The permittee shall report all instances of noncompliance not reported under LAC 33:V.309.L.1, L.2, L.6, and L.7 at the time monitoring reports are submitted. The reports shall contain the information listed in LAC 33:V.309.L.1 and L.7.

12. Other Information. If the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit

application, or in any report to the administrative authority, he shall promptly submit such facts or information.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994).

§311. Establishing Permit Conditions

A. In addition to conditions required in all permits, the administrative authority shall establish conditions, as required on a case-by-case basis, under duration of permits, schedules of compliance, monitoring, for considerations under federal law, and to provide for and assure compliance with all applicable requirements of LAC 33:V.Subpart 1 and its regulations.

B. New or reissued permits, modified, or revoked and reissued permits, shall incorporate each of the applicable requirements referenced in LAC 33:V.309.

C. All permit conditions shall be incorporated expressly, or with specific citation to the applicable regulations or specific permit requirements.

D. All permits for facilities with pre-existing groundwater contamination shall contain a permit condition containing the concentration limits of hazardous constituents established consistent with LAC 33:V.3305, 3307 and 3309. In no case shall other than background concentration limits be listed in the initial permit. Compliance with corrective action programs required in LAC 33:V.3303, 3319 and 3321 of the chapter will constitute a permitted variance. Corrective action programs shall be reviewed annually and may be based on predictive computer modeling. Alternate concentrations provided in LAC 33:V.3309.A or B may be set by permit amendment should the original concentration limits be unattainable within a 36-month timeframe.

E. Each RCRA permit shall include permit conditions necessary to achieve compliance with Subtitle II of Title 30 of the Louisiana Revised Statutes and LAC 33:V.Chapters 9, 15, 17, 19, 21, 22, 23, 25, 27, 28, 29, 30, 31, 32, 33, 35, 37, and 41. In satisfying this provision the administrative authority may incorporate applicable requirements of LAC 33:V.Chapters 9, 15, 17, 19, 21, 22, 23, 25, 27, 28, 29, 30, 31, 32, 33, 35, 37, and 41 directly by reference into the permit or establish other permit conditions that are based on these regulations. Each permit issued under Subtitle II of Title 30 of the Louisiana Revised Statutes shall contain terms and conditions as the administrative authority determines necessary to protect human health and the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 16:220 (March 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994).

§313. Requirements for Recording and Reporting of Monitoring Results

All permits shall specify:

A. requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);

B. required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring; and

C. applicable reporting requirements based upon the impact of the regulated activity as specified in LAC 33:V.Subpart 1. Reporting shall be no less frequent than specified in the regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§315. Duration of Permit

Hazardous waste permits shall be effective for a fixed term not to exceed 10 years. Except as provided in LAC 33:V.315.A, the term of a permit shall not be extended by modification beyond the maximum duration specified in this Section. The administrative authority may issue any permit for a duration that is less than the full allowable term under this Section. Each permit for a land disposal facility shall be reviewed by the administrative authority five years after the date of permit issuance or reissuance and shall be modified, suspended, or terminated, as necessary, as provided in LAC 33:V.323.

A. Continuation of Expiring Permits. The conditions of an expired permit continue in force until the effective date of a new permit if:

1. the permittee has submitted a timely application under LAC 33:V.517 and the applicable sections in LAC 33:V.519 through 533 which is a complete (under LAC 33:V.503) application for a new permit; and

2. the administrative authority through no fault of the permittee, does not issue a new permit with an effective date under LAC 33:V.705 on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resource constraints).

B. Effect. Permits continued under this Section remain fully effective and enforceable.

C. Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit, the administrative authority may choose to do any or all of the following:

1. initiate enforcement action based upon the permit which has been continued;

2. issue a notice of intent to deny the new permit under LAC 33:V.703.C.2. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

3. issue a new permit under LAC 33:V.303 with appropriate conditions; or

4. take other actions authorized by these regulations.

D. An EPA issued permit does not continue in force beyond its expiration date under federal law if at that time a state is the permitting authority. States authorized to administer the RCRA program may continue either EPA or state-issued permits until the effective date of the new permits.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:220 (March 1990), LR 20:1000 (September 1994).

§317. Availability and Retention of Records

A. The administrative authority or his representative, upon presentation of proper credentials, shall have access to the premises of all facilities permitted and to all pertinent records, and shall have the right to take samples from any facility or waste stream covered under this permit, as provided in R.S. 30:2012.

B. File copies of all manifests, annual reports, exception reports, waste tests or analyses, and other logs or records required hereunder shall be kept for department inspection for a period of not less than three years from date of completion or receipt, whichever is later.

C. Any information provided to the administrative authority will be made available to the public to the extent and in the manner authorized by the Freedom of Information Act except as provided otherwise in LAC 33:V.319.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990).

§319. Confidentiality

Information submitted as part of the permit application relating to proprietary processes or systems may be held confidential by the administrative authority in response to the following actions:

A. Any information submitted pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form, or instructions, or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the administrative authority may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with procedures in which the fullest possible disclosure of records to the public consistent with the rights of individuals to privacy and the rights of persons in business information entitled to confidential treatment will be made.

B. An indication of the degree of harm to the operator if this information is made public.

C. A determination by the administrative authority that the operator's request meets requirements of the Act relating to confidentiality of information.

D. Claims of confidentiality for the name and address of any permit applicant or permittee will be denied.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:84 (February 1987).

§321. Modification of Permits

A. Any proposed major modification of a facility or a site, any change in wastes handled in either volume or composition, any other change in the site, facility, or operations which materially deviates from a permit or materially increases danger to the public health or the environment, and any operator or ownership change must be reported in writing to the administrative authority prior to such an occurrence and a permit modification must be obtained in accordance with the application, public notice, and permit requirements of this Chapter. The administrative authority may approve an ownership change (transfer of permit) based on the following factors:

1. assumption of liability for existing violations;

2. financial responsibility; and

3. managerial competence.

B. Transfer of Permits

1. A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued under LAC 33:V.321.B.2 or 323.B.2 to identify the new permittee and incorporate such other requirements as may be necessary.

2. Changes in the ownership or operational control of a facility may be made as a Class 1 modification with prior written approval of the administrative authority in accordance with LAC 33:V.321.C. The new owner or operator must submit a revised permit application no later than 90 days prior to the scheduled change. A written agreement containing a specific date for transfer of permit responsibility between the current and new permittees must also be submitted to the administrative authority. When a transfer of ownership or operational control occurs, the old owner or operator shall comply with the requirements of LAC 33:V.Chapter 37 (Financial Requirements) until the new owner or operator has demonstrated that he or she is complying with the requirements of LAC 33:V.Chapter 37. The new owner or operator must demonstrate compliance with LAC 33:V.Chapter 37 requirements within six months of the date of the change of ownership or operational control of the facility. Upon demonstration to the administrative authority by the new owner or operator of compliance with LAC 33:V.Chapter 37, the administrative authority shall notify the old owner or operator that he or she no longer needs to comply with LAC 33:V.Chapter 37 as of the date of demonstration.

C. Permit Modification at the Request of the Permittee

1. Class 1 Modifications

a. Except as provided in LAC 33:V.321.C.1.b, the permittee may put into effect Class 1 modifications listed in LAC 33:V.322 under the following conditions:

i. The permittee must notify the administrative authority concerning the modification by certified mail or other means that establish proof of delivery within seven calendar days after the change is put into effect. This notice must specify the changes being made to permit conditions or supporting documents referenced by the permit and must explain why they are necessary. Along with the notice, the permittee must provide the applicable information required by LAC 33:V.515-533, 2707, and 3115.

ii. The permittee must send a notice of the modification to all persons on the facility mailing list, maintained by the administrative authority in accordance with LAC 33:V.717.A.5, and the appropriate units of state and local government, as specified in LAC 33:V.717.A.2 and 4. This notification must be made within 90 calendar days after the change is put into effect. For the Class 1 modifications that require prior administrative authority approval, the notification must be made within 90 calendar days after the administrative authority approves the request.

iii. Any person may request that the administrative authority review, and the administrative authority may for cause reject, any Class 1 modification. The administrative authority must inform the permittee by certified mail that a Class 1 modification has been rejected, explaining the reasons for the rejection. If a Class 1 modification has been rejected, the permittee must comply with the original permit conditions.

b. Class 1 permit modifications identified in LAC 33:V.322 by a superscript "1" may be made only with the prior written approval of the administrative authority.

c. For a Class 1 permit modification, the permittee may elect to follow the procedures in LAC 33:V.321.C.2 for Class 2 modifications instead of the Class 1 procedures. The permittee must inform the administrative authority of this decision in the notice required in LAC 33:V.321.C.2.a.

2. Class 2 Modifications

a. For Class 2 modifications, listed in LAC 33:V.322, the permittee must submit a modification request to the administrative authority that:

i. describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

ii. identifies the modification as a Class 2 modification;

iii. explains why the modification is needed; and

iv. provides the applicable information required by LAC 33:V.515-533, 2707, and 3115.

b. The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the administrative authority and to the appropriate units of state and local government as required in LAC 33:V.717.A.2 and must publish this notice in a major local newspaper of general circulation. This notice must be mailed and published within seven days before or after the date of submission of the modification request, and the permittee must provide to the administrative authority evidence of the mailing and publication. The notice must include:

i. announcement of a 60-day comment period, in accordance with LAC 33:V.321.C.2.e, and the name and address of a department contact to whom comments must be sent;

ii. announcement of the date, time, and place for a public meeting held in accordance with LAC 33:V.321.C.2.d;

iii. name and telephone number of the permittee's contact person;

iv. name and telephone number of a department contact person;

v. location where copies of the modification request and any supporting documents can be viewed and copied; and

vi. the following statement: "The permittee's compliance history during the life of the permit being modified is available from the department contact person."

c. The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

d. The permittee must hold a public meeting no earlier than 15 days after the publication of the notice required in LAC 33:V.321.C.2.b and no later than 15 days before the close of the 60-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

e. The public shall be provided 60 days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department contact identified in the public notice.

f. No later than 90 days after receipt of the notification request, the administrative authority must do one of the following:

i. approve the modification request with or without changes, and modify the permit accordingly;

ii. deny the request;

iii. determine that the modification request must follow the procedures in LAC 33:V.321.C.3 for Class 3 modifications for the following reasons:

(a). there is significant public concern about the proposed modification; or

(b). the complex nature of the change requires the more extensive procedures of Class 3;

iv. approve the request, with or without changes, as a temporary authorization having a term of up to 180 days;

v. notify the permittee that the administrative authority will decide the request within the next 30 days.

g. If the administrative authority notifies the permittee of a 30-day extension for a decision, the administrative authority must, no later than 120 days after receipt of the modification request, take one of the following actions:

i. approve the modification request, with or without changes, and modify the permit accordingly;

ii. deny the request;

iii. determine that the modification request must follow the procedures in LAC 33:V.321.C.3 for Class 3 modifications for the following reasons:

(a). there is significant public concern about the proposed modification; or

(b). the complex nature of the change requires the more extensive procedures of Class 3;

iv. approve the request, with or without changes, as a temporary authorization having a term of up to 180 days.

h. If the administrative authority fails to make one of the decisions specified in LAC 33:V.321.C.2.g by the 120th day after receipt of the modification request, the permittee is automatically authorized to conduct the activities described in the modification request for up to 180 days, without formal department action. The authorized activities must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of LAC 33:V.Chapter 43. If the administrative authority approves, with or without changes, or denies the modification request during the term of the temporary or automatic authorization provided for in LAC 33:V.321.C.2.f, g, and h, such action cancels the temporary or automatic authorization.

~~i. In the case of an automatic authorization under LAC 33:V.321.C.2.h, or a temporary authorization under LAC 33:V.321.C.2.f.iv or C.2.g.iv, if the administrative authority has not made a final approval or denial of the modification request by the date 50 days prior to the end of the temporary or automatic authorization, the permittee must within seven days of that time send a notification to persons on the facility mailing list, and make a reasonable effort to notify other persons who submitted written comments on the modification request, that the permittee has been authorized temporarily to conduct the activities described in the permit modification request.~~

j. If the owner/operator fails to notify the public by the date specified in LAC 33:V.321.C.2.i, the effective date of the permanent authorization will be deferred until 50 days after the owner/operator notifies the public.

k. Except as provided in LAC 33:V.321.C.2.m, if the administrative authority does not finally approve or deny a modification request before the end of the automatic or temporary authorization period or reclassify the modification as a Class 3, the permittee is authorized to conduct the activities described in the permit modification request for up to 180 days. The activities authorized under this Subsection must be conducted as described in the permit modification request and must be in compliance with all appropriate standards of LAC 33:V.Chapter 43.

l. In making a decision to approve or deny a modification request, including a decision to issue a temporary authorization or to reclassify a modification as a Class 3, the administrative authority must consider all written comments submitted to the department during the public comment period and must respond in writing to all significant comments in his or her decision.

m. With the written consent of the permittee, the administrative authority may extend indefinitely or for a specified period the time periods for final approval or denial of a modification request or for reclassifying a modification as a Class 3.

n. The administrative authority may deny or change the terms of a Class 2 permit modification request under LAC 33:V.321.C.2.f-h for the following reasons:

i. the modification request is incomplete;

ii. the requested modification does not comply with the appropriate requirements of LAC 33:V.Chapters 9, 15, 17,

19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37 or other applicable requirements;

iii. the conditions of the modification fail to protect human health and the environment.

o. The permittee may perform any construction associated with a Class 2 permit modification request beginning 60 days after the submission of the request unless the administrative authority establishes a later date for commencing construction and informs the permittee in writing before day 60.

3. Class 3 Modifications

a. For Class 3 modifications listed in LAC 33:V.322, the permittee must submit a modification request to the administrative authority that:

i. describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

ii. identifies the modification as a Class 3 modification;

iii. explains why the modification is needed; and

iv. provides the applicable information required by LAC 33:V.515-535, 537, 2707, and 3115.

b. The permittee must send a notice of the modification request to all persons on the facility mailing list maintained by the administrative authority and to the appropriate units of state and local government as required in LAC 33:V.717.A.2 and must publish this notice in a major local newspaper of general circulation. This notice must be mailed and published within seven days before or after the date of submission of the modification request, and the permittee must provide to the administrative authority evidence of the mailing and publication. The notice must include:

i. announcement of a 60-day comment period, and a name and address of a department contact to whom comments must be sent;

ii. announcement of the date, time, and place for a public meeting on the modification request, in accordance with LAC 33:V.321.C.3.d;

iii. name and telephone number of the permittee's contact person;

iv. name and telephone number of a department contact person;

v. location where copies of the modification request and any supporting documents can be viewed and copied; and

vi. the following statement: "The permittee's compliance history during the life of the permit being modified is available from the department contact person."

c. The permittee must place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

d. The permittee must hold a public meeting no earlier than 15 days after the publication of the notice required in LAC 33:V.321.C.3.b and no later than 15 days before the close of the 60-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

e. The public shall be provided at least 60 days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments should be submitted to the department contact identified in the notice.

f. After the conclusion of the 60-day comment period, the administrative authority must grant or deny the permit modification request according to the permit modification procedures of LAC 33:V.Chapter 3. In addition, the administrative authority must consider and respond to all significant written comments received during the 60-day comment period.

4. Other Modifications

a. In the case of modifications not explicitly listed in LAC 33:V.322, the permittee may submit a Class 3 modification request to the department, or he or she may request a determination by the administrative authority that the modification should be reviewed and approved as a Class 1 or Class 2 modification. If the permittee requests that the modification be classified as a Class 1 or 2 modification, he or she must provide the department with the necessary information to support the requested classification.

b. The administrative authority shall make the determination described in LAC 33:V.321.C.4.a as promptly as practicable. In determining the appropriate class for a specific modification, the administrative authority shall consider the similarity of the modification to other modifications codified in LAC 33:V.322 and the following criteria:

i. Class 1 modifications apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health and the environment. In the case of Class 1 modifications, the administrative authority may require prior approval.

ii. Class 2 modifications apply to changes that are necessary to enable a permittee to respond, in a timely manner, to:

(a). common variations in the types and quantities of the wastes managed under the facility permit,

(b). technological advancements, and

(c). changes necessary to comply with new regulations, where these changes can be implemented without substantially changing design specifications or management practices in the permit.

iii. Class 3 modifications substantially alter the facility or its operation.

5. Temporary Authorizations

a. Upon request of the permittee, the administrative authority may, without prior public notice and comment, grant the permittee a temporary authorization in accordance with this Paragraph. Temporary authorizations must have a term of not more than 180 days.

b. The permittee may request a temporary authorization for:

i. any Class 2 modification meeting the criteria in LAC 33:V.321.C.5.d.ii, and

ii. any Class 3 modification that meets the criteria in LAC 33:V.321.C.5.d.ii.(a) or (b), or that meets the criteria in LAC 33:V.321.C.5.d.ii.(c)-(e) and provides improved management or treatment of a hazardous waste already listed in the facility permit.

c. The temporary authorization request must include:

i. a description of the activities to be conducted under the temporary authorization;

ii. an explanation of why the temporary authorization is necessary;

iii. sufficient information to ensure compliance with LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37 standards; and

iv. the permittee must send a notice about the temporary authorization request to all persons on the facility mailing list maintained by the administrative authority and to appropriate units of state and local governments. This notification must be made within seven days of submission of the authorization request.

d. The administrative authority shall approve or deny the temporary authorization as quickly as practicable. To issue a temporary authorization, the administrative authority must find the following:

i. the authorized activities are in compliance with the standards of LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37; and

ii. the temporary authorization is necessary to achieve one of the following objectives before action is likely to be taken on a modification request:

(a). to facilitate timely implementation of closure or corrective action activities;

(b). to allow treatment or storage in tanks, containers, or containment buildings in accordance with LAC 33:V.Chapter 22;

(c). to prevent disruption of ongoing waste management activities;

(d). to enable the permittee to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or

(e). to facilitate other changes to protect human health and the environment.

e. A temporary authorization may be reissued for one additional term of up to 180 days provided that the permittee has requested a Class 2 or 3 permit modification for the activity covered in the temporary authorization, and:

i. the reissued temporary authorization constitutes the administrative authority's decision on a Class 2 permit modification in accordance with LAC 33:V.321.C.2.f.iv or C.2.g.iv, or

ii. the administrative authority determines that the reissued temporary authorization involving a Class 3 permit modification request is warranted to allow the authorized activities to continue while the modification procedures of LAC 33:V.321.C.3 are conducted.

6. Public Notice and Appeals of Permit Modification Decisions

a. The administrative authority shall notify persons on the facility mailing list and appropriate units of state and local government within 10 days of any decision under this Subsection to grant or deny a Class 2 or 3 permit modification request. The administrative authority shall also notify such persons within 10 days after an automatic authorization for a Class 2 modification goes into effect under LAC 33:V.321.C.2.h or k.

b. The administrative authority's decision to grant or deny a Class 2 or 3 permit modification request under this Subsection may be appealed under the permit appeal procedures of R.S. 30:2024.

c. An automatic authorization that goes into effect under LAC 33:V.321.C.2.h or k may be appealed under the permit appeal procedures of R.S. 30:2024; however, the permittee may continue to conduct the activities pursuant to the automatic authorization until the appeal has been granted pursuant to R.S. 30:2024, notwithstanding the provisions of LAC 33:V.705.B.2.

7. Newly Listed or Identified Wastes

a. The permittee is authorized to continue to manage wastes listed or identified as hazardous under LAC

33:V.Chapter 49, or to continue to manage hazardous waste ... units newly regulated as hazardous waste management units, ...e or she:

i. manages them at a facility that was in existence as a hazardous waste facility with respect to the newly listed or characterized waste or newly regulated waste management unit on the effective date of the final rule listing or identifying the waste, or regulating the unit;

ii. submits a Class 1 modification request on or before the date on which the waste or unit becomes subject to the new requirements;

iii. is in compliance with the standards of LAC 33:V.Chapters 41 and 43;

iv. also submits a complete Class 2 or 3 permit modification request within 180 days after the effective date of the rule listing or identifying the waste, or subjecting the unit to RCRA Subtitle C management standards; and

v. in the case of land disposal units, certifies that such unit is in compliance with all applicable requirements of LAC 33:V.4369 and 4397-4413 on the date 12 months after the effective date of the rule identifying or listing the waste as hazardous, or regulating the unit as a hazardous waste management unit. If the owner or operator fails to certify compliance with these requirements, he or she shall lose authority to operate under this Subsection.

b. New wastes or units added to a facility's permit under this Paragraph do not constitute expansions for the purpose of the 25 percent capacity expansion limit for Class 2 modifications.

8. Permit Modification List. The administrative authority must maintain a list of all approved permit modifications and must publish a notice once a year in a statewide newspaper that an updated list is available for review.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 15:378 (May 1989), LR 16:614 (July 1990), LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§322. Classification of Permit Modifications

The following is a listing of classifications of permit modifications made at the request of the permittee.

Modifications	Class
A. General Permit Provisions	
1. Administrative and informational changes	1
2. Correction of typographical errors	1
3. Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls)	1
4. Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee:	
a. to provide for more frequent monitoring, reporting, sampling, or maintenance	1
b. other changes	2
5. Schedule of compliance:	
a. changes in interim compliance dates, with prior approval of the administrative authority	[1]1
b. extensions of final compliance date	3
6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the administrative authority	[1]1
7. Changes in ownership or operational control of a facility, provided the procedures of LAC 33:V.321.B.2 are followed	[1]1

Modifications	Class
B. General Facility Standards	
1. Changes to waste sampling or analysis methods:	
a. to conform with agency guidance or regulations	1
b. to incorporate changes associated with F039 (multi-source leachate) sampling or analysis methods	[1]1
c. to incorporate changes associated with underlying hazardous constituents in ignitable or corrosive wastes	[1]1
d. other changes	2
2. Changes to analytical quality assurance/control plan:	
a. to conform with agency guidance or regulations	1
b. other changes	2
3. Changes in procedures for maintaining the operating record	1
4. Changes in frequency or content of inspection schedules	2
5. Changes in the training plan:	
a. that affect the type or decrease the amount of training given to employees	2
b. other changes	1
6. Contingency plan:	
a. changes in emergency procedures (i.e., spill or release response procedures)	2
b. replacement with functionally equivalent equipment, upgrading, or relocation of emergency equipment listed	1
c. removal of equipment from emergency equipment list	2
d. changes in names, addresses, or phone numbers of coordinators or other persons or agencies identified in the plan	1
7. Construction quality assurance plan:	
a. Changes that the CQA officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design specifications	1
b. Other changes	2
Note: When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change shall be reviewed under the same procedures as the permit modification.	
C. Groundwater Protection	
1. Changes to wells:	

Modifications	Class
a. changes in the number, location, depth, or design of upgradient or downgradient wells of a permitted groundwater monitoring system	2
b. replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well	1
2. Changes in groundwater sampling or analysis procedures or monitoring schedule, with prior approval of the administrative authority	[1]1
3. Changes in the statistical procedure for determining whether a statistically significant change in groundwater quality between the upgradient and downgradient wells has occurred, with prior approval of the administrative authority	[1]1
4. Changes in point of compliance	[1]1
5. Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs):	
a. as specified in the groundwater protection standard	3
b. as specified in the detection monitoring program	2
6. Changes to a detection monitoring program as required by LAC 33:V.3317, unless otherwise specified in this Section	2
7. Compliance monitoring program:	
a. addition of compliance monitoring program as required by LAC 33:V.3317 and 3319	3
b. changes to a compliance monitoring program as required by LAC 33:V.3319, unless otherwise specified in this Section	2
8. Corrective action program:	
a. addition of a corrective action program as required by LAC 33:V.3319.I.2, 3321 and 3322	3
b. changes to a corrective action program as required by LAC 33:V.3321.H, unless otherwise specified in this Section	2
D. Closure	
1. Changes to the closure plan:	
a. changes in the estimate of the maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the administrative authority	[1]1
b. changes in the closure schedule for any unit, changes in the final closure schedule for the facility, or extension of the closure period, with prior approval of the administrative authority	[1]1

Modifications	Class
c. changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the administrative authority	[1]1
d. changes in procedures for decontamination of facility equipment or structures, with prior approval of the administrative authority	[1]1
e. changes in the approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this Section	2
2. Creation of a new landfill unit as part of the closure	3
3. Addition of the following new units to be used temporarily for closure activities:	
a. surface impoundments	3
b. incinerators	3
c. waste piles that do not comply with LAC 33:V.2301.C	3
d. waste piles that comply with LAC 33:V.2301.C	2
e. tanks or containers (other than specified in LAC 33:V.322.D.3.f)	2
f. tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the administrative authority	[1]1
E. Post-closure	
1. Changes in the name, address, or phone number of the contact for the post-closure plan	1
2. Extension of the post-closure care period	2
3. Reduction of the post-closure care period	3
4. Changes to the expected year of final closure, where other permit conditions are not changed	1
5. Changes in the post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure	2
F. Containers	
1. Modification or addition of container units:	
a. resulting in greater than 25 percent increase in the facility's container storage capacity, except as provided in LAC 33:V.322.F.1.c and F.4.a below	3
b. resulting in up to 25 percent increase in the facility's container storage capacity, except as provided in LAC 33:V.322.F.1.c and F.4.a below	2

Modifications	Class
c. or treatment processes necessary to treat wastes that are prohibited from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in LAC 33:V.Chapter 22, with prior approval of the administrative authority. This modification may also involve addition of new waste codes or narrative descriptions of wastes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027 and 028)	[1]1
2. Other container modifications:	
a. modification of a container unit without increasing the capacity of the unit	2
b. addition of a roof to a container unit without alteration of the containment system	1
3. Storage of different wastes in containers, except as provided in LAC 33:V.322.F.4:	
a. that require additional or different management practices from those authorized in the permit	
b. that do not require additional or different management practices from those authorized in the permit	2
Note: See LAC 33:V.321.C.7 for modification procedures to be used for the management of newly listed or identified wastes.	
4. Storage or treatment of different wastes in containers:	
a. that require addition of units or a change in treatment process or management standards, provided that the wastes are prohibited from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that they are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in LAC 33:V.Chapter 22. This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	[1]1
b. that do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	1
G. Tanks	
1. Modification or addition of tank units:	

Modifications	Class
a. modification or addition of tank units resulting in greater than 25 percent increase in the facility's tank capacity, except as provided in LAC 33:V.322.G.1.c, G.1.d, and G.1.e	3
b. modification or addition of tank units resulting in up to 25 percent increase in the facility's tank capacity, except as provided in LAC 33:V.322.G.1.d and G.1.e	2
c. addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation	2
d. after prior approval of the administrative authority, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation or component separation	[1]1
e. modification or addition of tank units or treatment processes necessary to treat wastes that are prohibited from land disposal to meet some or all of the applicable treatment standards, or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in LAC 33:V.Chapter 22, with prior approval of the administrative authority. This modification may also involve addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028).	[1]1
2. Modification of a tank unit or secondary containment system without increasing the capacity of the unit	2
3. Replacement of a tank with a tank that meets the same design standards and has a capacity within ± 10 percent of that of the replaced tank, provided that:	
a. the capacity difference is not more than 1,500 gallons	1
b. the facility's permitted tank capacity is not increased, and	1
c. the replacement tank meets the same conditions in the permit	1
4. Modification of a tank management practice	2
5. Management of different wastes in tanks:	
a. that require additional or different management practices, tank design, different fire protection specifications, or a significantly different tank treatment process than that authorized in the permit, except as provided in LAC 33:V.322.G.5.c below	3

Modifications	Class
b. that do not require additional or different management practices or tank design, different fire protection specifications, or a significantly different tank treatment process than that authorized in the permit, except as provided in LAC 33:V.322.G.5.d	2
c. that require the addition of units or a change in treatment processes or management standards, provided that the wastes are prohibited from land disposal and are to be treated to meet some or all of the applicable treatment standards or that they are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in LAC 33:V.Chapter 22. The modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	[1]1
d. that do not require the addition of units or a change in the treatment process or management standards and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027 and 028)	1
Note: See LAC 33:V.321.C.7 for modification procedures to be used for the management of newly listed or identified wastes.	
H. Surface Impoundments	
1. Modification or addition of surface impoundment units that results in increasing the facility's surface impoundment storage or treatment capacity	3
2. Replacement of a surface impoundment unit	3
3. Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system, or leachate collection system	2
4. Modification of a surface impoundment management practice	2
5. Treatment, storage, or disposal of different wastes in surface impoundments:	
a. that require additional or different management practices or different design of the liner or leak detection system than is authorized in the permit.	3
b. that do not require additional or different management practices or different design of the liner or leak detection system than is authorized in the permit	2

Modifications	Class
c. that are wastes prohibited from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in LAC 33:V.Chapter 22, and provided that the unit meets the minimum technological requirements stated in LAC 33:V.2239. This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	1
d. that are residues from wastewater treatment or incineration, provided that disposal occurs in a unit that meets the minimum technological requirements stated in LAC 33:V.2239, and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	1
6. Modifications of unconstructed units to comply with LAC 33:V.2903.J, 2904, 2906, and 2907.E	[1]1
7. Changes in response action plan:	
a. Increase in action leakage rate	3
b. Change in a specific response reducing its frequency or effectiveness	3
c. Other changes	2
Note: See LAC 33:V.321.C.7 for modification procedures to be used for the management of newly listed or identified wastes.	
I. Enclosed Waste Piles. For all waste piles except those complying with LAC 33:V.2301.C, modifications are treated the same as for a landfill. The following modifications are applicable only to waste piles complying with LAC 33:V.2301.C.	
1. Modification or addition of waste pile units:	
a. resulting in greater than 25 percent increase in the facility's waste pile storage or treatment capacity	3
b. resulting in up to 25 percent increase in the facility's waste pile storage or treatment capacity	2
2. Modification of waste pile unit without increasing the capacity of the unit	2
3. Replacement of a waste pile unit with another waste pile unit of the same design and capacity that meets all waste pile conditions in the permit	1
4. Modification of a waste pile management practice	2
5. Storage or treatment of different wastes in waste piles:	

Modifications	Class
a. that require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system	3
b. that do not require additional or different management practices, different design of the liner, leachate collection system or leachate detection system	2
6. Conversion of an enclosed waste pile to a containment building unit.	2
Note: See LAC 33:V.321.C.7 for modification procedures to be used for the management of newly listed or identified wastes.	
J. Landfills and Unenclosed Waste Piles	
1. Modification or addition of landfill units that results in increasing the facility's disposal capacity	3
2. Replacement of a landfill	3
3. Addition or modification of a liner, leachate collection system, leachate detection system, run-off control, or final cover system	3
4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, run-off control, or final cover system	2
5. Modification of a landfill management practice	2
6. Landfill different wastes:	
a. that require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system	3
b. that do not require additional or different management practices, different design of the liner, leachate detection system, or leachate detection system	2
c. that are wastes prohibited from land disposal that meets the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in LAC 33:V.Chapter 22, and provided that the landfill unit meets the minimum technological requirements stated in LAC 33:V.2239. This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027, and 028)	1
d. that are residues from the wastewater treatment or incineration, provided that disposal occurs in a landfill unit that meet the minimum technological requirements stated in LAC 33:V.2239, and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, 021, 022, 023, 026, 027 and 028)	1

Modifications	Class
7. Modifications of unconstructed units to comply with LAC 33:V.2303.C, 2304, 2306, 2309.C, 2503.L, 2504, 2507.D, and 2508.	[1]1
8. Changes in response action plan:	
a. Increase in action leakage rate	3
b. Change in a specific response reducing its frequency or effectiveness	3
c. Other changes	2
Note: See LAC 33:V.321.C.7 for modification procedures to be used for the management of newly listed or identified wastes.	
K. Land Treatment	
1. Lateral expansion of or other modification of a land treatment unit to increase areal extent	3
2. Modification of a run-on control system	2
3. Modification of a run-off control system	3
4. Other modifications of land treatment unit component specifications or standards required in the permit	2
5. Management of different wastes in land treatment units:	
a. that require a change in permit operating conditions or unit design specifications	3
b. that do not require a change in permit operating conditions or unit design specifications	2
Note: See LAC 33:V.321.C.7 for modification procedures to be used for the management of newly listed or identified wastes.	
6. Modification of a land treatment unit management practice to:	
a. increase the rate or change the method of waste application	3
b. decrease the rate of waste application	1
7. Modification of a land treatment unit management practice to change measures of pH or moisture content, or to enhance microbial or chemical reactions	2
8. Modification of a land treatment unit management practice to grow food chain crops, to add to or replace existing permitted crops with different food chain crops, or to modify operating plans or distribution of animal feeds resulting from such crops	3
9. Modification of operating practice due to detection of releases from the land treatment unit pursuant to LAC 33:V.2711.G.2	3

Modifications	Class
10. Changes in the unsaturated zone monitoring system resulting in a change to the location, depth, or number of sampling points, or replacement of unsaturated zone monitoring devices or components of devices with devices or components that have specifications different from permit requirements	3
11. Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, or number of sampling points, or that replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements	2
12. Changes in background values for hazardous constituents in soil and soil-pore liquid	2
13. Changes in sampling, analysis, or statistical procedure	2
14. Changes in the land treatment demonstration program prior to or during the demonstration	2
15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the administrative authority's prior approval has been received	[1]1
16. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the administrative authority.	[1]1
17. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration	3
18. Changes in vegetative cover requirements for closure	2
L. Incinerators	
1. Changes to increase by more than 25 percent any of the following limits authorized in the permit: a thermal feed rate limit, a waste feed rate limit, or an organic chlorine feed rate limit. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3

Modifications	Class
2. Changes to increase by up to 25 percent any of the following limits authorized in the permit: a thermal feed rate limit, a waste feed limit, or an organic chlorine feed rate limit. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	2
3. Modification of an incineratory unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HCl or particulate from the combustion gases, or by changing other features of the incinerator that could affect its capability to meet the regulatory performance standards. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3
4. Modification of an incinerator unit in a manner that would not be likely to affect the capability of the unit to meet the regulatory performance standards but that would change the operating conditions or monitoring requirements specified in the permit. The administrative authority may require a new trial burn to demonstrate compliance with the regulatory performance standards	2
5. Operating requirements:	
a. modification of the limits specified in the permit for minimum combustion gas temperature, minimum combustion gas residence time, or oxygen concentration in the secondary combustion chamber. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3
b. modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls	3
c. modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit	2
6. Incineration of different wastes:	

Modifications	Class
a. if the waste contains a POHC that is more difficult to incinerate than authorized by the permit or if incineration of the waste requires compliance with different regulatory performance standards than specified in the permit. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means	3
b. if the waste does not contain a POHC that is more difficult to incinerate than authorized by the permit and if incineration of the waste does not require compliance with different regulatory performance standards than specified in the permit	2
Note: See LAC 33:V.321.C.7 for modification procedures to be used for the management of newly listed or identified wastes.	
7. Shakedown and trial burn:	
a. modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period, or the period immediately following the trial burn	2
b. authorization of up to an additional 720 hours of waste incineration during the shakedown period for determining operational readiness after construction, with the prior approval of the administrative authority	[1]1
c. changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor and has received the prior approval of the administrative authority	[1]1
d. changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor and has received the prior approval of the administrative authority	[1]1
8. Substitution of an alternate type of fuel that is not specified in the permit	2
M. Containment Buildings	
1. Modification or addition of containment building units:	
a. resulting in greater than a 25-percent increase in the facility's containment building storage or treatment capacity	3
b. resulting in up to a 25-percent increase in the facility's containment building storage or treatment capacity	2
2. Modification of containment building unit or secondary containment system without increasing the capacity of the unit	2

Modifications	Class
3. Replacement of a containment building with another containment building of the same design, having no increased capacity and that meets all containment building conditions in the permit	1
4. Modification of a containment building management practice	2
5. Storage or treatment of different wastes in a containment building:	
a. in which those wastes require additional or different management practices	3
b. in which those wastes do not require additional or different management practices or different design of the unit	2
N. Corrective Action:	
1. Approval of a corrective action management unit in accordance with LAC 33:V.2601	3
2. Approval of a temporary unit or time extension for a temporary unit in accordance with LAC 33:V.2603	2

[1] Class 1 modifications requiring prior administrative authority approval.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:614 (July 1990), LR 17:658 (July 1991), LR 21:266 (March 1995).

§323. Suspension, Modification or Revocation and Reissuance, and Termination of Permits

A. When the administrative authority receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit [see LAC 33:V.309], receives a request for revocation and reissuance under this Section, or conducts a review of the permit file), he or she may determine whether one or more of the causes listed in LAC 33:V.323.B.2.c, and B.3.b for suspension, modification or revocation and reissuance, or termination exist. If cause exists, the administrative authority may suspend, modify or revoke and reissue, or terminate the permit accordingly, subject to the limitations of LAC 33:V.323.A, B.1, B.2.c, d and e, or B.3.b, and may request an updated application, if necessary. Permits may be reviewed for potential modification, suspension, or termination either at the request of any interested person (including the permittee) or upon the administrative authority's initiative. However, permits may be modified, or revoked and reissued, suspended or terminated only for the reasons specified in LAC 33:V.323.A, B.1, B.2.c, and B.3.b, or if the administrative authority receives notification of a proposed transfer of the permit (LAC 33:V.309.L.4). All requests shall be in writing, and shall contain facts or reasons supporting the request.

B. If the administrative authority decides the request is not justified, he or she shall send the requester a brief written response giving a reason for the decision. Denials of requests for modification, revocation and reissuance, or termination are not subject to public notice, comment, or hearings. Denials by the administrative authority may be appealed to the Department of Environmental Quality (DEQ) in accordance with Act 97 of 1983.

1. Suspension

a. The administrative authority may temporarily suspend the operator's right to accept additional hazardous waste to treat, store, or dispose of until violations are corrected. If violations are corrected, the administrative authority may lift the enforcement. Suspension of a permit and/or subsequent corrections of the causes of the suspension by the permittee shall not preclude the administrative authority from terminating the permit, if necessary. The administrative authority shall give notice to the operator, by registered mail, return receipt requested, of violation of the permit or act, listing the specific violations. If the operator fails to comply with this notice by correcting the cited violations within 30 days from date of notice, the administrative authority may issue an order requiring compliance within a specified time, or may commence a civil action in the district court in the parish in which the violation occurred for appropriate relief,

including a temporary or permanent injunction. If the operator fails to take corrective action within the time specified in the order, the administrative authority shall assess a civil penalty, and may suspend or terminate the permit, all pursuant to LAC 33:V.Chapter 1 of these regulations and the Act.

b. For major infractions of the terms of the permit, the administrative authority may suspend the permit and require;

i. the operator to cease accepting hazardous waste or contracting for its treatment, storage, or disposal; or

ii. the operator to agree to a caretaker management of operations involving wastes which are being treated, stored, or have been disposed of on-site. The caretaker management shall be selected by the administrative authority from the following:

(a). operator's personnel acting under supervision of the administrative authority; or

(b). independent management firm operating under administrative authority supervision; or

(c). state operation.

iii. the total cost of the caretaker management shall be borne by the operator, by revenues from operation, or by calling upon the closure fund set up for this purpose;

iv. if the operator does not voluntarily agree to the caretaker management, appropriate legal action shall be taken by the administrative authority to institute the management operations to protect the public interest;

v. after exhausting all other remedies, the administrative authority shall request the attorney general to secure court authority to close the site, using closure funds for this purpose.

c. The operator may request reconsideration of the suspension order. The request shall stipulate the form requested: i.e., a staff conference, a public hearing, or an adjudicatory hearing.

2. Modification or Revocation and Reissuance

a. If the administrative authority tentatively decides to modify or revoke and reissue a permit under LAC 33:V.321.C.3 or 323, he or she shall prepare a draft permit under LAC 33:V.703.C incorporating the proposed changes. The administrative authority may request additional information and, in the case of a modified permit, may require the submission of an updated permit application. In the case of revoked and reissued permits, the administrative authority shall require the submission of a new application. When a permit is modified, only the conditions subject to modification are reopened. When a permit is revoked and reissued, the entire permit is reopened and subject to revision, and the permit is reissued for a new term.

b. If a permit modification is requested by the permittee, the administrative authority shall approve or deny the request according to the procedures of LAC 33:V.321.C. Otherwise, a draft permit must be prepared and other procedures followed.

c. The following are causes for modification, but not revocation and reissuance, suspension or termination of permits. The following may be causes for revocation and reissuance, as well as modification, when the permittee requests or agrees.

i. material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

ii. the administrative authority has received information that justifies the application of different permit conditions;

iii. the standards or regulations on which the permit was based have been changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision after the permit was issued. The owner or operator may request a permit modification for this cause only as follows:

(a). For promulgation of amended standards or regulations, when the administrative authority has revised, withdrawn, or modified that portion of the regulation or on which the permit condition was based, or has approved a state action with regard to standards on which the permit condition was based, and a permittee requests modification in accordance with LAC 33:V.323 within 90 days after notice of the action on which the request is based.

(b). For judicial decisions, a court of competent jurisdiction has remanded and stayed promulgated regulations, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based, and a request is filed by the permittee in accordance with LAC 33:V.323 within 90 days of judicial remand.

iv. the administrative authority determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, materials shortage, or other events over which the permittee has little or no control, and for which there is no reasonably available remedy.

d. Notwithstanding any other provision in this Section, when a permit for a land disposal facility is reviewed by the administrative authority under LAC 33:V.315, the administrative authority shall modify the permit as necessary to assure that the facility continues to comply with the currently applicable requirements in LAC 33:V.Subpart 1.

~~c. Suitability of the facility location will not be considered a cause for permit modification unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance.~~

~~3. Termination~~

a. If the administrative authority tentatively decides to terminate a permit under LAC 33:V.323.C.2, he shall issue a notice of intent to terminate. A notice of intent to terminate is a type of draft permit which follows the same procedures as any draft permit prepared under LAC 33:V.703.C. If a permit is terminated, the entire permit is reopened and subject to revision before the permit can be reissued for a new term.

b. The administrative authority may terminate a permit during its term or deny a permit renewal application for the following causes:

i. noncompliance by the permittee with any condition of the permit;

ii. the permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

iii. a determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by termination; or

iv. the administrative authority has received notification of a proposed transfer of the permit (see LAC 33:V.309.L.4).

c. The operator may request reconsideration of the termination order. The request shall stipulate the forum requested: i.e., a staff conference, a public hearing, or an adjudicatory hearing.

4. For major infractions of the terms of the permit, the administrative authority shall terminate the permit and require:

a. the operator to cease accepting hazardous waste or contracting for its treatment, storage, or disposal; or

b. the operator to agree to a caretaker management of operations involving wastes which are being treated, stored, or have been disposed of on-site. The caretaker management shall be selected by the administrative authority from the following:

i. operator's personnel acting under supervision of the administrative authority; or

ii. independent management firm operating under administrative authority supervision; or

iii. state operation.

5. The total cost of the caretaker management shall be borne by the operator, by revenues from operation, or by calling upon the closure fund set up for this purpose.

6. If the operator does not voluntarily agree to the caretaker management, appropriate legal action shall be taken by the administrative authority to institute the management operations to protect the public interest.

7. After exhausting all other remedies, the administrative authority shall request the attorney general to secure court authority to close the site, using closure funds for this purpose.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 14:790 (November 1988), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 18:1256 (November 1992), LR 20:1109 (October 1994).

§325. Compliance Schedule for Facilities Existing on the Effective Date of these Regulations

A. Applicability

1. The permit may, when appropriate, specify a schedule of compliance leading to compliance with the Act and any other regulations. Any schedules of compliance shall require compliance as soon as possible.

2. If a permit establishes a schedule of compliance which exceeds one year from the date of permit issuance, the schedule shall set forth interim requirements and the dates, except that:

a. the time between interim dates shall not exceed one year; or

b. if the time necessary for completion of any interim requirement is more than one year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date; and

c. the permit shall be written to require that no later than 14 days following such interim date and the final date of compliance, the permittee shall notify the administrative authority in writing of its compliance or noncompliance with the interim or final requirements. Surface facilities for hazardous waste UIC wells shall be written to require schedules of compliance not later than one year after the effective date of the permit.

B. Alternate Schedules of Compliance. A permit applicant or permittee may cease conducting regulated activities rather than continue to operate and meet permit requirements as follows:

1. If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

a. the permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

b. the permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

2. If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will insure timely compliance with applicable requirements.

3. If the permittee is undecided whether to cease conducting regulated activities, the administrative authority may issue or modify a permit to contain two schedules as follows:

a. both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner, if the decision is to continue conducting regulated activities;

b. one schedule shall lead to timely compliance with all applicable requirements; and the second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with all applicable requirements; and

c. each permit containing two schedules shall include a requirement that after the permittee has made a final decision under this Section, it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

4. The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the administrative authority, such as a resolution of the board of directors of a corporation.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

~~§327. Fees~~

Fees are established by fee system rules and regulations of the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§329. Research, Development, and Demonstration Permits

A. The administrative authority may issue a research, development, and demonstration permit for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which permit standards for such experimental activity have not been promulgated under LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 30, 31, 32, 33, 35, 37, or 41. Any such permit shall include such terms and conditions as will assure protection of human health and the environment. Such permits:

1. shall provide for the construction of such facilities as necessary, and for operation of the facility for not longer than one year unless renewed as provided in LAC 33:V.329.D;

2. shall provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the administrative authority deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment; and

3. shall include such requirements as the administrative authority deems necessary to protect human health and the environment (including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure and remedial action), and such requirements as the administrative authority deems necessary regarding testing and providing of information to the administrative authority with respect to the operation of the facility.

B. For the purpose of expediting review and issuance of permits under this Section, the administrative authority may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements in LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43 except that there may be no modification or waiver of regulations regarding financial responsibility (including insurance) or of procedures regarding public participation.

C. The administrative authority may order an immediate termination of all operations at the facility at any time he determines that termination is necessary to protect human health and the environment.

D. Any permit issued under this Section may be renewed not more than three times. Each such renewal shall be for a period of not more than one year.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 20:1000 (September 1994).

Chapter 5. Permit Application Contents

Subchapter A. General Requirements for Permit Applications

§501. Permit Application

A. Any person who is required to have a permit (including new applicants and permittees with expiring permits) shall complete, sign, and submit a permit application to the administrative authority as described in this Section and LAC 33:V.4301, 4303, and 4305. Persons currently authorized with interim status shall apply for permits when required by the administrative authority. Persons covered by RCRA permits by rule (LAC 33:V.305.D) need not apply. Procedures for applications, issuance, and administration of emergency permits are found exclusively in LAC 33:V.701

and 703. Procedures for application, issuance, and administration of research, development, and demonstration permits are found exclusively in LAC 33:V.329.

B. When a facility or activity is not owned and operated by one person, it is the operator's duty to obtain a permit. The owner must also sign the permit application.

C. Existing Hazardous Waste Management Facilities and Interim Status Qualifications

1. Owners and operators of existing hazardous waste management facilities or of hazardous waste management facilities in existence on the effective date of statutory or regulatory amendments under the Act that render the facility subject to the requirement to have a RCRA permit must submit Part I of their permit application no later than:

a. six months after the date of publication of regulations which first require them to comply with LAC 33:V.Chapters 11, 15, 25, 30, 41 or 43; or

b. thirty days after the date they first become subject to the standards set forth in LAC 33:V.Chapters 11, 15, 25, 30, 41, or 43, whichever first occurs.

2. At any time after promulgation of Phase II the owner and operator of an existing hazardous waste management facility may be required to submit Part II of their permit application. The administrative authority may require submission of Part II. Any owner or operator shall be allowed at least 120 days from the date of request to submit Part II of the application. Any owner or operator of an existing hazardous waste management facility may voluntarily submit Part II of the application at any time. Notwithstanding the above, any owner or operator of an existing hazardous waste management facility must submit a Part II permit application in accordance with the dates specified in LAC 33:V.4305. Any owner or operator of a land disposal facility in existence on the effective date of statutory or regulatory amendments under the Act that render the facility subject to the requirement to have a RCRA permit must submit a Part II application in accordance with the dates specified in LAC 33:V.4305.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

~~§503. Completeness~~

~~The administrative authority shall not issue a permit before receiving a complete application for a permit except for permits by rule (LAC 33:V.305.D) or emergency permits (LAC 33:V.701). An application for a permit is complete when the administrative authority receives an application form and any supplemental information which are completed to his or her satisfaction. The administrative authority may deny a permit for the active life of a hazardous waste management facility or TSD unit before receiving a complete application for the permit. An application for a permit is complete notwithstanding the failure of the owner or operator to submit the exposure information described in this Section.~~

A. Any Part II permit application submitted by an owner or operator of a facility that stores, treats, or disposes of hazardous waste in a surface impoundment or a landfill must be accompanied by information, reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum, such information must address:

1. reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;

2. the potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described under LAC 33:V.503.A.1; and

3. the potential magnitude and nature of the human exposure resulting from such releases.

B. By August 8, 1985, owners and operators of a landfill or a surface impoundment who have already submitted a Part II application must submit the exposure information required in LAC 33:V.503.A.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 17:658 (July 1991), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

§505. Recordkeeping

Applicants shall keep records of all data used to complete permit applications and of any supplemental information submitted under this Chapter, as required in LAC 33:V.309.J.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

Subchapter B. Signatories to Permit Applications and Reports, Changes of Authorizations, and Certifications

§507. Applications

All permit applications shall be signed as follows:

A. for a corporation: by a responsible corporate officer; for the purpose of this Section, a responsible corporate officer means:

1. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decisionmaking functions for the corporation, or

2. the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. for a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

C. for a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 12:319 (May 1986).

§509. Reports

All reports required by permits, and other information requested by the administrative authority shall be signed by a person described in LAC 33:V.507, or by a duly authorized representative of that person. A person is a duly authorized representative only if: the authorization is made in writing by a person described in LAC 33:V.507; and the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position). The written authorization is submitted to the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§511. Changes in Authorization

If an authorization under LAC 33:V.509 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of LAC 33:V.509 must be submitted to the administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§513. Certification

A. Any person signing a document under LAC 33:V.507 or 509 shall make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

B. Certification of an owner who is not the operator: "I certify that I understand that this application is submitted for the purpose of obtaining a permit to operate a hazardous waste management facility on the property as described. As owner of the property/facility, I understand fully that the facility operator and I are jointly and severally responsible for compliance with both LAC 33:V.Subpart 1 and any permit issued pursuant to those regulations." For owners of land disposal facilities, add: "I further understand that I am responsible for providing the notice in the deed to the property required by LAC 33:V.3525."

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

Subchapter C. Permit Applications: Parts I and II

§515. Part I Information Requirements

All applicants for TSD permits shall provide the following information to the administrative authority using the application form provided. Other formatting requirements may be specified by the administrative authority.

1. date of application;

2. EPA identification number;

3. a brief description of the nature of the business;

4. the activities conducted by the applicant which require it to obtain a TSD permit;

5. name, mailing address, and location of the facility for which the application is submitted;

6. the latitude and longitude of the facility and a legal description of the site;

7. up to four SIC codes which best reflect the principal products or services provided by the facility;

8. an indication of whether the facility is new or existing and whether it is a first or revised application;

9. the operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;

10. owner's name, address, and phone number if different from operator's;

11. contact: name of individual to be contacted concerning hazardous waste management;

12. telephone number of contact;

13. whether the facility is located on Indian lands;

14. a listing of all permits or construction approvals received or applied for under any of the following programs:

a. hazardous waste management program;

b. Underground Injection Control (UIC) program;

c. National Pollution Discharge Elimination System (NPDES) program;

d. Prevention of Significant Deterioration (PSD) program under the Federal Clean Air Act;

e. nonattainment program under the Clean Air Act;

f. National Emission Standards for Hazardous Air Pollutants (NESHAP) preconstruction approval under the Clean Air Act;

g. ocean dumping permits under the Marine Protection Research and Sanctuaries Act;

h. dredge or fill permits under Section 404 of the federal Clean Water Act (CWA); or

i. other relevant environmental permits;

15. a topographic map (or other map if a topographic map is unavailable) extending two miles beyond the property boundaries of the facility indicating the following; each hazardous waste treatment, storage, and disposal facility; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant;

16. for existing facilities, a scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas;

17. for existing facilities, photographs of the facility clearly delineating all existing structures; existing treatment, storage, and disposal areas; and sites of future treatment, storage, and disposal areas;

18. a description of the processes to be used for treating, storing, and disposing of hazardous waste, and the design capacity of these items;

19. a specification of the hazardous wastes listed or designated to be treated, stored, or disposed of at the facility; an estimate of the quantity of such wastes to be treated, stored, or disposed of annually; and a general description of the processes to be used for such wastes;

20. status: ownership status of existing site or land for proposed site (federal, state, private, public, other);

21. operation status;

22. list other company hazardous waste operations in Louisiana (permitted or non-permitted and current or abandoned);

23. list other states in which hazardous waste operations are or have been conducted;

24. zoning of site, if applicable;

~~25. for hazardous debris: a description of the debris~~ category(ies) ~~and contaminant category(ies) to be treated, stored, or disposed of at the facility; and~~

26. comments.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

Subchapter D. Part II General Permit Information Requirements

§516. Information Requirements for Solid Waste Management Units

A. The following information is required for each solid waste management unit at a facility seeking a permit:

1. the location of the unit on the topographic map required under LAC 33:V.517.B;

2. designation of type of unit;

3. general dimensions and structural description (supply any available drawings);

4. when the unit was operated; and

5. specification of all waste codes for all hazardous wastes that have been managed at the unit.

6. Details of all ancillary equipment including tanks storing hazardous waste in less than 90-day service and pipes carrying hazardous waste to the injection well(s) must meet the requirements of LAC 33:V.Chapter 19. A certification by an independent Louisiana Registered Professional Engineer must be provided attesting to the adequacy of pipes, valves, and pumps to handle hazardous waste under pressure and to the adequacy of secondary containment provided to meet the requirements of LAC 33:V.Subpart 1.

B. The owner or operator of any facility containing one or more solid waste management units must submit all available information pertaining to any known release of hazardous wastes or hazardous constituents from such unit or units.

C. The owner/operator must conduct and provide the results of sampling and analysis of groundwater, land surface and/or subsurface strata, surface water, and/or air, which may include the installation of wells, if the administrative authority ascertains it is necessary to complete a RCRA Facility Assessment that will determine whether a more complete investigation is necessary. If the owner/operator has an EPA approved RCRA Facility Investigation, the results of this investigation may be provided to the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§517. Part II Information Requirements (the Formal Permit Application)

The formal permit application information requirements presented in this Section reflect the standards promulgated in LAC 33:V.Subpart 1. These information requirements are necessary in order to determine compliance with all standards. Responses and exhibits shall be numbered sequentially according to the technical standards. The permit application must describe how the facility will comply with each of the sections of LAC 33:V.Chapters 15-37 and 41. Information required in the formal permit application shall be submitted to the administrative authority and signed in accordance with requirements in LAC 33:V.509. The description must include appropriate design information (calculations, drawings, specifications, data, etc.) and administrative details (plans, flow charts, decision trees, manpower projections, operating instructions, etc.) to permit the administrative authority to determine the adequacy of the hazardous waste permit application. Certain technical data, such as design drawings, specifications, and engineering studies, shall be certified by a registered professional engineer. If a section does not apply, the permit application must state it does not apply and why it does not apply. This information is to be submitted using the same numbering system and in the same order used in these regulations:

A. a general description of the facility including hours of operation/day and days/week;

B. a topographic map or maps showing a distance of 1,000 feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet); contours must be shown on the map. The contour interval must be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. The map or maps shall clearly show the following:

1. map scale and date;

2. orientation of the map (north arrow);

3. 100-year floodplain area;

[Comment: Owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year floodplain and a flood hazard map (Corps of Engineers or Department of Housing and Urban development). This identification must indicate the source of data for such determination and include a copy of the relevant Federal Insurance Administration (FIA) flood map, if used. Where maps for the National Flood Insurance Program produced by FIA of the Federal Emergency Management Agency are available, they will normally be determinative of whether a facility is located within or outside of the 100-year floodplain. However, where the FIA map excludes an area (usually areas of the floodplain less than 200 feet in width), these areas must be considered and a determination made as to whether they are in the 100-year floodplain. Where FIA maps are not available for a proposed facility location, the owner or operator must use equivalent mapping techniques to determine if the facility is within the 100-year floodplain, and if so located, what the 100-year flood elevation would be.]

4. Surface waters including intermittent streams and surface flow through the site and a map of the potentiometric surface for aquifers within 100 feet of lowest elevation of disposal cells, or other facilities containing hazardous waste, from 1,000 feet upstream to 1,000 feet downstream, where practicable. Included should be a general area map and cross sections indicating the extent of freshwater sands, and the degree of isolation from waste sources by confining layers of clay;

5. surrounding land uses (residential, commercial, agricultural, recreational, public) such as schools, hospitals, libraries, etc.;

[Comment: A map or aerial photograph showing surrounding land use for the area within two miles of the site is required.]

6. legal boundaries of the TSD facility site;

7. access control (fences, gates);

8. injection and withdrawal wells both on site and off site;

[Comment: A map of all known wells, operating or abandoned, on the site and within two miles of the site perimeter as required in LAC 33:V.515.A.15, including the depth of wells, amount of pumpage, water level depth (annual maximum and minimum), and water analysis from the water well nearest the disposal site is also required.]

9. the proposed location of groundwater monitoring wells as required under LAC 33:V.3315.A and B;

10. the proposed "point of compliance" as defined under LAC 33:V.3311;

11. buildings, treatment, storage, or disposal operations; or other structures (recreation areas, runoff control systems, access and internal roads, storm sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, utilities, security facilities, etc.);

12. barriers for drainage or flood control;

13. location of operational units within the TSD facility site, where hazardous waste is (or will be) treated, stored, or disposed of (including equipment cleanup areas). (For large TSD facilities, the administrative authority may allow the use of other scales on a case-by-case basis); and

14. natural features affecting off-site drainage patterns, transportation, utilities, and location of effluent discharges.

C. site layout and facility design when phased construction is planned; the plans must indicate each phase and an accompanying schedule of construction;

D. chemical and physical analyses of the hazardous wastes and the hazardous debris to be handled at the facility which must be known to treat, store, or dispose of the wastes properly;

E. a copy of the waste analysis plan required by LAC 33:V.1519.B;

F. a description of the security procedures (including entry control, hours manned, lighting, monitoring, and other procedures to prevent unauthorized entry) and equipment required by LAC 33:V.1507 or a justification demonstrating the reasons for requesting a waiver of this requirement;

G. a copy of the general inspection schedule required by LAC 33:V.1509.B. Include, where applicable, as part of the inspection schedule, specific requirements in LAC 33:V.1709, 1719, 1721, 1731, 1907.I, 1911, 2109, 2309, 2507, 2703.A-G, 2907, 3119.B and C, and 3205;

H. a justification of any request for a waiver(s) of the preparedness and prevention requirements of LAC 33:V.1511;

I. a copy of the contingency plan required by LAC 33:V.1513 [Note: Include, where applicable, as part of the contingency plan, specific requirements in LAC 33:V.2909];

J. a description of procedures, structures, or equipment used at the facility to:

1. prevent hazards in unloading operations (for example, ramps, special forklifts);

2. prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);

3. monitoring leachate control;

4. prevent contamination of water supplies;

5. monitor water and air pollution affecting area outside site;

6. mitigate effects of equipment failure, power outages, inclement weather, or other abnormal conditions;

7. prevent undue exposure of personnel to hazardous waste (for example, protective clothing);

8. prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with LAC 33:V.1517; and

9. prevent nonpermitted releases to the atmosphere.

K. traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes, if appropriate; describe access road surfacing and load bearing capacity; show traffic control signals);

L. an outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the TSD facility in a safe manner as required to demonstrate compliance with LAC 33:V.1515. A list of general qualifications of key operating positions and a brief description of how training will be designed to meet actual job tasks in accordance with these requirements;

M. a copy of the closure plan and, where applicable, the post-closure plan required by LAC 33:V.3511, 3523, and 1915. Include, where applicable, as part of the plans, specific requirements in LAC 33:V.1915, 2117, 2315, 2521, 2719, 2911, 3121, 3203 and 3207;

N. for hazardous waste disposal units that have been closed, documentation that notices required in LAC 33:V.3517 have been filed;

O. the most recent closure cost estimate for the facility prepared in accordance with LAC 33:V.3705 and a copy of the documentation required to demonstrate financial assurance under LAC 33:V.3707. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part II;

P. where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with LAC 33:V.3709 plus a copy of the documentation required to demonstrate financial assurance under LAC 33:V.3711. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part II;

Q. where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of LAC 33:V.Chapter 37. For a new facility, documentation showing the amount of insurance meeting the specification of LAC 33:V.Chapter 37 that the owner or operator plans to have in effect before initial receipt of hazardous waste for treatment, storage, or disposal;

R. where appropriate, proof of coverage by a state financial mechanism in compliance with LAC 33:V.Chapter 37;

S. a wind rose (i.e., prevailing wind speed and direction) and the source of the information;

T. facility location information:

1. Seismic Standard. In order to determine the applicability of the seismic standard, LAC 33:V.1503.A.3, the owner or operator of the facility must identify the political jurisdiction (e.g., parish, township, or election district) in which the facility is proposed to be located.

a. The owner or operator shall demonstrate compliance with the seismic standard. This demonstration may be made using either published geologic data (including federal hazardous waste regulations) or data obtained from field investigations carried out by the applicant. The information provided must be of such quality to be acceptable to geologists experienced in identifying and evaluating seismic activity. The information submitted must show that either:

i. no faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault (which have displacement in Holocene time) within 3,000 feet of a facility are present, based on data from:

(a). published geologic studies, including cites from federal regulations which demonstrate that the requirements of this Section do not apply,

(b). aerial reconnaissance of the area within a five-mile radius from the facility,

(c). an analysis of aerial photographs covering a 3,000-foot radius of the facility, and

(d). if needed to clarify the above data, a reconnaissance based on walking portions of the area within 3,000 feet of the facility, or

ii. no faults may pass within 200 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted based on data from a comprehensive geologic analysis of the site. Unless a site analysis is otherwise conclusive concerning the absence of faults within 200 feet of such portions of the facility, data shall be obtained from a subsurface exploration (trenching) of the area within a distance no less than 200 feet from portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such trenching shall be performed in a direction that is perpendicular to known faults (which have had displacement in Holocene time) passing within 3,000 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such investigation shall document with supporting maps and other analyses, the location of any faults found, and shall be certified by an independent Louisiana registered professional engineer or geologist.

2. 100-year floodplain

a. Owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year floodplain.

b. Owners and operators of facilities located in the 100-year floodplain must provide the following information:

i. the 100-year flood level and any other special flooding factors (e.g., wave action) which must be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood;

ii. engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as a consequence of a 100-year flood;

iii. structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., floodwalls, dikes) at the facility and how these will prevent washout;

iv. if applicable, and in lieu of the above two provisions, a detailed description of procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:

v. timing of such movement relative to flood levels, including estimated time to move the waste, showing that such movement can be completed before floodwaters reach the facility;

vi. a description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with LAC 33:V.Subpart 1;

vii. the planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use; and

viii. the potential for accidental discharges of the waste during movement.

c. existing facilities *not* in compliance with LAC 33:V.1503.B.3 shall provide a plan showing how the facility will be brought into compliance and a schedule for compliance.

3. site geology, including:

a. certification by a geologist or independent Louisiana registered professional engineer specializing in geotechnical engineering that the ground and subsurface conditions at the site are acceptable for the planned purposes of the facility;

b. identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);

c. soil types, textures, and conditions to depth of thirty feet below lowest elevation of planned disposal cells for impoundments, landfill and land treatment facility based on test holes at 200-foot intervals (or greater or less intervals if acceptable to the administrative authority);

d. logs of test holes and wells, including soil samples for each pertinent strata analyzed for soil type, texture, permeability, and other pertinent characteristics;

e. general area map and cross sections indicating the extent of freshwater sands, and the degree of isolation of these aquifers to a depth of 1,000 feet from waste sources by confining layers of clay;

f. on a topographic map, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under LAC 33:V.3311, the proposed location of groundwater monitoring wells as required under LAC 33:V.3315.A and B; and

g. detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of LAC 33:V.3315.A-H.

4. site hydrology, including:

a. travel times in feet/day for normal drainage of each natural surface drainage system within 1,000 feet of the property;

b. climate factors:

i. the 24-hour/25-year storm rainfall;

ii. maximum, minimum, and average temperature/month for past 10 years;

iii. impact of previous hurricanes on area;

iv. comparison of rainfall and evapotranspiration rates; and

v. prevailing wind direction (provide wind rose);

c. a description of any plume of contamination that has entered the groundwater from a regulated unit at the time that the application is submitted that:

i. delineates the extent of the plume on the topographic map such as required under LAC 33:V.521.B.4; and

ii. identifies the concentration of each Table 4, LAC 33:V.Chapter 33, constituent throughout the plume or identifies the maximum concentrations of each such constituent in the plume;

d. if the presence of hazardous constituents have not been detected in the groundwater at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of LAC 33:V.3317. This submission must address the following items specified under LAC 33:V.3317:

i. a proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the groundwater;

ii. a proposed groundwater monitoring system;

iii. background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

iv. a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

e. if the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of LAC 33:V.3319. The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of LAC 33:V.3321. To demonstrate compliance with LAC 33:V.3319, the owner or operator must address the following items:

i. a description of the wastes previously handled at the facility;

ii. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;

iii. a list of hazardous constituents for which compliance monitoring will be undertaken in accordance with LAC 33:V.3315 and 3317;

iv. proposed concentration limits for each hazardous constituent, based on the criteria set forth in LAC 33:V.3309.A, including a justification for establishing any alternate concentration limits;

v. detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of LAC 33:V.3315; and

vi. a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

f. if hazardous constituents have been measured in the groundwater which exceed the concentration limits established under LAC 33:V.3309, Table 1, or if groundwater monitoring conducted at the time of permit application under LAC 33:V.3301-3309 at the waste boundary indicates the presence of hazardous constituents from the facility in groundwater over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of LAC 33:V.3321. To demonstrate compliance with LAC 33:V.3321, the owner or operator must address, at a minimum, the following items:

i. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;

ii. the concentration limit for each hazardous constituent found in the groundwater as set forth in LAC 33:V.3309;

iii. detailed plans and an engineering report describing the corrective action to be taken; and

iv. a description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action.

5. Environmental factors, including:

a. list all known historical sites, recreational areas, archaeological sites, wildlife areas, swamps and marshes, habitats for endangered species, and other sensitive ecological areas within 1000 feet of the site; and

b. indicate measures planned to protect such areas listed from detrimental impact from the operation of the proposed facility.

6. Geographical Factors. For an area within two miles of the proposed site, provide the following information:

a. map or aerial photograph showing all buildings identified as residential, commercial, industrial, or public (schools, hospitals, libraries, etc.);

b. population;

c. principal livelihood of residents for facilities located in rural areas;

d. land use; and

e. road network, with average daily traffic count and route of trucks which will transport waste to the facility.

7. Operations plan, including:

a. classification and estimated quantities of wastes to be handled;

b. methods and processes utilized:

i. facility capacity for each disposal method;

ii. detailed description of each process or method;

iii. storage and disposal procedures:

(a). plans for receipt, checking, processing, segregation of incompatible wastes, and odor control; and

(b). life of each facility based on projected use;

(c). describe recordkeeping procedures, types of records to be kept, and use of the records by management to control the operation; and

(d). monitoring and recording of incoming wastes;

U. Special Requirements. Administrative authority may require additional provisions for special procedures or processes, for specific information for a supplementary environmental analysis, or for such information as may be necessary to enable the administrative authority to carry out his duties under other state laws;

~~V. for land disposal facilities, if a case-by-case extension has been approved under LAC 33:V.2239 or a petition has been approved under LAC 33:V.2241 or 2242, a copy of the notice of approval for the extension or petition is required.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 13:433 (August 1987), LR 14:790 (November 1988), LR 15:181 (March 1989), LR 15:378 (May 1989), LR 16:220 (March 1990), LR 16:399 (May 1990), LR 16:614 (July 1990), LR 16:683 (August 1990), LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 21:266 (March 1995).

Subchapter E. Specific Information Requirements

§519. Contents of Part II: General Requirements

Part II of the permit application consists of the general information requirements of this Section, and the specific information requirements in LAC 33:V:519 through 549 applicable to the facility. The Part II information requirements presented in LAC 33:V.519 through 549 reflect the standards promulgated in LAC 33:V.Chapters 15-37. These information requirements are necessary in order for the administrative authority to determine compliance with LAC 33:V.Chapters 15-37.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984).

§520. Specific Part II Information Requirements for Groundwater Protection

The following additional information regarding protection of groundwater is required from owners or operators of hazardous waste facilities containing a regulated unit except as provided in LAC 33:V.3301.B and C:

A. a summary of the groundwater monitoring data obtained during the interim status period under LAC 33:V.4367, 4369, 4371, 4373, and 4375, where applicable;

B. identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);

C. on the topographic map required under LAC 33:V.517.B, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under LAC 33:V.3311, the proposed location of groundwater monitoring wells as required under LAC 33:V.3315, and, to the extent possible, the information required in LAC 33:V.520.B;

D. A description of any known plume of contamination that has entered the groundwater from a regulated unit at the time that the application was submitted that:

1. delineates the extent of the plume on the topographic map required under LAC 33:V.517.B; and

2. identifies the concentration of each constituent listed in LAC 33:V.3325 throughout the plume or identifies the

maximum concentrations of each LAC 33:V.3325 constituent in the plume;

E. detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of LAC 33:V.3315;

F. if the presence of hazardous constituents has not been detected in the groundwater at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program that meets the requirements of LAC 33:V.3317. This submission must address the following items specified under LAC 33:V.3317:

1. a proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the groundwater;

2. a proposed groundwater monitoring system;

3. background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

4. a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

G. if the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time of the permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program that meets the requirements of LAC 33:V.3319. Except as provided in LAC 33:V.3317.H, the owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of LAC 33:V.3321, unless the owner or operator obtains written authorization in advance from the administrative authority to submit a proposed permit schedule for submittal of such a plan. To demonstrate compliance with LAC 33:V.3319, the owner or operator must address the following items:

1. a description of the hazardous waste code specified in LAC 33:V.Chapter 49 for the wastes previously handled at the facility;

2. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;

3. a list of hazardous constituents for which compliance monitoring will be undertaken in accordance with LAC 33:V.3315 and 3319;

4. proposed concentration limits for each hazardous constituent, based on the criteria set forth in LAC 33:V.3309.A, including a justification for establishing any alternate concentration limits;

5. detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of LAC 33:V.3315; and

6. a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

H. if hazardous constituents have been measured in the groundwater that exceed the concentration limits established under LAC 33:V.3309.Table 1, or if groundwater monitoring conducted at the time of permit application under LAC 33:V.4367, 4369, 4371, 4373, and 4375 at the waste boundary indicates the presence of hazardous constituents from the facility in groundwater over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program that meets the requirements of LAC 33:V.3321. However, an owner or operator is not required to submit information to establish a corrective action program if he or she demonstrates to the administrative authority that alternate concentration limits will protect human health and the environment after considering the criteria listed in LAC 33:V.3309.B. An owner or operator who is not required to establish a corrective action program for this reason must instead submit sufficient information to establish a compliance monitoring program that meets the requirements of LAC 33:V.3319 and LAC 33:V.520.F. To demonstrate compliance with LAC 33:V.3321, the owner or operator must address, at a minimum, the items listed in LAC 33:V.520.H.1-4 below (the permit may contain a schedule for submittal of the information required in LAC 33:V.520.H.3 and 4 provided the owner or operator obtains written authorization from the administrative authority prior to submittal of the complete permit application):

1. a characterization of the contaminated groundwater, including concentrations of hazardous constituents;

2. the concentration limit for each hazardous constituent found in the groundwater as set forth in LAC 33:V.3309;

3. detailed plans and an engineering report describing the corrective action to be taken; and

4. a description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action.

5. The permit may contain a schedule for submittal of the information required in LAC 33:V.520.H.3 and 4 provided the owner or operator obtains written authorization from the administrative authority prior to submittal of the complete permit application.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 18:1256 (November 1992).

§521. Specific Part II Information Requirements for Containers

Except as otherwise provided in LAC 33:V.2101 owners or operators of facilities that store containers of hazardous waste must provide the following additional information:

A. a description of the containment system to demonstrate compliance with LAC 33:V.2111; show at least the following:

1. basic design parameters, dimensions, and materials of construction;

2. how the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;

3. capacity of the containment system relative to the number and volume of containers to be stored;

4. provisions for preventing or managing run-on;

5. how accumulated liquids can be analyzed and removed to prevent overflow;

B. for storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with LAC 33:V.2111.C including:

1. test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

2. a description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.

C. sketches, drawings, or data demonstrating compliance with LAC 33:V.2113 (location of buffer zone and containers holding ignitable or reactive wastes) and LAC 33:V.2115.C (location of incompatible wastes), where applicable;

D. where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with LAC 33:V.2107.A-C, and LAC 33:V.1517.B-D.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 18:1256 (November 1992).

§523. Specific Part II Information Requirements for Tanks

Except as otherwise provided in LAC 33:V.1901, owners and operators of facilities that use tanks to store or treat hazardous waste must provide the following additional information:

A. a written assessment that is reviewed and certified by an independent, qualified registered professional engineer as to the structural integrity and suitability for handling hazardous waste for each tank system, as required under LAC 33:V.1903 and 1905;

B. dimensions and capacity of each tank;

C. descriptions of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);

D. a diagram of piping, instrumentation, and process flow for each tank system;

E. a description of materials and equipment used to provide external corrosion protection, as required under LAC 33:V.1905.A.3.b;

F. for new tank systems, a detailed description of how the tank system(s) will be installed in compliance with LAC 33:V.1905.B, C, D, and E;

G. detailed plans and description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of LAC 33:V.1907.A, B, C, D and F;

H. for tank systems for which a variance from the requirements of LAC 33:V.1907 is sought (as provided by LAC 33:V.1907.G):

1. detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water during the life of the facility, or

2. a detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment;

I. descriptions of controls and practices to prevent spills and overflows, as required under LAC 33:V.1909.B; and

J. for tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of LAC 33:V.1917 and 1919.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 13:433 (August 1987) LR 16:220 (March 1990), LR 16:614 (July 1990).

§525. Specific Part II Information Requirements for Surface Impoundments

Except as otherwise provided in LAC 33:V.105.D and 1501 and LAC 33:V.305.B and C, owners and operator of facilities that treat, store or dispose of hazardous waste in surface impoundments must provide the following additional information:

A. a list of the hazardous wastes placed or to be placed in each surface impoundment;

B. detailed plans and an engineering report describing how the surface impoundment is designed and is or will be constructed, operated and maintained to meet the requirements of LAC 33:V.1504, 2903, 2904, and 2906. This submission must address the following items:

1. the liner system (except for an existing portion of a surface impoundment). If an exemption from the requirement for a liner is sought as provided by LAC 33:V.2903.B, submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the groundwater or surface water at any future time;

2. the double liner and leak (leachate) detection, collection and removal system, if the surface impoundment must meet the requirements of LAC 33:V.2903.J. If an exemption from the requirements for double liners and leak detection, collection and removal system or alternative design is sought as provided by LAC 33:V.2903.C, K, or L, submit appropriate information;

3. if the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation and the location of the saturated zone in relation to the leak detection system;

4. the construction quality assurance (CQA) plan, if required under LAC 33:V.1504;

5. proposed action leakage rate, with rationale, if required under LAC 33:V.2904 and response action plan, if required under LAC 33:V.2906;

6. prevention of overtopping; and

7. structural integrity of dikes;

C. a description of how each surface impoundment, including the double liner system, leak detection system, cover system, and appurtenances for control of overtopping, will be inspected in order to meet the requirements of LAC 33:V.2907.B, C, and E. This information must be included in the inspection plan submitted under LAC 33:V.517.G;

D. a description of how each surface impoundment, including the liner and cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of LAC 33:V.2907.B and C;

E. a certification by a qualified engineer which attests to the structure integrity of each dike, as required under LAC 33:V.2907.D. For new units, the owner or operator must submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

F. a description of the procedure to be used for removing a surface impoundment from service, as required under LAC 33:V.2909.B and C;

G. a description of how hazardous waste residues and contaminated materials will be removed from the unit at closure, as required under LAC 33:V.2911.A. For any wastes not to be removed from the unit upon closure, the owner or operator must submit detailed plans and an engineering report describing how LAC 33:V.2911.B and C will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan;

H. if ignitable or reactive wastes are to be placed in a surface impoundment an explanation of how LAC 33:V.2913 will be complied with;

I. if incompatible wastes, or incompatible wastes and materials will be placed in a surface impoundment, an explanation of how LAC 33:V.2915 will be complied with;

J. a waste management plan for EPA Hazardous Waste Numbers F020, F021, F022, F023, F026 and F027 describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of LAC 33:V.2917. This submission must address the following items:

1. the volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. the attenuative properties of underlying and surrounding soils or other materials;

3. the mobilizing properties of other materials codisposed with these wastes; and

4. the effectiveness of additional treatment, design, or monitoring techniques.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 16:220 (March 1990), LR 21:266 (March 1995).

§527. Specific Part II Information Requirements for Waste Piles

Except as otherwise provided in LAC 33:V.105.D, 1501, and LAC 33:V.305.B and C, owners and operators of facilities that treat or store hazardous waste in waste piles must provide the following additional information:

A. a list of hazardous wastes placed or to be placed in each waste pile;

B. if an exemption is sought to LAC 33:V.2303 and LAC 33:V.Chapter 33 as provided by LAC 33:V.2301.C, an explanation of how the standards of LAC 33:V.2301.C will be complied with;

C. detailed plans and an engineering report describing how the pile is or will be designed, constructed, operated and maintained to meet the requirements of LAC 33:V.2303. This submission must address the following items as specified in LAC 33:V.2303:

1. the liner system (except for an existing portion of a pile), if the waste pile must meet the requirements of LAC 33:V.2303.A. If an exemption from the requirement for a liner is sought, as provided by LAC 33:V.2303.B, the owner or operator must submit detailed plans and engineering and hydrogeologic reports, as applicable, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituent into the groundwater or surface water at any future time;

a. the double liner and leak (leachate) detection, collection, and removal system, if the waste pile must meet the requirements of LAC 33:V.2303.C. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by LAC 33:V.2303.D, E, or F, submit appropriate information;

b. if the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation and the location of the saturated zone in relation to the leak detection system;

c. the construction quality assurance (CQA) plan if required under LAC 33:V.1504;

d. proposed action leakage rate, with rationale, if required under LAC 33:V.2304 and response action plan, if required under LAC 33:V.2306;

2. control of run-on;

3. control of run-off;

4. management of collection and holding units associated with run-on and run-off control systems; and

5. control of wind dispersal of particulate matter, where applicable.

D. if an exemption from LAC 33:V.Chapter 33 is sought as provided by LAC 33:V.2303 or 2307 submit detailed plans and an engineering report describing how the requirements of LAC 33:V.2303.B or 2307 will be complied with;

E. a description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system, and appurtenance for control of run-on and run-off, will be inspected in order to meet the requirements of LAC 33:V.2309.A, B, and C. This information must be included in the inspection plan submitted under LAC 33:V.517.G;

F. if treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;

G. if ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the requirements of LAC 33:V.2311 will be complied with;

H. if incompatible wastes, or incompatible wastes and materials will be placed in a waste pile, an explanation of how LAC 33:V.2313 will be complied with;

I. a description of how hazardous waste residues and contaminated materials will be removed from the waste pile at closure, as required under LAC 33:V.2315.A. For any waste not to be removed from the waste pile upon closure, this owner or operator must submit detailed plans and an engineering report describing how LAC 33:V.2521.A and B will be complied with.

J. A waste management plan for EPA Hazardous Waste Numbers F020, F021, F022, F023, F026 and F027 describing how a waste pile that is not enclosed (as defined in LAC 33:V.2301.C) is or will be designed, constructed, operated, and maintained to meet the requirements of LAC 33:V.2317. This submission must address the following items:

1. the volume, physical, and chemical characteristics of the wastes to be disposed in the waste pile, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. the attenuative properties of underlying and surrounding soils or other materials;

3. the mobilizing properties of other materials codisposed with these wastes; and

4. the effectiveness of additional treatment, design, or monitoring techniques.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 16:220 (March 1990), LR 21:266 (March 1995).

§529. Specific Part II Information Requirements for Incinerators

Except as LAC 33:V.Chapter 31 provides otherwise, owners and operators of facilities that incinerate hazardous waste must fulfill the requirements of A, B or C of this Section.

A. When seeking an exemption under LAC 33:V.3105.B or C of this Part (ignitable, corrosive, or reactive wastes only):

1. documentation that the waste is listed as a hazardous waste in LAC 33:V.Chapter 49 of this Part, solely because it

is ignitable (Hazard Code I) or corrosive (Hazard Code C) or both; or

2. documentation that the waste is listed as a hazardous waste in LAC 33:V.Chapter 4901 of this Part, solely because it is reactive (Hazard Code R) for characteristics other than those listed in LAC 33:V.4903.C.4 and C.5 of this Part, and will not be burned when other hazardous wastes are present in the combustion zone; or

3. documentation that the waste is a hazardous waste solely because it possesses the characteristics of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous waste under LAC 33:V.4903 of this Part; or

4. documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in LAC 33:V.4903.C.1, 2, 3, 6, 7 or 8 of this Part, and that it will not be burned when other hazardous wastes are present in the combustion zone; or

B. submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with LAC 33:V.3115; or

C. in lieu of a trial burn, the applicant may submit the following information:

1. an analysis of each waste or mixture of wastes to be burned including:

a. heat value of the waste in the form and composition in which it will be burned;

b. viscosity (if applicable), or description of physical form of the waste;

c. an identification of any hazardous organic constituents listed in Table I, LAC 33:V.Chapter 31, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Table I, LAC 33:V.Chapter 31 which would reasonably not be expected to be found in the waste; the constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (SW-846);

d. an approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (SW-846);

e. a quantification of those hazardous constituents in the waste which may be designated as POHC's based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in LAC 33:V.3111.

2. A detailed engineering description of the incinerators, including:

a. manufacturer's name and model number of incinerator;

b. type of incinerator;

c. linear dimension of incinerator unit including cross sectional area of combustion chamber;

d. description of auxiliary fuel system (type/feed);

e. capacity of prime mover;

f. description of automatic waste feed cutoff system(s);

g. stack gas monitoring and pollution control monitoring system;

h. nozzle and burner design;

i. construction materials;

j. location and description of temperature, pressure, and flow indicating devices and control devices;

3. a description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed; The data should include those items listed in Subsection C.1. of this Section. This analysis should specify the POHC's which the applicant has identified in the waste for which a permit is sought, and any differences from the POHC's in the waste for which burn data are provided.

4. the design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available;

5. a description of the results submitted from any previously conducted trial burn(s) including:

a. sampling and analysis techniques used to calculate performance standards in LAC 33:V.3111;

b. methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement);

6. the expected incinerator operation information to demonstrate compliance with LAC 33:V.3111 and 3117 of this Part including:

a. expected carbon monoxide (CO) level in the stack exhaust gas;

b. waste feed rate;

c. combustion zone temperature;

d. indication of combustion gas velocity;

e. expected stack gas volume, flow rate, and temperature;

f. computed residence time for waste in the combustion zone;

g. expected hydrochloric acid removal efficiency;

h. expected fugitive emissions and their control procedures;

i. proposed waste feed cut-off limits based on the identified significant operating parameters;

7. such supplemental information as the administrative authority finds necessary to achieve the purposes of this Subsection;

8. waste analysis data, including that submitted in Subsection C.1 of this Section, sufficient to allow the administrative authority to specify as permit Principal Organic Hazardous Constituents (permit POHC's) those constituents for which destruction and removal efficiencies will be required.

D. The administrative authority shall approve a permit application without a trial burn if he finds that:

1. the wastes are sufficiently similar; and

2. the incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under LAC 33:V.3117 of this Part) operating conditions that will ensure that the performance standards in LAC 33:V.3111 of this Part will be met by the incinerator.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984).

§530. Specific Part II Information Requirements for Process Vents

Except as otherwise provided in LAC 33:V.1501, owners and operators of facilities that have process vents to which LAC 33:V.Chapter 17, Subchapter A, applies must provide the following additional information:

A. Facilities that cannot install a closed-vent system and control device to comply with the provisions of LAC 33:V.Chapter 17, Subchapter A, on the effective date that the facility becomes subject to the provisions of LAC 33:V.Chapter 17, Subchapter A, and Chapter 43, Subchapter Q, must provide an implementation schedule as specified in LAC 33:V.1709.A.2.

B. Documentation of compliance with the process vent standards in LAC 33:V.1707 must be provided, including:

1. information and data identifying all affected process vents, annual throughput, and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan);

2. information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, estimates of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or concentrations) that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur;

3. information and data used to determine whether or not a process vent is subject to the requirements of LAC 33:V.1707.

C. Owners or operators who apply for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with the requirements of LAC 33:V.1707, and choose to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device must provide a performance test plan as specified in LAC 33:V.1713.B.3.

D. Documentation of compliance with LAC 33:V.1709 must be provided, including:

1. a list of all information references and sources used in preparing the documentation;

2. records including the dates of each compliance test required by LAC 33:V.1709.K;

3. a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the administrative authority that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in LAC 33:V.1713.B.4.a;

4. a statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur;

5. a statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater unless the total organic emission limits of LAC 33:V.1707.A for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 18:1256 (November 1992).

§531. Specific Part II Information Requirements for Land Treatment Facilities

Except as otherwise provided in LAC 33:V.105.D, 1501, and 305.B and C, owners and operators of facilities that use land treatment to dispose of hazardous waste must provide the following additional information:

A. A description of plans to conduct a treatment demonstration as required under LAC 33:V.2707. The description must include the following information:

1. the wastes for which the demonstration will be made and the potential hazardous constituents in the waste;

2. the data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);

3. any specific laboratory or field test that will be conducted, including:

a. the type of test (e.g., column leaching, degradation);

b. materials and methods, including analytical procedures;

c. expected time for completion;

d. characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices.

B. A description of a land treatment program, as required under LAC 33:V.2705. This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:

1. the wastes to be land treated;

2. design measures and operating practices necessary to maximize treatment in accordance with LAC 33:V.2703.A including:

a. waste application method and rate;

b. measures to control soil pH;

c. enhancement of microbial or chemical reactions;

d. control of moisture content;

3. provisions for unsaturated zone monitoring, including:

a. sampling equipment, procedures, and frequency;

b. procedures for selecting sampling locations;

c. analytical procedures;

d. chain of custody control;

e. procedures for establishing background values;

f. statistical methods for interpreting results;

g. the justification for any hazardous constituents recommended for selection as principal hazardous constituents, in accordance with the criteria for such selection in LAC 33:V.2711.A;

4. a list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to LAC 33:V.1519;

5. the proposed dimensions of the treatment zone;

C. A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of LAC 33:V.2303. This submission must address the following items:

1. control of run-on;

2. collection and control of run-off;

3. minimization of run-off of hazardous constituents from the treatment zone;

4. management of collection and holding facilities associated with run-on and run-off control systems;

5. periodic inspection of this unit. This information should be included in the inspection plan.

6. control of wind dispersal of particulate matter, if applicable;

D. No food-chain crops are to be grown in or on the treatment zone of the land treatment unit.

E. A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under LAC 33:V.2709.A.8 and C.2. This information should be included in the closure plan and, where applicable, the post-closure plan.

F. If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of LAC 33:V.2715 will be complied with.

G. If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how LAC 33:V.2717 will be complied with.

H. A waste management plan for EPA Hazardous Waste Numbers F020, F021, F022, F023, F026 and F027 describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of LAC 33:V.2723. This submission must address the following items:

1. the volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. the attenuative properties of underlying and surrounding soils or other materials;

3. the mobilizing properties of other materials codisposed with these wastes; and

4. the effectiveness of additional treatment, design, or monitoring techniques.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 16:220 (March 1990).

§532. Special Part II Information Requirements for Drip Pads

A. Except as otherwise provided by LAC 33:V.Chapter 15, owners and operators of hazardous waste treatment, storage, or disposal facilities that collect, store, or treat hazardous waste on drip pads must provide the following additional information:

1. a list of hazardous wastes placed or to be placed on each drip pad;

2. if an exemption is sought to LAC 33:V.Chapter 33, as provided by LAC 33:V.3301, detailed plans and an engineering report describing how the requirements of LAC 33:V.3301 will be met;

3. detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of LAC 33:V.2805, including the as-built drawings and specifications. This submission must address the following items as specified in LAC 33:V.2803:

a. the design characteristics of the drip pad;

b. the liner system;

c. the leakage detection system, including how the system is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;

d. practices designed to maintain drip pads;

e. the associated collection system;

f. control of run-on to the drip pad;

g. control of run-off from the drip pad;

h. the interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;

i. procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials, including but not limited to rinsing, washing with detergents or other appropriate solvents, or steam cleaning and provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned;

j. operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized;

k. procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and nonpressure processes is held on the drip pad until drippage has ceased; including recordkeeping practices;

l. provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;

m. if treatment is carried out on the drip pad, details of the process equipment used and the nature and quality of the residuals;

n. a description of how each drip pad, including appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of LAC 33:V.2805. This information should be included in the inspection plan submitted under LAC 33:V.517.G;

o. a certification signed by an independent qualified, registered professional engineer stating that the drip pad design meets the requirements of LAC 33:V.2805.A-F;

p. a description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under LAC 33:V.2809.A. For any waste not to be removed from the drip pad upon closure, the owner or operator must submit detailed plans and an engineering report describing how LAC 33:V.2521.A and B will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under LAC 33:V.517.M.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§533. Specific Part II Information Requirements for Landfills

Except as otherwise provided in LAC 33:V.105.D, 1501, and 305.B and 305.C, owners and operators of facilities that dispose of hazardous waste in landfills must provide the following additional information:

A. a list of the hazardous wastes placed in each landfill or landfill cell;

~~B. detailed plans and an engineering report describing how~~ the landfill is designed and is or will be constructed, operated and maintained to comply with the requirements of LAC 33:V.1504, 2503, 2504, and 2507. This submission must address the following items:

1. the liner system and leachate collection and removal system;

~~2. control of run-on;~~

~~3. control of run-off;~~

4. management of collection and holding facilities associated with run-on and run-off control systems; and

~~5. control of wind dispersal of particulate matter, where applicable;~~

C. there are no exemptions from the groundwater protection requirements of LAC 33:V.Chapter 33;

D. a description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of LAC 33:V.2507.B, C, and D. This information should be included in the inspection plan submitted under LAC 33:V.517.G;

E. detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with LAC 33:V.2521.A, and a description of how each landfill will be maintained and monitored after closure in accordance with LAC 33:V.2521.B. This information should be included in the closure and post-closure plans;

F. if ignitable or reactive wastes will be landfilled, an explanation of how the standards of LAC 33:V.2511 will be complied with;

G. if incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how LAC 33:V.2513 will be complied with;

H. bulk or non-containerized liquid waste or wastes containing free liquids to be landfilled must comply with LAC 33:V.2515;

I. if containers of hazardous waste are to be landfilled, an explanation of how the requirements of LAC 33:V.2517 or LAC 33:V.2519, as applicable, will be complied with.

J. a waste management plan for EPA Hazardous Waste Number F020, F021, F022, F023, F026 and F027 describing how a landfill is or will be designed, constructed, operated, and maintained to meet the requirements of LAC 33:V.2523. This submission must address the following items:

1. the volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. the attenuative properties of underlying and surrounding soils or other materials;

3. the mobilizing properties of other materials codisposed with these wastes; and

4. the effectiveness of additional treatment, design, or monitoring techniques.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 16:220 (March 1990), LR 21:266 (March 1995).

§534. Specific Part II Information Requirements for Miscellaneous Units

Except as otherwise provided in LAC 33:V.3201, owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units must provide the following additional information:

A. a detailed description of the unit being used or proposed for use, including the following:

1. physical characteristics, materials of construction, and dimensions of the unit;

2. detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of LAC 33:V.3203 and 3205; and

3. for disposal units, a detailed description of the plans to comply with the post-closure requirements of LAC 33:V.3207;

B. detailed hydrologic, geologic, and meteorologic assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards of LAC 33:V.3203. If the applicant can demonstrate that he does not violate the environmental performance standards of LAC 33:V.3203 and the administrative authority agrees with such demonstration, preliminary hydrologic, geologic, and meteorologic assessments will suffice;

C. information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents and on the potential magnitude and nature of such exposures;

D. for any treatment unit, a report on a demonstration of the effectiveness of the treatment based on laboratory or field data;

E. any additional information determined by the administrative authority to be necessary for evaluation of compliance of the unit with the environmental performance standards of LAC 33:V:3203.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:399 (May 1990).

~~§535. Specific Part II Information Requirements for Boilers and Industrial Furnaces Burning Hazardous Waste for Energy or Material Recovery and not for Destruction~~

~~A. Trial Burns~~

1. General. Except as provided below, owners or operators that are subject to the standards to control organic emissions provided by LAC 33:V.3009, standards to control particulate matter provided by LAC 33:V.3011, standards to control metals emissions provided by LAC 33:V.3013, or standards to control hydrogen chloride or chlorine gas emissions provided by LAC 33:V.3015 must conduct a trial burn to demonstrate conformance with those standards and must submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with LAC 33:V.537.

a. A trial burn to demonstrate conformance with a particular emission standard may be waived under provisions of LAC 33:V.3009-3015 and LAC 33:V.535.A.2-5.

b. The owner or operator may submit data in lieu of a trial burn, as prescribed in LAC 33:V.535.A.6.

2. Waiver of Trial Burn for DRE

a. Boilers Operated Under Special Operating Requirements. When seeking to be permitted under LAC 33:V.3009.A.4 and 3021 that automatically waive the DRE trial burn, the owner or operator of a boiler must submit documentation that the boiler operates under the special operating requirements provided by LAC 33:V.3021.

b. Boilers and Industrial Furnaces Burning Low Risk Waste. When seeking to be permitted under the provisions for low risk waste provided by LAC 33:V.3009.A.5 and 3019.A that waive the DRE trial burn, the owner or operator must submit:

i. documentation that the device is operated in conformance with the requirements of LAC 33:V.3019.A.1;

ii. results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in LAC 33:V.4901.G.Table 6, except for those constituents that would reasonably not be expected to be in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained. The analysis must rely on analytical techniques specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods;

iii. documentation of hazardous waste firing rates and calculations of reasonable, worst-case emission rates of each constituent identified in LAC 33:V.535.A.2.b.ii using procedures provided by LAC 33:V.3019.A.2.b;

iv. results of emissions dispersion modeling for emissions identified in LAC 33:V.535.A.2.b.iii using modeling procedures prescribed by LAC 33:V.3013.H. The administrative authority will review the emission modeling conducted by the applicant to determine conformance with these procedures. The administrative authority will either approve the modeling or determine that alternate or supplementary modeling is appropriate; and

v. documentation that the maximum annual average ground level concentration of each constituent identified in LAC 33:V.535.A.2.b.ii quantified in conformance with LAC 33:V.535.A.2.b.iv does not exceed the allowable ambient level established in Appendices IV or V of 40 CFR Part 266. The acceptable ambient concentration for emitted constituents for which a specific Reference Air Concentration has not been established in Appendix IV of 40 CFR Part 266 or Risk-Specific Dose has not been established in Appendix V of 40 CFR Part 266 is 0.1 micrograms per cubic meter, as noted in the footnote to 40 CFR Part 266, Appendix IV.

3. Waiver of Trial Burn for Metals. When seeking to be permitted under the Tier I (or adjusted Tier I) metals feed rate screening limits provided by LAC 33:V.3013.B and E that control metals emissions without requiring a trial burn, the owner or operator must submit:

a. documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feedstocks;

b. documentation of the concentration of each metal controlled by LAC 33:V.3013.B or E in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of each metal;

c. documentation of how the applicant will ensure that the Tier I feed rate screening limits provided by LAC 33:V.3013.B or E will not be exceeded during the averaging period provided by that Subsection;

d. documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by LAC 33:V.3013.B.3 - 5;

e. documentation of compliance with the provisions of LAC 33:V.3013.B.6, if applicable, for facilities with multiple stacks;

f. documentation that the facility does not fail the criteria provided by LAC 33:V.3013.B.7 for eligibility to comply with the screening limits; and

g. proposed sampling and metals analysis plan for the hazardous waste, other fuels, and industrial furnace feedstocks.

4. Waiver of Trial Burn for Particulate Matter. When seeking to be permitted under the low risk waste provisions of LAC 33:V.3019.B which waives the particulate standard (and trial burn to demonstrate conformance with the particulate standard), applicants must submit documentation supporting conformance with LAC 33:V.535.A.2.b and A.3.

5. Waiver of Trial Burn for HCl and Cl_2. When seeking to be permitted under the Tier I (or adjusted Tier I) feed rate screening limits for total chloride and chlorine provided by LAC 33:V.3015.B.1 and E that control emissions of hydrogen chloride (HCl) and chlorine gas (Cl_2) without requiring a trial burn, the owner or operator must submit:

a. documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feedstocks;

b. documentation of the levels of total chloride and chlorine in the hazardous waste, other fuels, and industrial furnace feedstocks, and calculations of the total feed rate of total chloride and chlorine;

c. documentation of how the applicant will ensure that the Tier I (or adjusted Tier I) feed rate screening limits provided by LAC 33:V.3015.B.1 or E will not be exceeded during the averaging period provided by that Subsection;

d. documentation to support the determination of the terrain-adjusted effective stack height, good engineering practice stack height, terrain type, and land use as provided by LAC 33:V.3015.B.3;

e. documentation of compliance with the provisions of LAC 33:V.3015.B.4, if applicable, for facilities with multiple stacks;

f. documentation that the facility does not fail the criteria provided by LAC 33:V.3015.B.3 for eligibility to comply with the screening limits; and

g. proposed sampling and analysis plan for total chloride and chlorine for the hazardous waste, other fuels, and industrial furnace feedstocks.

6. Data in lieu of Trial Burn. The owner or operator may seek an exemption from the trial burn requirements to demonstrate conformance with LAC 33:V.537 and 3009-3015 by providing the information required by LAC 33:V.537 from previous compliance testing of the device in conformance with LAC 33:V.3007, or from compliance testing or trial or operational burns of similar boilers or industrial furnaces burning similar hazardous wastes under similar conditions. If data from a similar device is used to support a trial burn waiver, the design and operating information required by LAC 33:V.535 must be provided for both the similar device and the device to which the data is to be applied, and a comparison of the design and operating information must be provided. The administrative authority shall approve a permit application without a trial burn if he finds that the hazardous wastes are sufficiently similar, the devices are sufficiently similar, the operating conditions are sufficiently similar, and the data from other compliance tests, trial burns, or operational burns are adequate to specify (under LAC 33:V.3005) operating conditions that will ensure conformance with LAC 33:V.3005.C. In addition, the following information shall be submitted:

a. for a waiver from any trial burn:

i. a description and analysis of the hazardous waste to be burned compared with the hazardous waste for which data from compliance testing, or operational or trial burns are provided to support the contention that a trial burn is not needed;

ii. the design and operating conditions of the boiler or industrial furnace to be used, compared with that for which comparative burn data are available; and

iii. such supplemental information as the administrative authority finds necessary to achieve the purposes of this Paragraph.

b. for a waiver of the DRE trial burn, the basis for selection of POHCs used in the other trial or operational burns which demonstrate compliance with the DRE performance standard in LAC 33:V.3009.A. This analysis should specify the constituents in LAC 33:V.4901.G.Table 6, that the applicant has identified in the hazardous waste for which a permit is sought, and any differences from the POHCs in the hazardous waste for which burn data are provided.

B. Alternative HC Limit for Industrial Furnaces with Organic Matter in Raw Materials. Owners or operators of industrial furnaces requesting an alternative HC limit under LAC 33:V.3009.F shall submit the following information at a minimum:

1. documentation that the furnace is designed and operated to minimize HC emissions from fuels and raw materials;

2. documentation of the proposed baseline flue gas HC (and CO) concentration, including data on HC (and CO) levels during tests when the facility produced normal products under normal operating conditions from normal raw materials while burning normal fuels and when not burning hazardous waste;

3. test burn protocol to confirm the baseline HC (and CO) level including information on the type and flow rate of all feedstreams, point of introduction of all feedstreams, total organic carbon content (or other appropriate measure of organic content) of all nonfuel feedstreams, and operating conditions that affect combustion of fuel(s) and destruction of hydrocarbon emissions from nonfuel sources;

4. trial burn plan to:

a. demonstrate that flue gas HC (and CO) concentrations when burning hazardous waste do not exceed the baseline HC (and CO) level; and

b. identify the types and concentrations of organic compounds listed in LAC 33:V.4901.G.Table 6, that are emitted when burning hazardous waste in conformance with procedures prescribed by the administrative authority;

5. implementation plan to monitor over time changes in the operation of the facility that could reduce the baseline HC level and procedures to periodically confirm the baseline HC level; and

6. such other information as the administrative authority finds necessary to achieve the purposes of this Subsection.

C. Alternative Metals Implementation Approach. When seeking to be permitted under an alternative metals implementation approach under LAC 33:V.3013.F, the owner or operator must submit documentation specifying how the approach ensures compliance with the metals emissions standards of LAC 33:V.3013.C or D and how the approach can be effectively implemented and monitored. Further, the

owner or operator shall provide such other information that the administrative authority finds necessary to achieve the purposes of this Subsection.

D. Automatic Waste Feed Cutoff System. Owners or operators shall submit information describing the automatic waste feed cutoff system, including any pre-alarm systems that may be used.

E. Direct Transfer. Owners or operators that use direct transfer operations to feed hazardous waste from transport vehicles (containers, as defined in LAC 33:V.3023) directly to the boiler or industrial furnace shall submit information supporting conformance with the standards for direct transfer provided by LAC 33:V.3023.

F. Residues. Owners or operators that claim that their residues are excluded from regulation under the provisions of LAC 33:V.3025 must submit information adequate to demonstrate conformance with those provisions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:737 (September 1989) amended LR 18:1375 (December 1992), LR 21:266 (March 1995).

§536. Specific Part II Information Requirements for Equipment

Except as otherwise provided in LAC 33:V.1501, owners and operators of facilities that have equipment to which LAC 33:V. Chapter 17, Subchapter B, applies must provide the following additional information.

A. For each piece of equipment to which LAC 33:V. Chapter 17, Subchapter B, applies, the following information must be provided:

1. equipment identification number and hazardous waste management unit identification;

2. approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan);

3. type of equipment (e.g., a pump or pipeline valve);

4. percent by weight total organics in the hazardous waste stream at the equipment;

5. hazardous waste state at the equipment (e.g., gas/vapor or liquid); and

6. method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

B. Facilities that cannot install a closed-vent system and control device to comply with the provisions of LAC 33:V. Chapter 17, Subchapter B, on the effective date that the facility becomes subject to the provisions of LAC 33:V. Chapter 17, Subchapter B, or Chapter 43, Subchapter R, must provide an implementation schedule as specified in LAC 33:V.1709.A.2.

C. Owners or operators who apply for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and choose to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device must provide a performance test plan as specified in LAC 33:V. 1713.B.3.

D. Documentation that demonstrates compliance with the equipment standards in LAC 33:V.1719-1733 must be provided. This documentation shall contain the records required under LAC 33:V.1743. The administrative authority may request further documentation before deciding if compliance has been demonstrated.

E. Documentation to demonstrate compliance with LAC 33:V.1735 shall be provided and include the following information:

1. a list of all information references and sources used in preparing the documentation;

2. records, including the dates, of each compliance test required by LAC 33:V.1709.J;

3. a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the administrative authority that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in LAC 33:V.1713.B.4.c;

4. a statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous management unit is operating at the highest load or capacity level reasonably expected to occur;

5. a statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 18:1256 (November 1992).

Subchapter F. Special Forms of Permits

§537. Permits for Boiler and Industrial Furnaces Burning Hazardous Waste for Recycling Purposes Only (boilers and industrial furnaces burning hazardous waste for destruction are subject to permit requirements for incinerators)

A. General. New boilers and industrial furnaces (those not operating under interim status) that will be permitted based on a trial burn under LAC 33:V.3005.D.3 are subject to

~~1Subsection B of this Section. Boilers and industrial furnaces~~ operating under the interim status standards of LAC 33:V.3007 are subject to Subsection C of this Section.

B. New Boilers and Industrial Furnaces Permitted with a Trial Burn. A permit for a new boiler or industrial furnace shall specify appropriate conditions for the following operating periods:

1. Pre-trial Burn Period. For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the boiler or industrial furnace to a point of operational readiness to conduct a trial burn, not to exceed 720 hours operating time when burning hazardous waste, the administrative authority shall establish pre-trial burn permit conditions, including but not limited to allowable hazardous waste feed rates and operating conditions. The administrative authority may extend this operational period once for up to 720 additional hours at the applicant's request when good cause is shown. The permit may be modified to reflect the extension according to LAC 33:V.323 (minor modifications of permits).

a. Applicants must submit a statement with Part II of the permit application that suggests the conditions necessary to operate in compliance with the standards of LAC 33:V.3009-3015 during this period. This statement should include, at a minimum, restrictions on the applicable operating parameters identified in LAC 33:V.3005.E.

b. The administrative authority will review this statement and any other relevant information submitted with Part II of the permit application and specify requirements for this period sufficient to meet the performance standards of LAC 33:V.3009-3015 based on engineering judgment.

2. Trial Burn Period. For the duration of the trial burn, the administrative authority must establish conditions in the trial burn permit for the purposes of determining feasibility of compliance with the performance standards of LAC 33:V.3009-3015 and of determining adequate operating conditions under LAC 33:V.3005.E.

a. Applicants must propose a trial burn plan, prepared under Subparagraph b of this Paragraph, to be submitted with Part II of the permit application.

b. The trial burn plan must include the following information:

i. An analysis of each feedstream, including hazardous waste, other fuels, and industrial furnace feedstocks as fired, containing the following information is required:

(a). heating value, levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, total chlorine/chloride, and ash; and composition of the hazardous waste must be specified;

(b). viscosity or a description of the physical form of the feedstream.

ii. An analysis of each hazardous waste stream as fired is required, including:

(a). an identification of any hazardous organic constituents listed in LAC 33:V.Chapter 31. Table 1, present in the hazardous waste must be identified, but the applicant need not analyze for constituents listed in Table 1 that would reasonably not be expected to be in the hazardous waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained. The analysis must rely on analytical techniques specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846, third edition), or another equivalent approved by the administrative authority;

(b). the hazardous constituents identified in the hazardous waste must be appropriately quantified within the precision produced by the analytical methods specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," (SW-846, third edition), or another equivalent approved by the administrative authority;

(c). if applicable, the blending procedures used before firing the hazardous waste must be described, and a detailed analysis of the hazardous waste before blending provided, along with an analysis of the material with which the hazardous waste is blended and the blending ratios.

iii. A detailed engineering description of the boiler or industrial furnace is required, including:

(a). manufacturer's name and model number of the boiler or industrial furnace;

(b). type of boiler or industrial furnace;

(c). maximum design capacity in appropriate units;

(d). description of the feed system for the hazardous waste, and, as appropriate, other fuels and industrial furnace feedstocks;

(e). capacity of the hazardous waste feed system;

(f). description of automatic hazardous waste feed cutoff system(s);

(g). description of any emission control system(s); and

(h). description of stack gas monitoring and any pollution-control monitoring systems.

iv. A detailed description of sampling and monitoring procedures including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis must be provided.

v. A detailed test schedule for each hazardous waste for which the trial burn in planned, including date(s), duration quantity of hazardous waste to be burned, and other factors relevant to the administrative authority's decision under LAC ~~33:V.537.B.2.c must be included.~~

vi. A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feed rate and, as appropriate, the feed rates of other fuels and industrial furnace feedstocks, and any other relevant parameters that will vary and that may affect the ability of the boiler or industrial furnace to meet the performance standards in LAC 33:V.3009-3015 must be provided.

vii. Any emission control equipment that will be used must be described along with the planned operating conditions.

viii. Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction must be described.

ix. the administrative authority may request additional information that he reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this Paragraph and the criteria in LAC 33:V.537.B.2.e.

c. The administrative authority, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information to achieve the purposes of this Paragraph.

d. The administrative authority will use the hazardous waste analysis data in the trial burn plan to specify as trial Principal Organic Hazardous Constituents (POHCs) those constituents for which destruction and removal efficiencies must be calculated during the trial burn. The administrative authority will specify these trial POHCs on the basis of his estimate of the difficulty of destroying:

i. the constituents identified in the hazardous waste feed;

ii. their concentrations or mass in the hazardous waste feed; and

iii. for hazardous wastes listed in LAC 33:V.4901, the hazardous waste organic constituent(s) identified in LAC 33:V.4901.G, Table 6.

e. The administrative authority shall approve a trial burn plan if he finds that:

i. the trial burn is likely to determine whether the boiler or industrial furnace can meet the performance standards in LAC 33:V.3009-3015;

ii. the trial burn itself will not present an imminent hazard to human health and the environment;

iii. the trial burn will help him determine operating requirements to be specified under LAC 33:V.3005.E; and

iv. the information sought in LAC 33:V.537.B.2.e.i-iii cannot reasonably be obtained through other means.

f. The administrative authority may extend and modify the pre-trial burn permit as necessary to accommodate the approved trial burn plan. The permit modification shall proceed as a minor modification according to LAC 33:V.323.

g. During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations and analyses:

i. a quantitative analysis of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, thallium, silver, and chlorine/chloride in the feedstreams (hazardous waste, other fuels, and industrial furnace feedstocks) to the boiler or industrial furnace is required;

ii. a quantitative analysis of the stack gas for the concentration and mass emissions of the trial POHCs is required;

iii. if dioxin and furan testing is required under LAC 33:V.3009.E, a quantitative analysis of the stack gas for the concentration and mass emission rate of the 2,3,7,8-chlorinated tetra-octa congeners of chlorinated dibenzo-p-dioxins and furans, and a computation showing conformance with the emission standard are required;

iv. a quantitative analysis of the stack gas for the concentration and mass emission of particulate matter, metal(s) or hydrogen chloride (HCl) and chlorine gas (Cl_2) and a computation showing conformance with the metals or HCl emission performance standard in LAC 33:V.3011 and 3015 are required;

v. a quantitative analysis of the scrubber water (if any), ash residues, and other residues is required for the purpose of estimating the fate of the trial POHCs, the fate of any metal, and the fate of chlorine/chloride subject to emissions testing under LAC 33:V.537.B.2.g.iii.(b);

vi. destruction and removal efficiency (DRE) must be computed in accordance with the DRE formula specified in LAC 33:V.3009.A;

vii. sources of fugitive emissions and their means of control must be identified;

viii. carbon monoxide, total hydrocarbons, and oxygen in the stack gas must be continuously measured. The administrative authority may approve an alternative scheme for monitoring total hydrocarbons;

ix. a quantitative analysis of the exhaust gas for the concentration and mass emission of particulate matter, and a computation showing conformance with the particulate matter standard in LAC 33:V.3011 is required; and

x. any other information will be required that the administrative authority specifies as necessary to ensure that the trial burn will reveal whether the facility complies with the performance standards required by LAC 33:V.3009-3015.

h. The applicant must submit to the administrative authority a certification that the trial burn has been conducted in accordance with the approved trial burn plan and must submit the results of all the analyses and determinations required in LAC 33:V.537.B.2.g. This submission shall be made within 90 days of completion of the trial burn, or later if approved by the administrative authority.

i. All data collected during any trial burn must be submitted to the administrative authority after completion of the trial burn.

j. All submissions required by this Paragraph must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under LAC 33:V.507 and 509.

k. Based on the results of the trial burn, the administrative authority shall specify the operating requirements in the final permit according to LAC 33:V.3005.E. The permit modification shall proceed as a minor modification according to LAC 33:V.323.

3. Post-trial Burn Period. For a minimum period immediately after the trial burn sufficient for the applicant to analyze samples, compute data, and submit the trial burn results, and for the administrative authority to review the trial burn results and modify the facility permit to reflect those results, the administrative authority will specify the operating requirements most likely to ensure compliance with the performance standards of LAC 33:V.3009-3015 based on engineering judgment. The administrative authority shall extend and modify the trial burn permit to develop the post-trial burn permit. The permit modification shall proceed as a minor modification according to LAC 33:V.323.

a. Applicants must submit a statement with Part II of this permit application that identifies the conditions necessary for operation in compliance with the performance standards of LAC 33:V.3009-3015 during this period. This statement should include, at a minimum, restrictions on the operating parameters identified in LAC 33:V.3005.E.

b. The administrative authority will review this statement and any other relevant information submitted with Part I of the permit application and specify requirements for this period sufficient to meet the performance standards of LAC 33:V.3009-3015 based on engineering judgment.

4. Final Permit. For the final period of operation, the administrative authority will develop operating requirements in conformance with LAC 33:V.3005.E that reflect conditions in the trial burn plan and are likely to ensure compliance with the performance standards of LAC 33:V.3009-3015. After reviewing the trial burn results, the administrative authority will modify the permit as necessary to develop a final permit that will ensure compliance with the performance standards of LAC 33:V.3009-3015. The permit modification shall proceed as a minor modification according to LAC 33:V.323.

C. Interim Status Boilers and Industrial Furnaces. For the purpose of determining feasibility of compliance with the performance standards of LAC 33:V.3009 through 3015 of this Chapter and of determining adequate operating conditions under LAC 33:V.3005.E, applicants owning or operating existing boilers or industrial furnaces operated under the interim status standards of these regulations that will be permitted with a trial burn to determine compliance with the performance standards of LAC 33:V.3009-3015 and to determine adequate operating conditions under LAC 33:V.3005.E must prepare and submit a trial burn plan and perform a trial burn in accordance with LAC 33:V.537.B.2.b-i. Applicants who submit a trial burn plan and receive approval before submission of Part II of the permit application must complete the trial burn and submit the results specified in LAC 33:V.537.B.2.g with Part II of the permit application. If completion of this process conflicts with the date set for submission of Part II, the applicant must contact the administrative authority to establish a later date for submission of Part II or the trial burn results. If the applicant submits a trial burn plan with Part II of the permit application, the trial burn must be conducted and the results submitted within a period specified by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:737 (September 1989), amended LR 18:1375 (December 1992), LR 21:266 (March 1995).

Chapter 7. Administrative Procedures for Treatment, Storage, and Disposal Facility Permits

Subchapter A. Permits

§701. Emergency Permits

Notwithstanding any other provision, in the event the administrative authority finds an imminent and substantial endangerment to human health or the environment, he may issue a temporary emergency permit (1) to a non-permitted facility to allow treatment, storage, or disposal of hazardous waste or (2) to a permitted facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective permit. This emergency permit:

A. may be oral or written; if oral, it shall be followed in five days by a written emergency permit;

B. shall not exceed 90 days in duration;

C. shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal;

D. may be terminated by the administrative authority at any time without process if he determines that termination is appropriate to protect human health and the environment;

E. shall be accompanied by a public notice including:

1. name and address of the office granting the emergency authorization;

2. name and location of the permitted TSD facility;

3. a brief description of the wastes involved;

4. a brief description of the action authorized and reasons for authorizing it; and

5. duration of the emergency permit;

F. shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable and appropriate requirements of LAC 33:V.Subpart 1.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 18:1256 (November 1992).

§703. Permit Evaluation

A. Application Distribution. Upon acceptance of an application for review, the administrative authority will distribute copies of the application (Part I) for review and comment to: the public (filed with local libraries or other public facility), notification of which is to be published in a bulletin (see LAC 33:V.717), and as an ad in a local newspaper; Water Pollution Division; Air Quality Division; Department of Health and Human Resources, Office of Health Services and Environmental Quality; Department of Wildlife and Fisheries; Office of Public Works of the Department of Transportation and Development; or the successors to any of the above; and to local governing authorities of any municipality and parish within whose territorial jurisdiction the facility or activity is located.

B. Review Considerations

1. In conducting its review of the application, the administrative authority will consider the purpose and use of facilities, operations and monitoring plan, capacity, closure, site suitability, financial responsibility, legal considerations, special considerations deemed necessary by the administrative authority on a site specific basis, and local zoning ordinances.

2. Comment from the public and involved local, parish, state, and federal agencies will be reviewed. The administrative authority may consider that the agencies that do not comment within 45 days from the date the ad is published in the newspaper have no objection to the proposed operation.

3. The administrative authority will assist the operator in the modification of the permit application or facility design or operation by:

a. conducting staff discussions with operator, designing engineer, and other principals to discuss reasons for denial;

b. referencing to "state-of-the-art" procedures and methods which, if incorporated in the operation design, would allow permit reapplication; and

c. conducting staff evaluations of objectionable features of application.

4. Initial compliance inspections shall be made as follows:

a. for existing facilities as a part of permit application evaluation; or

b. for new facilities ready to begin operation, after a "Request to Perform Initial Inspection" is submitted by the operator to the administrative authority. This inspection determines that new construction was built in conformity with conditions of the permit by a certification from the operator and supervising engineer, and actual department inspection and evaluation.

5. Order to proceed, or to continue with operation shall be given as follows:

a. the administrative authority will issue to existing facilities a notice to continue operations, issue an interim permit for a specified length of time to continue, and cite measures which must be taken to satisfy the terms of the permit. Specific target dates will be listed in the permit and a report of compliance will be submitted as required to the administrative authority but in no case less than quarterly; or

b. to new facilities the administrative authority will issue a notice permitting operation under a standard permit or issue a list of modifications required, before an order to begin operation will be issued.

6. Mandatory Provisions. Operation of existing facilities during department action on the permit application is permitted, in accordance with provisions of the Act, except that when the continued operation of an existing facility is determined by the department to be causing or about to cause irreparable damage to the environment, or a serious threat to life or safety based on recognized criteria or standards, or both, the administrative authority shall institute immediate enforcement actions pursuant to LAC 33:V.107 of these regulations and the Act. During the time period effective as of November 19 1980, and to extend no longer than the date of issuance of an interim or standard permit, existing treatment, storage and disposal facilities are required to meet interim status standards, in addition to the requirements of prior permits issued before August 1, 1979. Failure to comply with applicable provisions of the interim status standards as set forth in LAC 33:V.Chapter 43 shall be a violation of these regulations.

7. If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement actions may be taken under the applicable statutory provisions.

8. The effective date of an application is the date on which the administrative authority notifies the applicant that the application is complete as provided in LAC 33:V.303.M.

9. For each application from a major TSD facility, the administrative authority shall, no later than the effective date of the application, prepare and mail a project decision schedule to the applicant. The schedule shall specify target dates by which the administrative authority intends to:

a. prepare a draft permit;

b. give public notice;

c. complete the public comment period, including any public hearing; and

d. issue a final permit.

C. Draft Permits

1. Once an application is complete, the administrative authority shall tentatively decide whether to prepare a draft permit or to deny the permit.

2. If the administrative authority tentatively decides to deny the permit, a notice of intent to deny shall be issued. A notice of intent to deny the permit is a type of draft permit which follows the same procedures as any draft permit prepared under LAC 33:V.703.C.4. If the administrative authority's final decision is that the tentative decision to deny the permit was incorrect, the notice of intent to deny shall be withdrawn and a draft permit under LAC 33:V.703.C.3 shall be prepared.

3. If the administrative authority decides to prepare a draft permit, he shall prepare a draft permit that contains the following information:

a. all conditions under LAC 33:V.309 and 311;

b. all compliance schedules under LAC 33:V.325;

c. all monitoring requirements under LAC 33:V.309.J; and

d. all standards for treatment, storage, and/or disposal facilities and surface facilities for injection wells.

4. All draft permits prepared under this Section shall be accompanied by a fact sheet (LAC 33:V.703.D), and shall be based on the administrative record, publicly noticed (LAC 33:V. 715) and made available for public comment (LAC 33:V.707). The administrative authority shall give notice of opportunity for a public hearing (LAC 33:V. 711), and respond to comments (LAC 33:V.707).

D. Fact Sheet

1. A fact sheet shall be prepared for every draft permit. The fact sheet shall briefly set forth principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The administrative authority shall send this fact sheet to the applicant and, on request, to any other person.

2. The fact sheet shall include, when applicable:

a. a brief description of the type of facility or activity which is the subject of the draft permit;

b. the type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged;

c. a brief summary of the basis for the draft permit conditions including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record;

d. reasons why any requested variances or alternatives to required standards do or do not appear justified;

e. a description of the procedures for reaching a final decision on the draft permit including:

i. the beginning and ending dates of the comment period and the address where comments will be received;

ii. procedures for requesting a hearing and the nature of that hearing;

iii. any other procedures by which the public may participate in the final decision; and

f. name and telephone number of a person to contact for additional information.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:564 (June 1995).

§705. Issuance and Effective Date of Permit

A. After the close of the public comment period under LAC 33:V.707 on a draft permit, the administrative authority shall issue a final permit decision (or a decision to deny a permit for the active life of a hazardous waste management facility or TSD unit under LAC 33:V.706). The administrative authority shall notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. This notice shall include reference to the procedures for appealing a decision. For the purpose of this section, a final permit decision means a final decision to issue, deny, modify or revoke and reissue, or terminate a permit.

B. A final permit decision (or a decision to deny a permit for the active life of a hazardous waste management facility or TSD unit under LAC 33:V.706) shall become effective 30 days after the service of notice of the decision under LAC 33:V.705.A, unless:

1. a later effective date is specified in the decision;

2. review is requested under R.S. 30:2024;

3. no comments requested a change in the draft permit, in which case the permit shall become effective immediately upon issuance.

AUTHORITY NOTE: Promulgated in accordance with R.S.30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 14:790 (November 1988), LR 15:181 (March 1989). LR 16:614 (July 1990).

§706. Permit Denial

The administrative authority may deny the permit application either in its entirety or as to the active life of a hazardous waste management facility or TSD unit only.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:614 (July 1990).

Subchapter B. Hearings

§707. Public Comments and Requests for Public Hearings

A. During the public comment period provided under LAC 33:V.715, any interested person may submit written comments on the draft permit or the permit application and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in LAC 33:V.707.B.

B. Response to Comments. At the time that any final permit decision is issued, the administrative authority shall issue a response to comments.

1. This response shall specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change, and briefly describe and respond to all significant comments on the draft permit or the permit application raised during the public comment period, or during any hearing.

2. The response to comments shall be available to the public.

C. Within 30 days after a final permit decision (or a decision under LAC 33:V.706 to deny a permit for the active life of a hazardous waste management facility or TSD unit) has been issued under LAC 33:V.705, any person who filed comments on that draft permit or participated in the public hearing may petition the administrative authority to review any condition of the permit decision.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 16:614 (July 1990).

§709. Evidentiary Hearings on Operating Permit Applications for Commercial Hazardous Waste Treatment, Storage, Disposal, or Recycling Facilities

A. The purpose of an evidentiary hearing is to develop a record of facts, documents, testimony, and pleadings for submission to the administrative authority for consideration in making a permit decision.

B. An evidentiary hearing shall be held after the technical review on a permit application for operation of a commercial hazardous waste treatment, storage, disposal, or recycling facility. The administrative authority shall direct the Administrative Hearings Division to schedule an evidentiary hearing.

C. The administrative authority shall give public notice of the hearing at least 30 days prior to the date scheduled for commencement of the hearing.

D. Public notice shall be given for all evidentiary hearings.

1. The administrative authority shall mail a copy of a notice to the following persons (any person otherwise entitled to receive notice under this Subsection may waive his or her rights to receive notice for any classes and categories of permits):

a. the applicant;

b. the parish governing authority;

c. those who request notice in writing and those who are on the area mailing list developed by the Hazardous Waste Division Permits Section.

2. The permit applicant shall publish a notice, provided by the administrative authority, in a daily or weekly major local newspaper of general circulation within the area affected by the facility or activity and in the official journal of the state.

3. The permit applicant shall provide for broadcasting the notice over a local radio station designated by the administrative authority.

4. The administrative authority shall require the applicant to provide and pay for the notifications in LAC 33:V.709.D.2 and 3 and submit proof thereof.

E. All public notices issued under LAC 33:V.709.D.1 and 2 shall contain the following minimum information:

1. name and address of the office processing the permit action for which notice is being given;

2. name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit;

3. a brief description of the business conducted at the facility or activity described in the permit application;

4. name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the permit application;

5. a statement that intervention is required to participate at the hearing and a brief description of the procedures to qualify as an intervener;

6. date, time, and place of the hearing;

7. a brief description of the nature and purpose of the hearing; and

8. any additional information considered by the administrative authority to be necessary or proper.

F. Administrative procedures for adjudications contained in LAC 33:I.Chapter 3 shall apply to evidentiary hearings except as provided in LAC 33:V.709.G and H or where they are incompatible with the purpose of the evidentiary hearing as stated in LAC 33:V.709.A.

G. The presiding officer shall not make findings of fact, conclusions of law, or recommendations or render decisions on the merits of the permit application. The presiding officer's authority terminates once the record is complete and has been transmitted to the administrative authority.

H. Administrative procedures for adjudications pertaining to intervention contained in LAC 33:I.323 shall apply to evidentiary hearings.

I. Upon completion of the evidentiary hearing, the administrative authority may require the applicant to submit additional relevant information to supplement the record.

J. No draft permit decision shall be issued until after the administrative authority has received and reviewed the record of the evidentiary hearing.

K. Unless otherwise directed by the secretary in writing, hearing officers hired pursuant to R.S. 30:2018 are hereby delegated authority to perform the functions of the presiding officer in evidentiary hearings.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:683 (August 1990), LR 17:362 (April 1991), LR 21:565 (June 1995).

§711. Public Hearings

A. Applicability

1. The administrative authority shall hold a public hearing whenever written notice of opposition to a draft permit and a request for a hearing are received within 45 days of the public hearing notice. Whenever practicable, the administrative authority shall schedule a hearing under this Section at a location convenient to the nearest population center to the proposed facility.

2. The administrative authority may also hold a public hearing at his or her discretion whenever, for instance, such a hearing might clarify one or more issues involved in the permit decision.

3. Public notice of the hearing shall be given as specified in LAC 33:V.713.A.

B. For any public hearing, the administrative authority shall designate a presiding officer who shall be responsible for its scheduling and orderly conduct.

C. Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and written submissions may be required. The public comment period under LAC 33:V.715 shall automatically be extended to the close of any public hearing under this Section. The hearing officer may also extend the comment period by so stating at the hearing.

D. A tape recording or written transcript of the hearing shall be made available to the public.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 17:478 (May 1991).

Subchapter C. Public Notice of Permit Actions and Public Comment Period

§713. Scope

A. The administrative authority shall give public notice that the following actions have occurred:

1. a permit application has been tentatively denied under LAC 33:V.703.C.2;

2. a draft permit has been prepared under LAC 33:V.703.C.3;

3. a hearing has been scheduled under LAC 33:V.711.A; or

4. an appeal has been granted under LAC 33:V.323.A.3.

B. No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied under LAC 33:V.323. Written notice of that denial shall be given to the requester and to the permittee.

C. Public notices may describe more than one permit or permit action.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§715. Timing

A. Public notice of the preparation of a draft permit (including a notice of intent to deny a permit application) required under LAC 33:V.703.C.2 and 703.C.4 shall allow at least 45 days for public comment.

B. Public notice of a public hearing shall be given at least 45 days before the hearing. (Public notice of the hearing may be given at the same time as public notice of the draft permit and the two notices may be combined.)

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§717. Methods

Public notice of activities described in LAC 33:V.713.A shall be given by the following methods:

A. By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this Subsection may waive his or her rights to receive notice for any classes and categories of permits):

1. the applicant;

2. any unit of local government having jurisdiction over the area where the facility is proposed to be located, and each state agency having any authority under state law with respect to the construction or operation of such facility;

3. any other agency which the administrative authority knows has issued or is required to issue a permit for the same facility or activity;

4. federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the Advisory Council on Historic Preservation, state historic preservation officers, and affected states (Indian tribes). (For purposes of this Section, and in the context of the underground injection control program only, the term "state" includes Indian tribes as states.)

5. persons on a mailing list, including:

a. those who request in writing to be on the list;

b. those solicited for "area lists" on the basis of their participation in past permit proceedings in that area; and

c. those on the list as a result of notification to the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as regional and state funded newsletters, environmental bulletins, or state law journals. The administrative authority may update the mailing list from time to time by requesting written indication of continued interest from those listed and the administrative authority may delete from the list the name of any person who fails to respond to such a request.

d. Also, public notices will be mailed to subscribers to a bulletin issued periodically by the administrative authority. Subscribers will include public officials, industries who operate under department permits, and interested individuals and organizations who request that their name be added to the list. The bulletin will contain information concerning permit applications, actions on permits, suspension and revocation orders, enforcement actions, and other information of public interest concerning the hazardous waste program.

B. For standard permits or major modifications, publication of a notice in a daily or weekly major local newspaper of general circulation within the area affected by the facility or activity and broadcast over local radio stations. The administrative authority may require the applicant to provide for and pay for the notifications and submit proof thereof.

C. Any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:478 (May 1991).

§719. Contents

A. All public notices issued under this Part shall contain the following minimum information:

1. name and address of the office processing the permit action for which notice is being given;

2. name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit;

3. a brief description of the business conducted at the facility or activity described in the permit application or the draft permit;

4. name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit or draft general permit, as the case may be, statement of basis or fact sheet, and the application;

5. a brief description of the comment procedures required by LAC 33:V.707 and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision; and

6. any additional information considered necessary or proper.

~~B. Public Notices for Hearings. In addition to the general~~ public notice described in LAC 33:V.719, the public notice of a hearing under LAC 33:V.709 shall contain the following information:

1. reference to the date of previous public notices relating to the permit;

2. date, time, and place of the hearing; and

3. a brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 14:790 (November 1988).

§721. Additional Information

In addition to any other notice requirements of this Chapter, a copy of the fact sheet, Part 1 of the permit application, and the draft decision shall be mailed to the applicant, the United States Environmental Protection Agency, the governing authority for the parish in which the facility or activity is located or proposed, and the library repository specifically designated to receive information concerning the facility.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR ~~21:565 (June 1995).~~

Chapter 9. Manifest System for TSD Facilities

§901. Applicability

The regulations in this Chapter apply to owners and operators of both on-site and off-site TSD facilities, except as LAC 33:V.1501 provides otherwise. LAC 33:V.905, 907, and 909 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources. LAC 33:V.907.B only applies to permitees who treat, store, or dispose of hazardous wastes on-site where such wastes were generated.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 20:1000 (September 1994).

§903. Manifest Requirements

A. The manifest must contain all of the following information:

1. a state manifest document number which shall be obtained from this department if the destination point is in Louisiana;

2. the generator's name, mailing address, telephone number, and active EPA identification number;

3. the name, active EPA identification number and telephone number of each transporter;

4. the name, address, telephone number and active EPA identification number of the designated facility;

5. the description of the waste(s) (e.g., proper shipping name, hazard class, active EPA hazardous waste number, etc.) required by Louisiana Department of Public Safety and Corrections regulations in §§172.101, 172.202, and 172.203, the department's designated handling codes for waste described; and

6. the total quantity of each hazardous waste by units of weight in tons cubic yards, pounds, or gallons (liquids only), and the type and number of containers (metal drums, barrels, kegs, fiberboard or plastic drums, cargo tanks, tank trucks, dump trucks, metal boxes, cartons, cases, burlap bags, paper bags, plastic bags, wooden drums, tanks portable, tank cars, cylinders, wooden boxes, and fiber or plastic boxes) as loaded into or onto the transport vehicle. If the weight is unknown, the volume and estimated weight should be provided.

7. The department's handling codes for use on the manifest (effective January 1, 1992) are as follows:

Handling Codes	
	Metals Recovery (for reuse)
M011	High temperature metals recovery
M012	Retorting
M013	Secondary smelting
M014	Other metals recovery for reuse; e.g., ion exchange, reverse osmosis, acid leaching, etc. (specify in comments)
M019	Metals recovery — type unknown
	Solvents Recovery
M021	Fractionation/distillation
M022	Thin film evaporation
M023	Solvent extraction
M024	Other solvent recovery (specify in comments)
M029	Solvents recovery — type unknown
	Other Recovery
M031	Acid regeneration
M032	Other recovery; e.g., waste oil recovery, nonsolvent organics recovery, etc. (specify in comments)
M039	Other recovery — type unknown
	Incineration
M041	Incineration — liquids
M042	Incineration — sludges
M043	Incineration — solids
M044	Incineration — gases
M049	Incineration — type unknown
	Energy Recovery (reuse as fuel)
M051	Energy recovery — liquids
M052	Energy recovery — sludges
M053	Energy recovery — solids
M059	Energy recovery — type unknown
	Fuel blending
M061	Fuel blending

Handling Codes	
	Aqueous Inorganic Treatment
M071	Chrome reduction followed by chemical precipitation
M072	Cyanide destruction followed by chemical precipitation
M073	Cyanide destruction only
M074	Chemical oxidation followed by chemical precipitation
M075	Chemical oxidation only
M076	Wet air oxidation
M077	Chemical precipitation
M078	Other aqueous inorganic treatment; e.g., ion exchange, reverse osmosis, etc. (specify in comments)
M079	Aqueous inorganic treatment — type unknown
	Aqueous Organic Treatment
M081	Biological treatment
M082	Carbon adsorption
M083	Air/steam stripping
M084	Wet air oxidation
M085	Other aqueous organic treatment (specify in comments)
M089	Aqueous organic treatment — type unknown
	Aqueous Organic and Inorganic Treatment
M091	Chemical precipitation in combination with biological treatment
M092	Chemical precipitation in combination with carbon adsorption
M093	Wet air oxidation
M094	Other organic/inorganic treatment (specify in comments)
M099	Aqueous organic and inorganic treatment — type unknown
	Sludge Treatment
M101	Sludge dewatering
M102	Addition of excess lime
M103	Absorption/adsorption
M104	Solvent extraction
M109	Sludge treatment — type unknown

Handling Codes	
	Stabilization
M111	Stabilization/Chemical fixation using cementious and/or pozzolanic materials
M112	Other stabilization (specify in comments)
M119	Stabilization — type unknown
	Other Treatment
M121	Neutralization only
M122	Evaporation only
M123	Setting/clarification only
M124	Phase separation (e.g., emulsion breaking, filtration) only
M125	Other treatment (specify in comments)
M129	Other treatment — type unknown
	Disposal
M131	Land treatment/application/farming
M132	Landfill
M133	Surface impoundment (to be closed as a landfill)
M134	Deepwell/undergound injection
M135	Direct discharge to sewer/POTW (no prior treatment)
M136	Direct discharge to surface water under NPDES (no prior treatment)
M137	Other disposal (specify in comments)
	Transfer Facility Storage
M141	Transfer facility storage, waste was shipped off site with no on-site TDR activity

B. The following certification must appear on the manifest: "This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Louisiana Department of Public Safety, the Louisiana Department of Environmental Quality, the U.S. Department of Transportation, and the U.S. EPA."

C. The manifest must consist of at least enough copies to provide the original to the department; one copy each for the generator, each transporter, and the owner or operator of the designated facility; and remaining copies to be signed and returned to the generator and other appropriate parties.

D. The manifest form must be obtained from the department. A Louisiana manifest shall be used as follows:

1. if the hazardous waste is generated in Louisiana and disposed of in Louisiana;

2. if the hazardous waste is generated out of Louisiana and disposed of in Louisiana; or

3. if the hazardous waste is generated in Louisiana and is disposed of in a state without its own manifest system.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 12:319 (May 1986), LR 17:362 (April 1991).

§905. Use of the Manifest System

A. If a facility receives a hazardous waste accompanied by a manifest, the owner or operator, or his agent, must:

1. sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;

2. note any significant discrepancies in the manifest (as defined in LAC 33:V.907.A) on each copy of the manifest. The administrative authority does not intend that the owner or operator of a facility whose procedures under LAC 33:V.1519.C include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. LAC 33:V.907.B, however, requires reporting an unreconciled discrepancy discovered during later analysis;

3. immediately give the transporter at least one copy of the signed manifest;

4. within seven working days after the delivery, send a signed copy of the manifest to the generator; and

5. retain at the facility a copy of each manifest for at least three years from the date of delivery or final disposal, whichever is later. After three years, a summary, extract, or microfilm copy of the information shall be retained by the facility to keep records of waste received.

B. If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification, and signatures), the owner or operator, or his agent, must:

1. sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;

2. note any significant discrepancies (as defined in LAC 33:V.907.A) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper. The administrative authority does not intend that the owner or operator of a facility whose procedures under LAC 33:V.1519.C include waste analysis must perform that analysis before signing the shipping paper and giving it to the transporter. LAC 33:V.907.B, however, requires reporting an unreconciled discrepancy discovered during later analysis;

3. immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);

4. within 30 days after the delivery, send a copy of the signed and dated manifest to the generator, however, if the manifest has not been received within 30 days after delivery, the owner or operator, or his agent, must send a copy of the shipping paper signed and dated to the generator. LAC 33:V.1107.D.3 requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by water (bulk shipment); and

5. retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery or final disposal, whichever is later.

C. Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of LAC 33:V.1107.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:364 (April 1991).

§907. Manifest Discrepancies

A. Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are: (1) for bulk waste, variations greater than 10 percent in weight; and (2) for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

B. Upon discovering a discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g, with telephone conversations). The owner or operator must submit to the administrative authority within five working days a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue. After the discrepancy is resolved, a corrected copy is to be sent to the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:364 (April 1991).

§909. Unmanifested Waste Report

If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described in LAC 33:V.1307.E.2, then the owner or operator must prepare and submit a single copy of a report to the administrative authority within 15 days after receiving the waste. Such unmanifested waste storage, treatment, or disposal shall be covered by the facility permit or an emergency permit (LAC 33:V.701), and treatment or disposal shall not occur until approval of the administrative authority is given. The unmanifested waste report must be submitted on the form provided by the administrative authority. Such report must be

designated "Unmanifested Waste Report" and include the following information:

A. the EPA identification number, name, and address of the facility;

B. the date the facility received the waste;

C. the EPA identification number, name, and address of the generator and the transporter, if available;

D. a description and the quantity of each unmanifested hazardous waste and facility received;

E. the method of treatment, storage, or disposal for each hazardous waste;

F. the certification signed by the owner or operator of the facility, or his authorized representative; and

G. a brief explanation of why the waste was unmanifested, if known.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:364 (April 1991).

§911. Manifest Forms

A. A manifest form containing the information required by these regulations shall be used for all shipments of hazardous waste under this regulation and shall be completed in full by the proper parties.

B. Sample manifest forms will be available upon request from the department.

C. The manifest form shall contain a valid and active EPA identification number for the generator, transporter, and disposer and the valid EPA waste identification number(s).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:364 (April 1991).

§913. Manifest Document Flow

A. The generator initiates the manifest (original and at least seven copies) as required in LAC 33:V.903. After the transporter signs the manifest, the generator retains one copy for his files, mails the second copy to the administrative authority of the generator's state (where the waste was generated) and the original and all other copies accompany the hazardous waste shipment.

B. The transporter who delivers the hazardous waste to the facility secures the hazardous waste facility operator's signature upon delivery of waste, retains one copy for his files, and gives the original and copies to the hazardous waste facility operator.

C. The hazardous waste facility operator fills out his portion, retains a copy for his files, submits the original to the department no later than seven days after delivery of the hazardous waste and sends all remaining copies to the generator no later than seven days after delivery of the hazardous waste.

D. The generator files his copy and maintains records in accordance with LAC 33:V.1111.A.1.

E. The generator, transporter, and hazardous waste facility operator shall maintain file copies of the manifest for a period not less than three years for department inspection, as required in LAC 33:V.317.B.

F. The generator and hazardous waste facility operator each shall submit an annual report to the department including manifest numbers, total quantity by type of waste handled, its disposition, and all other information requested by the department on the annual report forms. The report shall cover the preceding calendar year and shall be submitted by March 1.

G. The signing of the manifest by the generator, transporter, or hazardous waste facility operator certifies that to the best of his knowledge, his portion of the manifest is accurately and correctly filled out. The generator further certifies that the material is properly packaged, marked, and labelled and is in a proper container for transportation.

H. Except as otherwise provided in LAC 33:V.919 and 1309.G, hazardous waste facility operators are required to report to the department any irregularities between the wastes actually received and the waste described on the manifest, or any other irregularities, within five days.

I. Additional generator responsibilities for rail shipments are contained in LAC 33:V. 1107.D.4 and 1107.D.5.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 12:319 (May 1986), LR 17:362 (April 1991), LR 18:1256 (November 1992).

§915. Facilities Accepting Out-of-State Wastes

The operator of a hazardous waste facility accepting out-of-state wastes is responsible for all the requirements of this Section, including requiring the generator to initiate a manifest.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§917. Hazardous Wastes Not Properly Manifested

When hazardous wastes are not properly manifested and shipped but are to be accepted by the operator of a hazardous

waste facility, the requirements of LAC 33:V.909 should be followed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§919. Hazardous Waste Rejections

If any hazardous waste is rejected by the operator of a hazardous waste facility, the operator of that facility is to notify the department immediately (within 24 hours) by telephone and give reasons why the waste was rejected. Within seven days of the refusal to accept the wastes, the operator must provide the administrative authority with a written explanation of why the waste was rejected.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:364 (April 1991).

§921. TSD Operator Responsibility

The operator of any treatment, storage, and disposal facility will assume all the responsibilities of a generator established by these regulations for any hazardous waste transported from his facility to another permitted facility, except for waste rejected under LAC 33:V.919.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§923. Special Manifest Provisions

A. Scope. These provisions will apply to material in containers meeting the provisions of lab packs except that the outer container, excluding overpacking, shall not exceed five gallons (20 liters) in total liquid capacity prior to addition of the absorbent. The container and overpacking shall comply with applicable requirements of the Louisiana Department of Public Safety and Corrections or its successor agency. Except as otherwise provided herein, the requirements of LAC 33:V.2519 shall be met.

B. Reporting and Recordkeeping. Both the generator and disposer shall maintain copies of the manifests and other records as required elsewhere in the LAC 33:V.Subpart 1. The generator and disposer shall include all such wastes in the annual report as provided in LAC 33:V.913.F and 1111.B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:364 (April 1991).

Chapter 11. Generators

§1101. Applicability

A. A generator who treats, stores, or disposes of hazardous waste on-site is not required to comply with the requirements of this Chapter except for the following with respect to that waste: LAC 33:V.1101.C, 1103, 1105, 1109.E, 1111.A.3, 1111.A.4, 1111.D, 1115, 1117, 1119 and 1121.

~~B. Any person who imports hazardous waste into Louisiana~~ must comply with ~~the standards~~ applicable to generators ~~established in this Chapter and especially LAC 33:V.1113.~~

C. A farmer who generates waste pesticides which are hazardous waste and who complies with all of the requirements of LAC 33:V.105.D.5 is not required to comply with other standards in this Chapter or LAC 33:V.Subpart 1 with respect to such pesticides.

D. A person who generates a hazardous waste as defined in LAC 33:V.109 and further specified in LAC 33:V.Chapter 49 is subject to the requirements of this Chapter and penalties prescribed in the Act for noncompliance.

E. An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility must comply with the generator standards established in LAC 33:V.Chapter 11. The provisions of LAC 33:V.1109.E are applicable to the on-site accumulation of hazardous waste by generators. Therefore, the provisions of LAC 33:V.1109.E only apply to owners or operators who are shipping hazardous waste which they generated at that facility. A generator who treats, stores, or disposes of hazardous waste on-site must comply with the applicable standards and permit requirements set forth in LAC 33:V.Subpart 1.

~~F. A person who generates a hazardous waste as defined in~~ LAC 33:V.109 and further specified in ~~LAC 33:V.Chapter 49~~ is subject to the ~~requirements of these chapters and shall~~ register with ~~the department~~ in accordance with the applicable ~~provisions of LAC 33:V.303.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:398 (May 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994).

§1103. Hazardous Waste Determination

A person who generates a solid waste, as defined in LAC 33:V.109, must determine if that waste is a hazard.

~~A. First, the generator must determine if the waste is exempted from regulation under LAC 33:V.105.D.~~

B. ~~For the purposes of compliance with LAC 33:V.Chapter 22, or~~ if the waste is not listed as a hazardous waste in LAC 33:V.4901, the generator must determine whether the waste is identified in LAC 33:V.4903 by either:

1. testing the waste according to the methods set forth in the "Test Methods for Evaluating Solid Waste, ysical/Chemical Methods" (SW846), or according to an equivalent method approved by the administrative authority; or

2. applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used.

C. If the waste is determined to be hazardous, the generator must refer to other parts of these regulations for possible exclusions or prohibitions pertaining to management of his specific wastes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 15:378 (May 1989), LR 17:658 (July 1991).

§1105. EPA Identification Numbers

A generator must not treat, store, dispose of, transport or offer for transportation hazardous waste without having received an active EPA identification number.

A. A generator who has not received an active EPA identification number must obtain one by applying to the administrative authority using the form provided within 14 days after first generating any hazardous waste.

B. A generator must notify the administrative authority within seven days if any of the information submitted in the application for the identification number changes. Because EPA identification numbers are site-specific, if a facility moves to another location, the owner/operator must obtain a new EPA identification number for the facility.

C. A generator must not offer his or her hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an active EPA identification number and the required permits (or interim status) necessary to receive and manage the generator's waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:362 (April 1991), LR 18:1256 (November 1992).

§1107. The Manifest System

A. General Requirements

1. A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal must prepare a manifest before transporting the waste off-site, with the exclusions of generators exempt pursuant to provisions of LAC 33:V.105.D.

2. A generator must designate on the manifest one facility which is permitted to handle the waste described on the manifest.

3. If the transporter is unable to deliver the hazardous waste to the designated facility, the generator must either designate another facility or instruct the transporter to return the waste.

4. Reserved

5. In naming a hazardous waste, a generator shall use the proper shipping name prescribed by the Louisiana Department of Public Safety and Corrections or its successor agency and provide specific identification pursuant to LAC 33:V.Chapter 49.

6. If the hazardous waste is to be transported out-of-state, the generator will be responsible for receiving the completed, signed manifest from the out-of-state hazardous waste facility.

7. Generators must get written confirmation of acceptability of the hazardous waste from the operator of the hazardous waste facility before shipping the hazardous waste. The confirmation must be maintained as part of the facility manifest records (See LAC 33:V.1111).

8. Except as otherwise provided in LAC 33:V.919 and 1309.F, generators are required to report to the department any irregularities between the wastes actually received and the waste described on the manifest, or any other irregularities, within 15 days.

9. The manifest form and the continuation sheet used must be obtained from the department.

10. If additional space is needed on the manifest form, another manifest form or a continuation sheet may be used.

B. Required Information

1. The manifest must contain all of the following information prior to leaving the generator site:

a. a state manifest document which shall be obtained from this department if the destination point is in Louisiana;

b. the generator's name, mailing address, telephone number, and active EPA identification number;

c. the name, active EPA identification number and telephone number of each transporter;

d. the name, address, telephone number and active EPA identification number of the designated facility;

e. the description of the waste(s) (e.g., proper shipping name, EPA hazardous waste number, etc.) required by Hazardous Materials regulations of the Louisiana Department of Public Safety and Corrections in LAC 33:V.Subpart 2.Chapter 101, and the department's designated handling codes for waste listed; and

f. the total quantity of each hazardous waste by units of weight in tons, cubic yards, pounds, or gallons (liquids only), and the type and number of containers (metal drums, barrels, kegs, fiberboard or plastic drums, cargo tanks, tank trucks, dump trucks, metal boxes, cartons, cases, burlap bags, paper bags, plastic bags, wooden drums, tanks portable, tank

cars, cylinders, wooden boxes, and fiber or plastic boxes) as loaded into or onto the transport vehicle. If the weight is unknown, the volume and estimated weight should be provided.

2. The certification that appears on the manifest must be read, signed, and dated by the generator as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me that minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford."

C. Number of Copies. The manifest consists of at least the number of copies which will provide the generator, each transporter, and the owner or operator of the designated facility with one copy each for their records and remaining copies to be returned to the generator and other appropriate parties.

D. Use of the Manifest

1. The generator must:

a. sign and date the manifest certification by hand when the initial transporter accepts the shipment;

b. obtain the handwritten signature of the initial transporter and date of acceptance on the manifest; and

c. retain one copy, in accordance with LAC 33:V.1111.A.

2. The generator must give the transporter the remaining copies of the manifest.

3. For shipments of hazardous waste within the United States solely by water (bulk shipments only), the generator must send three copies of the manifest dated and signed in accordance with this Section to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.

4. For rail shipments of hazardous waste within the United States which originate at the site of generation, the generator must complete the transporter section of the manifest less signature, retain one copy of the completed manifest, and send at least three copies of the manifest dated and signed in accordance with this Section to:

a. the next non-rail transporter, if any; or

b. the designated facility if transported solely by rail; or

c. the last rail transporter to handle the waste in the United States if exported by rail. [Note: See LAC 33:V.1307.E and 1307.F for special provisions for rail or water (bulk shipment) transporters.]

5. Reserved

6. For shipments of hazardous waste to a designated facility in an authorized state that has not yet obtained authorization to regulate that particular waste was hazardous, the generator must assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 12:319 (May 1986), LR 16:220 (March 1990), LR 17:362 (April 1991), LR 17:478 (May 1991), LR 18:1256 (November 1992), LR 20:1109 (October 1994), LR 21:266 (March 1995).

§1108. Manifest System Emergency Response Information

A. Generators must provide a Chem-Card or similar emergency card, or a statement concerning the hazardous nature of the material and general guidelines for an emergency situation involving this hazardous waste to accompany the manifest on shipments and loads.

B. The generator will supply the railroad company with the necessary emergency response information and the manifest document number, which are to be included on the waybill.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1256 (November 1992).

§1109. Pre-transport Requirements

A. Packaging. Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must package the waste in accordance with the applicable Department of Public Safety regulations and packaging under LAC 33:V.Subpart 2.Chapter 101.

1. Hazardous waste, liquid, or solid not otherwise specified must meet the requirement of Subchapter C of 49 CFR, and/or the Louisiana Hazardous Material Regulations Subchapter C. Special attention must be directed towards LAC 33:V.Subpart 2.Chapter 101.

2. Dump type transport vehicles in addition to LAC 33:V.1109.A.1 must have a continuous plastic lining with a minimum thickness of 6 mil, be bindered or bolted in order to

prevent accidental leakage or escape of the material (Trip binders are not acceptable), must be completely covered by a tarpaulin that is secured to insure no leakage during normal transportation, and the material transported must be solidified with a medium to such consistency that insures the material will not shift, creep, crawl or splash during emergency braking from 20 mph, or accomplish these requirements by other means acceptable to the administrative authority.

3. Portable tank or "sludge" containers in addition to LAC 33:V.1109.A.1 must have fill, discharge, and similar openings of the container bindered or bolted to prevent discharge during transport, be secured to the transport vehicle to insure that the container will not shift laterally or longitudinally during transportation, or accomplish these requirements by other means acceptable to the administrative authority.

B. Labeling. Before transporting or offering hazardous waste for transportation off-site, a generator must label each package in accordance with the applicable transportation regulations on hazardous materials of the Louisiana Department of Public Safety and Corrections or its successor agency under LAC 33:V.Subpart 2.Chapter 101.

C. Marking. Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 110 gallons or less used in such transportation with the following words and information displayed in accordance with the Department of Public Safety regulations (see Department of Public Safety regulation LAC 33:V.Subpart 2.Chapter 101.

Hazardous waste: Federal and state law prohibits improper disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name and Address _____

Manifest Document Number _____

D. Placarding. Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to Department of Public Safety regulations for hazardous materials under LAC 33:V.Subpart 2.Chapter 101.

E. Accumulation Time

1. Except as provided in LAC 33:V.1109.E.7, a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status provided that:

a. the waste is placed in containers and the generator complies with LAC 33:V.Chapter 21; and/or

b. the waste is placed in tanks and the generator complies with LAC 33:V.Chapter 19; and/or

c. the waste is placed on drip pads and the generator complies with LAC 33:V.Chapter 43.Subchapter S and maintains the following records at the facility:

i. a description of procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and

ii. documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal.

In addition, such a generator is exempt from all requirements in LAC 33:V.Chapter 43. Subchapters F and G, except for LAC 33:V.4379 and 4385.

~~d. the waste is placed in containment buildings and the~~ generator complies with LAC 33:V.4701 by having placed his professional engineer certification that the building complies with the design standards specified in LAC 33:V.4703 in the facility's operating record no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit. The owner or operator shall maintain the following records at the facility:

i. a written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the 90-day limit, and documentation that the procedures are complied with; or

ii. documentation that the unit is emptied at least ~~once every 90 days;~~

e. the date upon which each period of accumulation begins is clearly marked on each container and visible for inspection; and while being accumulated on-site, each container and tank is labeled or marked clearly with the words "Hazardous Waste"; and the generator complies with the requirements for owners or operators in LAC 33:V.4319 and in Subchapters B and C of LAC 33:V.Chapter 43.

2. A generator not subject to the exclusions in LAC 33:V.105.D, who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the permitting requirements as specified in LAC 33:V.305.A.1 of LAC 33:V.Subpart 1 unless he has been granted an extension to the 90-day period. Such an extension may be granted by the administrative authority if hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, or uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the administrative authority on a case-by-case basis.

3. Generators who accumulate hazardous waste for less than 90 days are subject to the requirements of LAC 33:V.1115, 1117, 1119 and 2245 of these regulations.

4. A generator may accumulate as much as 55 gallons of hazardous waste listed in LAC 33:V.4901.B, C, D, F, or

LAC 33:V.4903, or one quart of acutely hazardous waste listed in LAC 33:V.4901.E in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with LAC 33:V.1109.E.1 of this Section provided he complies with LAC 33:V.2103, 2105, 2107.A and marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

5. A generator who accumulates either hazardous waste or acutely hazardous waste listed in LAC 33:V.4901.E in excess of the amounts listed in LAC 33:V.1109.E.4 of this Section at or near any point of generation must, with respect to that amount of excess waste, comply within three days with LAC 33:V.1109.E.1 of this Section or other applicable provisions of this Chapter.

6. During the three-day period, the generator must continue to comply with LAC 33:V.1109.E.4 of this Section. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amounts began accumulating.

7. A generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status provided that:

a. the generator complies with the requirements of LAC 33:V.Chapter 43.Subchapter H except for LAC 33:V.4427;

b. the generator complies with the requirements of LAC 33:V.4301.E;

c. the generator complies with the requirements of LAC 33:V.1109.E.1; the requirements of LAC 33:V.Chapter 43.Subchapter B; and the requirements of LAC 33:V.2245.E;

d. the generator complies with the following requirements:

i. at all times there must be at least one employee either on the premises or on call (i.e. available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in LAC 33:V.1109.E.7.e.iv. This employee is the emergency coordinator;

ii. the generator must post the following information next to the telephone:

(a). the name and telephone number of the emergency coordinator;

(b). location of fire extinguishers and spill control material, and, if present, fire alarm; and

(c). the telephone number of the fire department, unless the facility has a direct alarm;

iii. the generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

iv. the emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

(a). in the event of a fire, call the fire department or attempt to extinguish the fire with a fire extinguisher;

(b). in the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

(c). in the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the administrative authority. The report must include the following information:

(i). the name, address, and U.S. EPA Identification Number of the generator;

(ii). date, time, and type of incident (e.g., spill or fire);

(iii). quantity and type of hazardous waste involved in the incident;

(iv). extent of injuries, if any; and

(v). estimated quantity and disposition of recovered materials, if any.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 16:47 (January 1990), LR 16:220 (March 1990), LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:266 (March 1994).

§1111. Recordkeeping and Reporting

A. Recordkeeping

1. A generator must keep a copy of each manifest signed in accordance with LAC 33:V.1107.D.1 for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.

2. A generator, must keep a copy of each Annual Report and Exception Report for a period of at least three years from the due date of the report.

3. A generator must keep records of any test results, waste analyses, or other determinations made in accordance with LAC 33:V.1103 for at least three years from the date that

the waste was last sent to an on-site or off-site treatment, storage, or disposal facility.

4. The periods of retention referred to in this Section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the administrative authority.

B. Annual Report

1. A generator who ships any hazardous waste off-site to a treatment, storage, or disposal facility within the United States must prepare and submit a single copy of an annual report to the administrative authority by March 1 of each year. The annual report must be submitted on the form provided by the administrative authority and it must cover generator activities during the previous calendar year. The reports must also include the following information:

a. the EPA identification number, name, and address of the generator;

b. the calendar year covered by the report;

c. the EPA identification number, name, and address of each off-site treatment, storage, or disposal facility in the United States to which waste was shipped during the year;

d. the name and EPA identification number of each transporter used during the reporting year for shipments to a treatment, storage, or disposal facility within the United States;

e. a description of the waste, the EPA hazardous waste number (see LAC 33:V.4901 or 4903), U.S. Department of Transportation hazard class, and quantity of each hazardous waste shipped off-site for shipments to a treatment, storage, or disposal facility within the United States. This information must be listed by EPA identification number of each such off-site facility to which waste was shipped;

f. the certification signed by the generator or his authorized representative;

g. a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;

h. a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available.

2. Generators who also dispose, treat, or store hazardous waste on-site shall also submit annual reports to the department, reporting total quantity, by type, of waste handled, and how that waste was disposed, treated, or stored. Generators must maintain on site a copy of each report submitted to the department for a period of at least three years from the date of the report. Reporting for exports of hazardous waste is not required on the annual report form. A separate annual report requirement is set forth in LAC 33:V.1113.G.

C. Exception Reporting

1. A generator who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 15 days of the date the waste was accepted by the initial transporter must contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste.

2. A generator must submit an Exception Report to the administrative authority if he has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter. The Exception Report must include:

a. a legible copy of the manifest for which the generator does not have confirmation of delivery; and

b. a cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

D. Additional Reporting. The administrative authority, as it deems necessary under the Act, may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or listed in LAC 33:V.Chapter 49.

E. Quarterly Reports. Generators who dispose of hazardous waste on-site shall submit a quarterly report (form approved by the administrative authority) no later than 15 days after the beginning of the quarter to the department reporting total quantities (calculated on a daily basis), by type of waste handled, and how that waste was disposed of during the previous calendar quarter, and shall retain on-site a copy of the report for at least three years from the date of disposal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:220 (March 1990), LR 17:365 (April 1991), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

§1113. Exports of Hazardous Waste

A. Applicability. Any person who exports hazardous waste to a foreign country, from a point of departure in Louisiana, must comply with the requirements of this Chapter and with the special requirements of LAC 33:V.1113. Importation of hazardous waste from a foreign country into Louisiana is prohibited under R.S. 30:2190 and 2191. This Section establishes requirements applicable to exports of hazardous waste. A primary exporter of hazardous waste must comply with the special requirements of this Section, and a transporter transporting hazardous waste for export must comply with applicable requirements of LAC 33:V.Chapter 13.

B. Reserved

C. General Requirements. Exports of hazardous wastes are prohibited except in compliance with the applicable

requirements of LAC 33:V.1113 and LAC 33:V.Chapter 13. Exports of hazardous waste are prohibited unless:

1. notification in accordance with LAC 33:V.1113.D has been provided;

2. the appropriate authority in the receiving country has consented to accept the hazardous waste;

3. a copy of the EPA Acknowledgment of Consent for the shipment accompanies the hazardous waste shipment and, unless exported by rail, is attached to the manifest (or shipping paper for exports by water [bulk shipment]);

4. the hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgement of Consent.

D. Notification of Intent to Export

1. A primary exporter of hazardous waste must notify the United States Environmental Protection Agency of an intended export before such waste is scheduled to leave the United States. A complete notification should be submitted 60 days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a 12-month or lesser period. The notification must be in writing, signed by the primary exporter, and include the following information:

a. name, mailing address, telephone number, and EPA ID number of the primary exporter;

b. by consignee, for each hazardous waste type:

i. a description of the hazardous waste and the EPA hazardous waste number (LAC 33:V.4901 and 4903), U.S. Department of Transportation proper shipping name, hazard class, and ID number for each hazardous waste as identified in 49 CFR Part 171-177;

ii. the estimated frequency or rate at which such waste is to be exported and the period of time over which such waste is to be exported;

iii. the estimated total quantity of the hazardous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22);

iv. all points of entry to and departure from each foreign country through which the hazardous waste will pass;

v. a description of the means by which each shipment of the hazardous waste will be transported (e.g., mode of transportation vehicle [air, highway, rail, water, etc.], type[s] of container [drums, boxes, tanks, etc.]);

vi. a description of the manner in which the hazardous waste will be treated, stored, or disposed of in the receiving country (e.g., land or ocean incineration, other land disposal, ocean dumping, recycling);

vii. the name and site address of the consignee and any alternate consignee; and

viii. the name of any transit countries through which the hazardous waste will be sent and a description of the approximate length of time the hazardous waste will remain in such country and the nature of its handling while there.

2. Notification shall be sent to the Louisiana Department of Environmental Quality with "Attention: Notification to Export" prominently displayed on the front of the envelope. [Note: This does not relieve the regulated community from the requirement of submitting notification to the Office of International Activities as required by 40 CFR 262.53(b).]

3. Except for changes to the telephone number required by Subsection D.1.a of this Section, changes to the information required by Subsection D.1.b.v of this Section, and decreases in the quantity indicated pursuant to Subsection D.1.b.iii of this Section, when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous waste specified in the original notification), the primary exporter must provide the United States Environmental Protection Agency with a written renotification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to Subsection D.1.b.viii of this Section and in the ports of entry to and departure from transit countries pursuant to Subsection D.1.b.iv of this Section) has been obtained and the primary exporter received an EPA Acknowledgment of Consent reflecting the receiving country's consent to the changes.

4. Upon request by the United States Environmental Protection Agency, a primary exporter shall furnish to the United States Environmental Protection Agency any additional information which a receiving country requests in order to respond to a notification.

5. The administrative authority will provide a complete notification to the receiving country and any transit countries. A notification is complete when the administrative authority receives a notification which the administrative authority determines satisfies the requirements of LAC 33:V.1113.D.1. Where a claim of confidentiality is asserted with respect to any notification information required by LAC 33:V.1113.D.1, the administrative authority may find the notification not complete until any such claim is resolved in accordance with LAC 33:V.317.C and LAC 33:V.319.

6. Where the receiving country consents to the receipt of the hazardous waste, the administrative authority will forward an EPA Acknowledgement of Consent to the primary exporter for purposes of LAC 33:V.1113.E.8. Where the receiving country objects to receipt of the hazardous waste or withdraws a prior consent, the administrative authority will notify the primary exporter in writing. The EPA will also notify the primary exporter of any responses from transit countries.

E. Special Manifest Requirements. A primary exporter must comply with manifest requirements of LAC 33:V.1107, except for the following:

1. in lieu of the name, site address, and EPA ID number of the designated permitted facility, the primary exporter must enter the name and site address of the consignee;

2. in lieu of the name, site address, and EPA ID number of a permitted alternate facility, the primary exporter may enter the name and site address of any alternate consignee;

3. in Special Handling Instructions and Additional Information, the primary exporter must identify the point of departure from the United States;

4. the following statement must be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: "and conforms to the terms of the attached EPA Acknowledgment of Consent";

5. in lieu of the requirements of LAC 33:V.1107.A.6, the primary exporter must obtain the manifest form from the department.

6. the primary exporter must require the consignee to confirm in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies between the manifest and the shipment (as defined in LAC 33:V.907.A). A copy of the manifest signed by such facility may be used to confirm delivery of the hazardous waste.

7. in lieu of the requirements of LAC 33:V.1107.A.3, where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter must:

a. renotify the United States Environmental Protection Agency of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with LAC 33:V.1113.D.3 and obtain an EPA Acknowledgment of Consent prior to delivery; or

b. instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States; and

c. instruct the transporter to revise the manifest in accordance with the primary exporter's instructions.

8. the primary exporter must attach a copy of the EPA Acknowledgement of Consent to the shipment to the manifest which must accompany the hazardous waste shipment. For exports by rail or water (bulk shipment), the primary exporter must provide the transporter with an EPA Acknowledgment of Consent which must accompany the hazardous waste but which need not be attached to the manifest except that for exports by water (bulk shipment) the primary exporter must attach the copy of the EPA Acknowledgment of Consent to the shipping paper;

9. the primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with LAC 33:V.1307.G.4.

F. Exception Reports. In lieu of the requirements of LAC 33:V.1111.C, a primary exporter must file an Exception Report with the United States Environmental Protection Agency, if:

1. he has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within 45 days from the date it was accepted by the initial transporter;

2. within 90 days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received; or

3. the waste is returned to the United States.

G. Annual Reports

1. Primary exporters of hazardous waste shall file with the United States Environmental Protection Agency no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year. Such reports shall include the following:

a. the EPA identification number, name, and mailing and site address of the exporter;

b. the calendar year covered by the report;

c. the name and site address of each consignee;

d. by consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from LAC 33:V.4901 or 4903), U.S. Department of Transportation hazard class, the name and US EPA ID number (where applicable) for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification;

e. Except for hazardous waste produced by exporters of less than 100 kg in a calendar month, unless provided pursuant to LAC 33:V.1111.B:

i. a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

ii. a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

f. A certification signed by the primary exporter which states:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

2. Reports shall be sent to the administrative authority of the Louisiana Department of Environmental Quality. [Note:

This does not relieve the regulated community from the requirement of submitting annual reports to the Office of International Activities.]

H. Recordkeeping

1. For all exports a primary exporter must:

a. keep a copy of each notification of intent to export for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

b. keep a copy of each EPA Acknowledgment of Consent for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

c. keep a copy of each confirmation of delivery of the hazardous waste from the consignee for at least three years from the date the hazardous waste was accepted by the initial transporter; and

d. keep a copy of each annual report for a period of at least three years from the due date of the report.

2. The periods of retention referred to in this Section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the United States Environmental Protection Agency.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

§1115. Preparedness and Prevention

All generators shall comply with the requirements of LAC 33:V.1511.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§1117. Contingency Plan

Each generator shall prepare a contingency plan. The contingency plan must include the information as specified in LAC 33:V.1513.A, B, C, D.2, and F. The contingency plan shall include a section describing emergency response procedure as specified in LAC 33:V.1513.F.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§1119. Personnel Training

All generators shall institute a personnel training program as specified in LAC 33:V.1515. The training program should cover all portions of the facility that handle hazardous wastes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, LR 10:200 (March 1984).

§1121. Spills

Any spilled material or material trapped in sumps that is a hazardous waste or that will be disposed of as a hazardous waste must be cleaned up in a timely manner.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

Chapter 13. Transporters

§1301. Applicability

A. LAC 33:V.Chapter 13 establishes standards which apply to persons transporting hazardous waste within the state of Louisiana if the transportation requires a manifest under LAC 33:V.Chapter 9.

B. The regulations set forth in LAC 33:V.Chapters 11 and 13 establish the responsibilities of generators and transporters in the handling, transportation and management of hazardous waste. In these regulations, Louisiana has expressly adopted certain regulations of the Department of Public Safety (DPS). These regulations concern, among other things, labeling, marking, placarding, using proper containers and reporting discharges. The department has adopted these regulations in order to satisfy its statutory obligation to promulgate regulations which are necessary to protect human health and the environment in the transportation of hazardous waste. The department adoption of these DPS regulations ensures consistency with the requirements of DPS and thus avoids the establishment of duplicative or conflicting requirements with respect to these matters.

C. Transporters of hazardous waste are cautioned that DPS's regulations are fully applicable to their activities and enforceable by DPS. The department and DPS worked together to develop standards for transporters of hazardous waste in order to avoid conflicting requirements. Regardless of DPS's action, the department retains its authority to enforce these regulations.

D. This Chapter does not apply to:

1. on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities; and

2. any person who offers for transportation or who transports household refuse or household septic tank pumping

from the site where it was generated, if those materials are not ansported with any other hazardous waste.

E. A transporter of hazardous waste must also comply with LAC 33:V.Chapter 11 if he transports hazardous waste into Louisiana from abroad.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1303. EPA Identification Number

A transporter must not transport hazardous wastes without having received an EPA identification number.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§1305. Transfer Facility Requirements

A. A transporter who stores manifested shipments of hazardous waste at a transfer facility for more than 10 days is considered a storage facility and is required to obtain a permit in compliance with the conditions of these regulations.

B. If hazardous wastes from different generators or separate wastes from the same generator become mixed after being accepted by the transporter, the transporter shall comply with applicable federal or state generator standards unless the transporter shows that the information on the manifests still identifies the hazardous waste.

C. A transporter storing manifested shipments of hazardous waste in containers meeting the requirements applicable to the LDPS regulations on packaging under LAC 33:V.Subpart 2.Chapter 101 at a transfer facility for a period of 10 days or less is exempt from the permitting requirements with approval of the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), repromulgated LR 18:1256 (November 1992).

§1307. The Manifest System

A. A transporter may not accept hazardous waste from a generator or another transporter unless it is accompanied by a manifest, signed by the generator in accordance with the provisions of LAC 33:V.1107. The transportation of any hazardous wastes without a manifest shall be deemed a violation of these regulations and the Act. ~~In the case of exports, a transporter may not accept such waste from a primary exporter or other person:~~

~~1. if he knows the shipment does not conform to the EPA~~ Acknowledgment of Consent; and

2. unless, in addition to a manifest signed in accordance with LAC 33:V.1107, such waste is also accompanied by an EPA Acknowledgment of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for ~~exports by water [bulk shipment]~~).

B. Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator or other transporter. The transporter must return a signed copy to the generator or other transporter before leaving the generator's property or other transporter's facility.

C. The transporter must ensure that the manifest accompanies the hazardous waste, except as provided for bulk water or rail transport in LAC 33:V.1307.E and F. ~~In the case of exports, the transporter must ensure that a copy of the EPA Acknowledgment of Consent also accompanies the hazardous waste.~~

D. A transporter who delivers a hazardous waste to another transporter or to the designated facility must:

1. obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest;

2. retain one copy of the manifest in accordance with LAC 33:V.1311; and

3. give the remaining copies of the manifest to the accepting transporter or designated facility.

E. The requirements of LAC 33:V.1307.C, D and F do not apply to water (bulk shipment) transporters if:

1. the hazardous waste is delivered by water (bulk shipment) to the designated facility;

2. a shipping paper containing all the information required on the manifest (excluding the EPA identification number, generator certification and signature) ~~and, for exports, an EPA Acknowledgment of Consent~~ accompanies the hazardous waste;

3. the delivering transporter obtains the date of delivery and handwritten signature of the owner and operator of the designated facility on either the manifest or the shipping paper;

4. the person delivering the hazardous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and

5. a copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with LAC 33:V.1311.B.

F. For shipments involving rail transportation, the requirements of LAC 33:V.1307.C, D and E do not apply and the following requirements do apply.

1. When accepting hazardous waste from a non-rail transporter, the initial rail transporter must:

a. sign and date the manifest acknowledging acceptance of the hazardous waste;

b. return a signed copy of the manifest to the non-rail transporter;

c. forward at least three copies of the manifest to:

i. the next non-rail transporter, if any;

ii. the designated facility, if the shipment is delivered to that facility by rail; or

iii. the last rail transporter designated to handle the waste in the United States;

d. retain one copy of the manifest and rail shipping paper in accordance with LAC 33:V.1311;

2. Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) ~~and, for exports, an EPA Acknowledgment of Consent~~ accompanies the hazardous waste at all times. [Note: Intermediate rail transporters are not required to sign either the manifest or shipping paper.];

3. When delivering hazardous waste to the designated facility, a rail transporter must:

a. obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and

b. retain a copy of the manifest or signed shipping paper in accordance with LAC 33:V.1311;

4. When delivering hazardous waste to a non-rail transporter, a rail transporter must:

a. obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and

b. retain a copy of the manifest in accordance with LAC 33:V.1311; and

5. Before accepting hazardous waste from a rail transporter, a non-rail transporter must sign and date the manifest or the shipping paper and provide a copy to the rail transporter.

G. Transporters who transport hazardous waste out of the United States must:

1. indicate on the manifest the date the hazardous waste left the United States;

2. sign the manifest and retain one copy in accordance with LAC 33:V.1311.D; and

3. return a signed copy of the manifest to the generator; and

~~4. give a copy of the manifest to a United States Customs official at the point of departure from the United States.~~

H. Transporters who pick up hazardous waste from generators exempted by LAC 33:V.105.D are responsible for the generator manifest requirements. Transporters may use a single manifest for shipments containing waste from several generators if all the generators are listed, all the wastes are accurately described, the wastes transported in the same shipment are compatible, and are labeled as required in this Chapter, LAC 33:V.1107.A.5 and 1109.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 18:1256 (November 1992), LR 20:1109 (October 1994).

§1309. Compliance with the Manifest

A. The transporter must deliver the entire quantity of hazardous waste which he has accepted from a generator or a transporter to:

1. the designated facility listed on the manifest;

2. the alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery, and such action is approved by the administrative authority;

3. the next designated transporter; or

4. the place outside the United States designated by the generator. [Note: No person may deliver a hazardous waste to a place other than the permitted facility shown on the manifest.]

B. If the hazardous waste cannot be delivered in accordance with LAC 33:V.1309.A, the transporter must contact the generator for further directions and must revise the manifest according to the generator's instructions.

C. A transporter shall not transport a shipment of hazardous waste in containers unless each hazardous waste container is marked and labeled as required in LAC 33:V.1109.B and C. If the label is lost or detached, the transporter shall replace it based on the information taken from the manifest for the shipment.

D. A transporter shall not transport a container that is leaking or appears to be damaged, except to the nearest place where the transport vehicle can be safely positioned without unnecessarily endangering other transport vehicles or the environment. The transporter will then make the repairs necessary to remedy the unsafe condition.

E. A transporter shall not accept hazardous wastes consisting of a material or mixtures of materials prohibited under DPS regulations.

F. Transporters will pick up and ship only those wastes which are properly prepared for shipment (see LAC 33:V.1109), and which are accompanied by a properly filled out manifest, and appear to be the hazardous waste described on the manifest. If the transporter notices any irregularities or rejects a shipment for any reason, he must notify the department as soon as possible, but no later than the next working day.

G. Except as provided in LAC 33:V.919 and 1309.F, transporters are required to report to the department any irregularities between the wastes received and the waste described on the manifest, or any other irregularities, within five days.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1311. Recordkeeping

A. A transporter of hazardous waste must keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner or operator of the designated facility for a period of three years from the date the hazardous waste was accepted by the initial transporter.

B. For shipments delivered to the designated facility by water (bulk shipment), each water (bulk shipment) transporter must retain a copy of the shipping paper containing all the information required in LAC 33:V.1307.E.2 for a period of three years from the date the hazardous waste was accepted by the initial transporter.

C. For shipments of hazardous waste by rail:

1. the initial rail transporter must keep a copy of the manifest and shipping paper with all the information required in LAC 33:V.1307.F.2 for a period of three years from the date the hazardous waste was accepted by the initial transporter; and

2. the final rail transporter must keep a copy of the signed manifest (or the shipping paper if signed by the designated facility in lieu of the manifest) for a period of three years from the date the hazardous waste was accepted by the initial transporter. [Note: Intermediate rail transporters are not required to keep records pursuant to these regulations.]

D. A transporter who transports hazardous waste out of the United States must keep a copy of the manifest, indicating that the hazardous waste left the United States, for a period of three years from the date the hazardous waste was accepted by the initial transporter.

E. The periods of retention referred to in this Section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§1313. Financial Responsibility

A. Each transporter of hazardous wastes shall acquire continuous coverage for all of its transport vehicles regulated by these rules and regulations at a minimum coverage of $300,000 per vehicle public liability and $200,000 per vehicle damage.

B. The financial responsibility required by this Section may be established by any one or a combination of the following:

1. evidence of liability insurance;

2. self-insurance with a level not more than 20 percent of equity; or

3. other evidence of financial responsibility acceptable to the secretary of public safety.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1315. Spills

A. Contingency Plan. Each transporter shall prepare a spills contingency plan. The spill contingency plan must include the information specified in LAC 33:V.1513.B (except 1513.B.1), C, E and F. The contingency plan shall include a section describing emergency response procedures as specified in LAC 33:V.1513.F.

B. Personnel Training. All transporters shall institute a personnel training program as specified in LAC 33:V.1515. This program shall apply to all personnel who would reasonably be expected to handle hazardous waste containers or tanks or deal with spills (e.g., drivers and dispatchers).

C. In the event of a discharge of hazardous waste during transportation, the transporter must take appropriate immediate action to protect human health and the environment (e.g., notify local authorities and dike the discharge area).

D. If a discharge of hazardous waste occurs during transportation and an official acting within the scope of his official responsibilities determines that immediate removal of the waste is necessary to protect human health or the environment, that official may authorize the removal of the waste by transporters who do not have EPA identification numbers.

E. An air, rail, highway, or water transporter who has discharged hazardous waste must:

1. give notice, if required by 49 CFR 171.15, to the National Response Center (800-424-8802 or 202-426-2675); and

2. report in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590.

F. A water (bulk shipment) transporter who has discharged hazardous waste must give the same notice as required by 33 CFR 153.203 for oil and hazardous substance.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§1317. Discharge Cleanup

A transporter must clean up any hazardous waste discharge that occurs during transportation and take such action as may be required by the administrative authority so that the hazardous waste discharge no longer presents a hazard to human health or the environment. The transporter becomes the generator of the waste for the purpose of cleanup, unless such responsibility is transferred to the owner of the material, or other responsible parties.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1319. Use and Reuse of Containers

A. A container may be used for the shipment of hazardous waste only to the extent permitted under the regulations of the Department of Public Safety. A permitted container may be reused only as provided in LAC 33:V.1319.B.

B. A package marked "NRC" or "STC" according to the specification requirements in the regulations of the Department of Public Safety may be reused only one time for the shipment of hazardous wastes, under the following conditions:

1. the material is packaged, marked, and labeled in accordance with the regulations of the Department of Public Safety;

2. transportation is by highway only;

3. the package is transported only after being sealed for at least 24 hours, is inspected for leakage immediately before being transported; or

4. the package is loaded by the shipper and unloaded by the consignee, unless the motor carrier is a private or contract carrier.

C. Any container, including tank trucks, used to transport waste shall be cleaned before leaving the disposal site. Such cleaning should be by a method or methods necessary to remove the hazardous constituents to a level which will not cause an incompatibility with any subsequent shipment and/or render any future load hazardous. All material resulting from such cleaning shall be considered a hazardous waste unless otherwise approved by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1321. Hazardous Waste that is also a Hazardous Material

If a hazardous waste, as defined in these rules and regulations, also meets the definition of hazardous material, the regulations of the Department of Public Safety also apply.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1323. Vehicle Markings and Placards

A. Markings. No person may transport a hazardous waste unless the transport vehicle is marked to display:

1. the name or trademark of the carrier operating the vehicle;

2. the city or place in which the carrier has its principal office or in which the vehicle is customarily based; and

3. the name of the person operating the vehicle. The name of a person other than the operating carrier may appear on the vehicle as long as the words "operated by" immediately precedes the information required by LAC 33:V.1323.A.1 and A.2. (Other identifying information may be displayed on the vehicle if it is not inconsistent with the information required by this Paragraph.)

B. The marking required by LAC 33:V.1323.A must:

1. appear on both sides of the vehicle;

2. be in letters that contrast sharply in color with the background;

3. be readily legible during daylight hours from a distance of at least 50 feet while the vehicle is stationary; and

4. be maintained in a manner that retains the legibility required by LAC 33:V.1323.B. (The marking may be a removable device.)

C. Placarding. A transporter may not move a transport vehicle containing a hazardous waste which is also a hazardous material unless the vehicle is placarded with placards in accordance with the regulations of the Department of Public Safety or such other regulations as may be prescribed by the

secretary of public safety for placarding vehicles carrying a hazardous material.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March, 1984).

Chapter 15. Treatment, Storage, and Disposal Facilities

§1501. Applicability

A. The regulations in this Chapter apply to owners and operators of all hazardous waste facilities, except as provided in LAC 33:V.1501.C. LAC 33:V.1503.B.3 applies only to facilities subject to regulations under LAC 33:V. Chapters 19, 21, 23, 25, 27, 29, 31, or 32.

B. Except as specifically authorized by the terms and conditions of a permit issued under these rules and regulations, the construction and operation of a facility to treat, store, or dispose of hazardous wastes in violation of the standards established by this Section shall be a violation of the Act enforceable pursuant to LAC 33:V.107 of these regulations and R.S. 30:1073.

C. The requirements of this Chapter do not apply to:

1. the owner or operator of a facility permitted, licensed, or registered to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation by the LHWR;

2. the owner or operator of a facility which treats or stores material which would otherwise be a hazardous waste which is being beneficially used or reused, legitimately recycled, or reclaimed as defined in LAC 33:V.Chapter 41 (except to the extent they are referred to in LAC 33:V.Chapter 40 or sections 4139, 4143, or 4145;

3. a wastewater treatment unit (see LAC 33:V.109);

4. a farmer disposing of waste pesticides from his own use as provided in LAC 33:V.105.D.5;

5. the owner or operator of a totally enclosed treatment facility (see LAC 33:V.109);

6. the owner or operator of an elementary neutralization unit (see LAC 33:V.109);

7. persons who respond immediately to contain or treat a spill of hazardous waste or material which, when spilled, becomes a hazardous waste, except that, the appropriate requirements of LAC 33:V.1511 and 1513 are applicable to owners and operators of treatment, storage, and disposal facilities. This Paragraph only applies to activities taken in immediate response to a spill. After the immediate response activities are completed, the applicable regulations of this Chapter apply;

8. a transporter storing manifested shipments of hazardous waste in containers meeting the requirements applicable to the regulations of the Department of Public Safety on packaging, at a transfer facility for a period of 10 days or less, if so approved by the administrative authority;

9. the addition of absorbent material to waste in a container (see LAC 33:V.109), or the addition of waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container and LAC 33:V.1517.B, 2103, and 2105 are complied with; or

10. a generator accumulating waste on-site in compliance with LAC 33:V.1109.E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992), LR 21:266 (March 1995).

§1503. Site Requirements

A. Geology

1. Topographic Relief. The site should not have any abrupt topographic changes or means should be provided to guard against slides, slumping, or erosion.

2. Soils. The area should be covered with natural stable soils of low permeability or a means should be provided, acceptable to administrative authority, which provide a barrier to penetration of surface spills or accumulations of hazardous wastes into a subsurface strata which would have a potential effect on a fresh-water aquifer.

3. Seismic Conditions. Portions of new facilities where treatment, storage, or disposal of hazardous waste will be conducted must not be located within 61 meters (200 feet) of a fault which has had displacement in Holocene time.

B. Hydrology

1. General Requirement. Sites utilized shall be isolated by means of natural or created boundaries from adjoining land and from subsurface and surface waters.

2. Drainage. The site must have the capability to control and/or contain run-off from the maximum rainfall in 24 hours from a 25-year storm (when maximum rainfall records are not available, the design standard shall be 12 inches below 31 degrees North latitude and nine inches above 31 degrees North latitude) and must have the capability to divert run-on from adjoining land (outside limits of hazardous waste site or if part of an industrial complex, outside limits of company property) from such a storm from the site (surface and subsurface).

3. Floodplains

a. A facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood unless the

owner or operator can demonstrate to the administrative authority that:

i. procedures are in effect which will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to floodwaters; or

ii. for existing surface impoundments, waste piles, land treatment units, landfills, and miscellaneous units, no adverse effects on human health or the environment will result if washout occurs, considering:

(a). the volume and physical and chemical characteristics of the waste in the facility;

(b). the concentrations of hazardous constituents that would potentially affect surface waters as a result of washout;

(c). the impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and

(d). the impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout.

4. Hurricane-Prone-Areas. Sites located in an area which is historically subject to hurricanes shall be protected from the entry of water by natural or created barriers certified by a professional engineer.

5. Conformity with Existing Restrictions and Permits. Sites located in floodways or wetlands under control of the U. S. Army Corps of Engineers and/or the Coastal Zone Management Office must apply for applicable permits. However, to avoid unnecessarily long licensing periods, the department may accept and process the application with its final approval dependent upon a similar approval. Final department action on such a state permit will be taken after final action on wetlands and coastal zone permits.

6. Areas of Critical Environmental Concern. Sites located in, or adjacent to, swamps, marshes, floodplains, estuaries, designated wildlife hatchery areas, habitats of endangered species, and similar critical environmental areas shall be isolated from such areas by effective barriers which eliminate possible adverse impacts on such areas due to operation of the facility.

7. Salt Dome Formations, Salt Bed Formations, Underground Mines, and Caves. The placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited.

C. Facilities

1. Transportation. Access to sites by surface and water transportation modes shall be by roads and waterways with the capacity to accept the demands created by the facility and designed to avoid, to the extent practical, congestion, sharp turns, obstructions, or other hazards which are conducive to accidents.

2. Services. Sites shall have convenient access to required services, including: utilities, medical care, police, fire protection, and similar services, or provide these services internally in a manner acceptable to the administrative authority.

3. Buffer Zone

a. General Requirement. Sites shall be shielded from adjoining non-compatible land uses by space, natural separation, or other means acceptable to the administrative authority.

b. Minimum Requirements. In no event shall the buffer be less than that stated for the following sites:

i. Sites zoned industrially—Sufficient space for security and drainage control facilities; or

ii. All other locations—200 feet between any facility (treatment pond, incinerator, tank, etc.) and property line unless a proper buffer is installed which is acceptable to the administrative authority (see LAC 33:V.2113 for container requirements).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 16:399 (May 1990), LR 18:1256 (November 1992).

§1504. Construction Quality Assurance Program

A. CQA Program

1. A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with LAC 33:V.2903.J and K, 2303.C and D, and 2503.L and M. The program must ensure that the constructed units meet or exceed all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a registered professional engineer.

2. The CQA program must address the following physical components, where applicable:

a. foundations;

b. dikes;

c. low-permeability soil liners;

d. geomembranes (flexible membrane liners);

e. leachate collection and removal systems and leak detection systems; and

f. final cover systems.

B. Written CQA Plan. The owner or operator of units subject to the CQA program under LAC 33:V.1504.A must

develop and implement a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include:

1. identification of applicable units and a description of how they will be constructed;

2. identification of key personnel in the development and implementation of the CQA plan and CQA officer qualifications;

3. a description of inspection and sampling activities for all unit components identified in LAC 33:V.1504.A.2, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover:

a. sampling size and locations;

b. frequency of testing;

c. data evaluation procedures;

d. acceptance and rejection criteria for construction materials;

e. plans for implementing corrective measures; and

f. data or other information to be recorded and retained in the operating record under LAC 33:V.1529.

C. Contents of Program

1. The CQA program must include observations, inspections, tests, and measurements sufficient to ensure:

a. structural stability and integrity of all components of the unit identified in LAC 33:V.1504.A.2;

b. proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications; and

c. conformity of all materials used with design and other material specifications under LAC 33:V.2303, 2503, and 2903.

2. The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full-scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of LAC 33:V.2303.C.1.b, 2503.L.1.b, and 2903.J.1.b in the field. Compliance with the hydraulic conductivity requirements must be verified by using in situ testing on the constructed test fill. The administrative authority may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of LAC 33:V.2303.C.1.b, 2503.L.1.b, and 2903.J.1.b in the field.

D. Certification. Waste shall not be received in a unit subject to LAC 33:V.1504 until the owner or operator has submitted to the administrative authority by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out, that the unit meets the requirements of LAC 33:V.2903.J or K, 2303.C or D, or 2503.L or M, and the procedure in LAC 33:V.309.L.3.b has been completed. Documentation supporting the CQA officer's certification must be furnished to the administrative authority upon request.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§1505. Discharges from the Site

A. General Requirements. All point-source discharges must be controlled and reported as follows:

1. water discharges, if any, must be in conformity with effluent limitations established by the Clean Water Act operating under an NPDES permit and reported as required by that permit. The NPDES Permit must be applied for prior to the issuance of a hazardous waste permit; or

2. air emissions, if any, must be in conformity with air limitations of the Clean Air Act administered by the Air Quality Division of the department, operating under an Air Quality Permit as required, and reported as required by that permit. The air permit must be applied for prior to the issuance of a hazardous waste permit.

B. Surface. Offsite shipments of any hazardous waste material, containers, packaging, or similar material must be reported on a manifest and must be delivered to a permitted facility.

C. Spills

1. Any spill of hazardous waste which could possibly endanger health or adversely affect the environment off-site shall be reported to the department immediately as provided in the "Notification Regulations and Procedures for Unauthorized Discharges and Spills." (See LAC 33:I.Chapter 39)

2. If a spill occurs on the site of a generator or TSD facility, and if that spill could endanger the public health or affect the environment off-site, the department and the Department of Public Safety have the authority to enter the site and investigate the spill. It is the responsibility of the operator to report spills of this nature to the department and the Department of Public Safety as soon as possible, as provided in LAC 33:V.1505.C.1.

3. Any spilled material or material trapped in sumps that is a hazardous waste or that will be disposed of as a hazardous waste must be cleaned up in a timely manner.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§1507. Security

A. General Requirements. The security system shall insure that site ingress and egress by the public is controlled and that employees are protected from hazards to health resulting from contact with extremely hazardous operations.

B. Perimeter Control. The natural or created barrier to site ingress or egress around the entire perimeter of the hazardous waste area shall be continuously patrolled or monitored. Equipment will be installed, as necessary, to keep birds and wildlife off the site.

C. Entry. Each entry through the perimeter barrier shall be manned at all hours. The entry should be opened by security personnel or by an electronic system (card, code, handprint, etc. or television monitor) acceptable to the administrative authority.

D. Alternate Means of Meeting Security Requirements. Any operator may petition the administrative authority for acceptance of equivalent alternative means of meeting the requirements of LAC 33:V.1507 in whole or in part. This shall be done through submission of proof that necessary procedures for the protection of health and property are provided by other means and that representatives of local fire and police departments, if any, are adequately informed of such means.

E. Perimeter Barrier. A constructed barrier shall enclose the entire hazardous waste site and shall have the capability to deny unauthorized or unknowing ingress or egress and to prevent entry by domestic livestock.

F. Perimeter Clear Zone. A clear, lighted path shall be constructed and maintained inside the perimeter barrier to permit patrol by vehicle or foot.

G. Required entry facilities include the following:

1. gate at each entry point equipped with secure locking device;

2. gate house for guard, or electromechanical equipment permitting controlled access; and

3. floodlighting at each entry to insure a well-lighted, safe, and secure area at night.

H. Emergency Response Facilities

1. Communications. An alarm system with controls accessible to each area of potential spill, explosion, or fire; telephone contact to each facility location; two-way radios for key personnel; and

2. Fire Control. Portable fire extinguishers, decontamination facilities, fire control equipment at incinerators, mixing and treatment vats; and other fire-hazard facilities and fire hydrants (with capacity as required by state fire code) located not more than 200 feet from each fire-hazard facility.

I. Safety Control Devices

1. Moving Equipment Barriers. Steel or concrete posts or barriers capable of stopping trucks or other equipment used on the site (at maximum expected speed) shall be installed to protect all hazardous waste above-ground pipelines, valves, or other containers located adjacent to roadways.

2. Personnel Barriers. Barriers shall be installed at all locations where employees or visitors normally come in contact with ponds, lagoons, incinerators, treatment facilities, and other high-hazard locations.

J. Exterior Lighting

1. All personnel barriers shall be lighted; all vehicle barriers shall have reflectors.

2. Entry gates shall be lighted (see LAC 33:V.1507.G.3).

3. Perimeter barriers shall be lighted (see LAC 33:V.1507.B).

K. Signs. A sign with the legend "Danger—Unauthorized Personnel Keep Out" must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion but in no case shall the spacing be greater than 200-foot intervals. The legend must be written in English and in any other language predominant in the area surrounding the facility, and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger—Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§1509. General Inspection Requirements

A. The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to:

1. a release of hazardous waste; or

2. a threat to human health.

The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

B. Schedule. LAC 33:V.517.G requires the inspection schedule to be submitted with Part II of the permit application. The administrative authority will evaluate the

schedule along with the rest of the application to ensure that it adequately protects human health and the environment.

1. The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

2. He must keep this schedule at the facility.

3. The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

4. The frequency of inspection may vary for the items on the schedule. However, inspections should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in LAC 33:V.1709, 1719, 1721, 1731, 1907, 1911, 2109, 2309, 2507, 2711, 2907, 3119, and 3205, where applicable. [Comment: LAC 33:V.517.G requires the inspection schedule to be submitted with Part II of the permit application. The department will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, the department may modify or amend the schedule as may be necessary.]

C. The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals; a schedule must be set up to ensure that the problem does not lead to an environmental or human health hazard. When a hazard is imminent or has already occurred, remedial action must be taken immediately.

D. The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 21:266 (March 1995).

§1511. Preparedness and Prevention

A. Applicability. The regulations in this Section apply to owners and operators of all hazardous waste facilities.

B. Design and Operation of a Facility. Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

C. Required Equipment. All facilities must be equipped with the following, unless it can be demonstrated to the administrative authority that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

1. an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

2. a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

3. portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

4. water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

D. Testing and Maintenance of Equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

E. Access to Communications or Alarm System

1. Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless it can be demonstrated to the administrative authority that such a device is not required.

2. Anytime there is at least one employee on the premises while the facility is operating, he must have immediate access to a device such as a telephone, immediately available at the scene of operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless it can be demonstrated to the administrative authority that such a device is not required.

F. Required Aisle Space. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to

the administrative authority that aisle space is not needed for any of these purposes.

G. Arrangements with Local Authorities

1. The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

a. arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;

b. where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

c. agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

d. arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

2. Where state or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1513. Contingency Plan and Emergency Procedures

A. Purpose and Implementation of Contingency Plan

1. Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

2. A contingency plan to be implemented in the event of an emergency shall be filed with the administrative authority and, after approval, with the local fire and police departments (if any operate in the area), hospitals and emergency response teams operating in the area which are subject to call by the operator or the department.

3. The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

4. The plan shall be revised each time the facility operations are changed due to expansion, change in type or quantity of waste handled, or other changes which affect the degree or type of possible emergency situation.

B. Content of Contingency Plan

1. The contingency plan must describe the actions facility personnel must take to comply with LAC 33:V.1513.B and F in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

2. If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with these requirements.

3. The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services.

4. The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator, and this list must be kept up to date. When more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. For new facilities, this information must be supplied to the administrative authority at the time of certification, rather than at the time of permit application.

5. The plan must include a list of all emergency equipment (where required) at the facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list and a brief outline of its capabilities.

6. The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. The plan must describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

C. Copies of Contingency Plan

1. The contingency plan must be submitted to the administrative authority with the permit application and, after modification or approval, will become a condition of any permit issued.

2. A copy of the contingency plan and all revisions to the plan must be maintained at the facility and additional copies must be submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

D. Amendment of Contingency Plan. The contingency plan ust be reviewed, and immediately amended, if necessary, enever:

1. the facility permit is revised;

2. the plan fails in an emergency;

3. applicable regulations are revised;

4. the facility changes its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

5. the list of emergency coordinators changes; or

6. the list of emergency equipment changes.

E. Emergency Coordinator. At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures (see LAC 33:V.1513.F). This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this erson must have the authority to commit the resources needed carry out the contingency plan.

F. Emergency Procedures

1. Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

a. activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

b. notify appropriate state or local agencies with designated response roles if their help is needed.

2. Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifest, and, if necessary, by chemical analysis.

3. Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

4. If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, he must report his findings as follows:

a. if his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

b. he must immediately notify the state official designated as the on-scene coordinator for that geographical area and provide:

i. name and telephone number of reporter;

ii. name and address of facility;

iii. time and type of incident (e.g., release, fire);

iv. name and quantity of material(s) involved, to the extent known;

v. the extent of injuries, if any; and

vi. the possible hazards to human health or the environment, outside the facility.

5. During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

6. If the facility stops operation in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

7. Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil, or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the owner or operator can demonstrate that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements.

8. The emergency coordinator must ensure that in the affected area(s) of the facility:

a. no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

b. all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

9. The owner or operator must notify the administrative authority and appropriate state and local authorities that the facility is in compliance with LAC 33:V.1513.F.8 before operations are resumed in the affected area(s) of the facility.

10. The owner or operator must note in the operating record the time, date, and details of any incident that requires implementation of the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the administrative authority which includes:

a. name, address, and telephone number of the owner or operator;

b. name, address, and telephone number of the facility;

c. date, time, and type of incident (e.g., fire, explosion);

d. name and quantity of material(s) involved;

e. the extent of injuries, if any;

f. an assessment of actual or potential hazards to human health or the environment, where this is applicable; and

g. estimated quantity and disposition of recovered material that resulted from the incident.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984) amended LR 10:496 (July 1984), LR 16:614 (July 1990), LR 18:1256 (November 1992).

§1515. Personnel Training

A. Instruction Program

1. Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this Section. The owner or operator must ensure that this program includes all the elements described in the document required in LAC 33:V.1515.D.3.

2. This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

3. At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:

a. procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

b. key parameters for automatic waste feed cut-off systems;

c. communications or alarm systems;

d. response to fires or explosions;

e. response to groundwater contamination incidents; and

f. shutdown of operations.

4. The facility operator shall conduct training sessions to be held at regular intervals for personnel in routine plant operation and also to inform and train the plant contingency team, representatives of local fire and police departments, and emergency response teams of plant layout, location of possible hazards, emergency equipment location and operation, the evacuation plan and route, power and waste stream cut-offs, communications equipment and phone numbers of all required contacts, and other critical information and procedures.

B. Facility personnel must successfully complete the program required in LAC 33:V.1515.A. within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements in LAC 33:V.1515.A.

C. Facility personnel must take part in an annual review of the initial training required in LAC 33:V.1515.A.

D. The owner or operator must maintain the following documents and records at the facility:

1. the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;

2. a written job description for each position listed in LAC 33:V.1515.D.1. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications and duties of employees assigned to each position;

3. a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed in LAC 33:V.1515.D.1; and

4. records documenting that the training or job experience required under LAC 33:V.1515.A, B, and C have been given to, and completed by, facility personnel.

E. Training records on current personnel must be kept until closure of the facility; training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1517. General Requirements for Ignitable, Reactive, or Incompatible Wastes

A. The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must restrict smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

B. The owner or operator of a facility that treats, stores, or disposes of ignitable or reactive waste, or mixes incompatible waste or incompatible wastes and other materials, must take precautions to prevent reactions which:

1. generate extreme heat or pressure, fire or explosions, or violent reactions;

2. produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;

3. produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

4. damage the structural integrity of the device or facility; and

5. through other like means threaten human health or the environment.

C. In landfills and burial sites, incompatible wastes shall be adequately separated to avoid mixing of the wastes during operation or after closure.

D. Treatment and storage facilities containing ignitable, reactive, or incompatible wastes shall be sufficiently separated or protected to prevent mixing, ignition, or reaction as a result of a spill, tank failure, or other cause. Protection shall include use of container materials compatible with the wastes contained therein.

E. Any container, including tank trucks, used to transport waste shall be cleaned before leaving the disposal site. Such cleaning should be by a method or methods necessary to remove the hazardous constituents to a level which will not cause an incompatibility with any subsequent shipment and/or of itself render any future load hazardous. All material resulting from such cleaning shall be considered a hazardous waste unless otherwise approved by the administrative authority.

F. When required to comply with LAC 33:V.1517.A and B, the owner or operator must document that compliance. This documentation may be based on references to published scientific or engineering literature, data from trial tests (e.g., bench scale or pilot scale tests), waste analyses, or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1519. General Waste Analysis

A. Hazardous Waste Chemical and Physical Analysis

1. Before an owner or operator treats, stores, or disposes of any hazardous waste, or non-hazardous wastes if applicable under LAC 33:V.3513.D, he or she must obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with all requirements of LAC 33:V.Chapters 15 and 22.

2. The analysis may include data developed under LAC 33:V.Chapter 49 and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes.

3. The analysis must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:

a. when the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste or nonhazardous waste if applicable under LAC 33:V.3513.D, has changed; and

b. for off-site facilities, when the results of the inspection required in LAC 33:V.1519.A.4 indicate that the hazardous waste received at the facility does not match the waste designated in the accompanying manifest or shipping paper.

4. The owner or operator of an off-site facility must inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

B. The owner or operator must develop and follow a written waste analysis plan that describes the procedures that he or she will carry out to comply with LAC 33:V.1519.A. He or she must keep this plan at the facility. At a minimum, the plan must specify:

1. the parameters for which each hazardous waste, or non-hazardous waste if applicable under LAC 33:V.3513.D, will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with LAC 33:V.1519.A;

2. the test methods as specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods"

(SW846) or equivalent approved by the administrative authority which will be used to test for these parameters; and

3. the sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using a method approved by the administrative authority;

[Comment: See LAC 33:V.105.I for related discussion.]

4. the plan must further specify the frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date;

5. the Quality Assurance and Quality Control (QA/QC) procedures used to ensure the waste sampling and analysis are satisfactory.

6. the plan must further specify for off-site facilities the waste analyses that hazardous waste generators have agreed to supply; and

7. where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in LAC 33:V.1517, 1711.D, 1741.D, 2515, 3107 and 2245;

~~8. for surface impoundments exempted from land~~ disposal prohibitions under LAC 33:V.2237, the procedures and schedules for:

a. the sampling of impoundment contents,

b. the analysis of test data, and

c. the annual removal of residues which are not delisted under LAC 33:V.105.M or which exhibit a characteristic of hazardous waste and either:

i. do not meet applicable treatment standards of LAC 33:V.Chapter 22, Subchapter B, or

ii. where no treatment standards have been established

(a). such residues are prohibited from land disposal under LAC 33:V.2213, or

(b). such residues are prohibited from land ~~disposal under LAC 33:V.2215.~~

C. For off-site facilities, the required waste analysis plan must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

1. the procedures which will be used to determine the identity of each movement of waste managed at the facility; and

2. the sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling. (LAC 33:V.517.C requires that the waste analysis plan be submitted with Part II of the permit application.)

3. the procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

~~D. Certification. All waste analysis plans must be certified by a Louisiana licensed professional engineer (PE) or by a master level or senior level certified hazardous materials manager (CHMM) who is in good standing with his professional organization.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 15:378 (May 1989), LR 16:220 (March 1990), LR 17:478 (May 1991), LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:266 (March 1995).

§1521. Chemical, Physical, and Biological Treatment Facilities (Wastes Only)

In addition to the requirements listed below, a permit application shall address the technical requirements in LAC 33:V.Chapters 15, 19, 21, 29, 33, 35, and 37.

A. Below-surface basins are governed by LAC 33:V.2903.A.

B. Above-ground and mixing and other facilities in basins shall be certified by the designing engineer or manufacturer.

C. Treatment techniques shall include proper chemical analysis or data collecting such as is necessary to determine compatibility with existing treatment facilities, prevention of the release of toxic gases, and provisions for bacterial control and for safety of operating personnel.

D. Pilot or bench-scale tests or reliable operating data must be obtained for any new or altered hazardous waste prior to introduction into an existing or new treatment sequence.

E. Storage and handling procedures insuring protection of human health and the environment must be observed for all treatment chemicals or reagents.

F. Proper design and operation of all equipment must be maintained to insure minimum spillage, foaming, or misting.

G. Reserve emergency storage must be maintained for critical process areas to insure against operational mishaps and inadvertent volumetric surges.

H. Flow safeguards and cut-offs must be included in the flow system to avoid improper operation, overflow, or treatment defects.

I. Residual sludges or by-products shall be analyzed before disposition within the treatment sequence.

J. An air monitoring system is required under LAC 33:V.3305.E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§1523. Surveillance and Monitoring

A. Primary responsibility for the proper handling of hazardous wastes is assumed by the industry operating under these rules and regulations and cooperating with the department in meeting the purposes of the Act. As part of this responsibility, the owner or operator of any treatment, storage, or disposal facility shall develop a schedule of routine facility inspections and shall keep a log or record of all inspections carried out thereunder. The owner or operator shall likewise develop and adhere to a waste analysis plan to be approved by the department.

B. Department surveillance and monitoring includes the following:

1. analysis of manifests and manifest reports to determine that all wastes generated are disposed of in permitted sites and that the proper disposal method has been used;

2. periodic inspections required by the permit maintenance program to insure that facilities treating, storing, and disposing of hazardous wastes are operated in conformity with the terms of the permit and these rules and regulations;

3. spot inspections and sampling by the traveling laboratory and the analytical and inspection team;

4. a systematic program to conduct or to require investigations and recording of the groundwater, leachate, and air monitoring systems;

5. response to citizen complaints and suggestions concerning operation of the system; and

6. such other procedures as may be deemed necessary by the administrative authority.

C. Violations discovered through such surveillance and monitoring shall be the subject of enforcement actions pursuant to LAC 33:V.107 of these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1525. Emergency Response

A. Purpose. To provide for control and clean-up of accidental spills and other emergency situations involving hazardous wastes resulting from a violation of a requirement of these regulations or the Act.

B. Program. The department, working with the Department of Public Safety, will establish the following program:

1. emergency response equipment and teams located in strategic locations;

2. emergency response plan involving a communication system, cooperation with local police and fire departments, training program based, as a minimum, on the "emergency information card," and an operations plan for each class of emergency situation; and

3. the Emergency Response Program will respond to all in-transit accidents and spills, and respond to on-site emergencies when called by the operator or in accordance with provisions of LAC 33:V.1513.F.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1527. Receiving and Monitoring Incoming Waste

A. Each site which treats, stores, or disposes of hazardous wastes generated off site shall be equipped to accomplish the following:

1. provide control of all incoming waste to prevent entry of unrecorded and unanalyzed hazardous waste; and

2. measure quantity and type by taking and analyzing a representative sample of waste received to verify the information on the manifest, and to determine proper method for handling and disposal.

B. Each facility within the site which receives hazardous wastes shall be equipped with necessary devices to record quantities, by classification or other identification, of hazardous wastes deposited into the facility system.

C. Each site shall be equipped with a central control and recordkeeping system which tabulates information from LAC 33:V.1527.A.2 and B.

D. Onsite Transfer Systems

1. All docking, mooring, loading, and unloading facilities for a hazardous waste treatment, storage, or disposal facility are considered part of the facility operation.

2. Hose couplings for truck, barge, or pipeline discharge shall be located within a natural or created containment, with an elevation above surface elevation sufficient to contain a ten-minute discharge. Groundwater protection shall be provided.

3. Hose couplings on a barge shall be in a containment area on the barge to prevent leakage from entering the waterway.

4. Hoses from a barge to the facility shall be supported by a land-based boom so that the low point of the hose is within the barge or site containment area.

5. Barge moorings shall be in a slack water area outside the navigation channel.

E. Receiving Waste from an Offsite Source. The owner or operator of a facility that receives hazardous waste from an off site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record.

F. Unmanifested Waste Reports. Any wastes presented for disposal that are not accompanied by a properly completed manifest shall be rejected. The TSD operator shall note the name of the driver, hauler, and the vehicle identification numbers. He shall notify the administrative authority by phone immediately and in writing within seven days of the refusal to accept the waste and provide the administrative authority with the required information.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§1529. Operating Record and Reporting Requirements

A. The owner or operator must keep a written operating record at his facility.

B. Records of each hazardous waste received, treated, stored, or disposed of at the facility must be recorded in the following manner, as they become available, and maintained in the operating record until closure of the facility.

1. A description by its common name and the EPA hazardous waste number(s) (LAC 33:V.Chapter 49) which apply to the waste and the quantity of the waste received. The waste description also must include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in LAC 33:V.Chapter 49, the description also must include the process that produced it.

2. Each hazardous waste listed in LAC 33:V.109, and each hazardous waste characteristic defined in LAC 33:V.105.B has a four-digit EPA hazardous waste number assigned to it. This number must be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description must include all applicable EPA hazardous waste numbers.

3. Record the estimated or manifest-reported weight, or volume and density, where applicable, in one of the units of measure specified in Table 2.

TABLE 2

Units for Reporting

Unit of Measure	Symbols[1]	Density
Pounds	P	
Short tons (2,000 lb)	T	
Gallons (U.S.)	G	P/G
Cubic yards	Y	
Kilograms	K	
Tonnes (1,000 kg)	K	
Liters	L	K/L
Cubic Meters	C	M/C

[1] Single digit symbols are used here for data processing purposes.

4. The method(s) by handling code(s) and date(s) of treatment, storage, or disposal.

5. The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest.

6. Records and results of waste analyses performed as ecified in these regulations and in LAC 33:V.1517, 1519, ./11, 1741, 2237.A, 2245, 2515, and 3107.

7. Summary reports and details of all incidents that require implementing the contingency plan.

8. Records and results of inspections required by LAC 33:V.1509.D.

9. Monitoring, testing, or analytical data where required by LAC 33:V.1504, 1711.C-F, 1713, 1741, 1743, 1903, 1907, 1911, 2304, 2306, 2309, 2504, 2507, 2508, 2509, 2709, 2711, 2719, 2904, 2906, 2907, 3119, 3203, 3205, and Chapter 33, as well as corrective action cites.

10. For off-site facilities, notices to generators that the TSD facility has the appropriate permits for and will accept the waste the generator is shipping.

11. All closure cost estimates and, for disposal facilities, all post-closure cost estimates.

12. Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal prohibition granted pursuant to LAC 33:V.2239, a petition pursuant to LAC 33:V.2241 or 2242, or a certification under LAC 33:V.2235 and the applicable notice required by a generator under LAC 33:V.2245.

13. For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.

14. For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.

15. For an off-site land disposal facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility under LAC 33:V.2235, 2245, or 2247, whichever is applicable.

16. For an on-site land disposal facility, the information contained in the notice required of the generator or owner or operator of a treatment facility under LAC 33:V.2245 or LAC 33:V.2247, except for the manifest number, and the certification and demonstration, if applicable, required under LAC 33:V.2235, whichever is applicable.

17. For an off-site storage facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247; and

18. For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247.

19. A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

C. Availability, Retention, and Disposition of Records

1. All records, including plans, required under this Part must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representatives who are duly designated by the administrative authority.

2. The retention period for all records required under this Section is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the administrative authority.

3. A copy of records of waste disposal locations and quantities must be submitted to the administrative authority and local land authority upon closure of the facility.

D. Annual Report. The owner or operator must prepare and submit a single copy of an annual report to the administrative authority by March 1 of each year. The report form must be used for this report. The annual report must cover facility activities during the previous calendar year. Information submitted on a more frequent basis may be included by reference or in synopsis form where it is not pertinent to reporting under LAC 33:V.Chapter 9 or monitoring reporting under LAC 33:V.3317. It must include the following information:

1. the EPA identification number, name, and address of the facility;

2. the calendar year covered by the report;

3. for off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year. For imported shipments, the report must give the name and address of the foreign generator;

4. a description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;

5. the method of treatment, storage, or disposal for each hazardous waste;

6. the most recent closure cost estimate under LAC 33:V.3705, and, for disposal facilities, the most recent post-closure cost estimate under LAC 33:V.3709;

7. the certification signed by the owner or operator of the facility or his authorized representative; and

8. monitoring data where required;

9. for generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;

10. for generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984.

E. Additional Reports. In addition to submitting the annual reports and unmanifested waste reports described in LAC 33:V.1529.D and 909, the owner or operator must also report to the administrative authority:

1. releases, fires, and explosions as specified in LAC 33:V.1513.F.10;

2. facility closures as specified in LAC 33:V.Chapter 35; and

3. as otherwise required by LAC 33:V.Chapters 17, 23, 25, 27, 29, and 33.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 15:378 (May 1989), LR 16:220 (March 1990), LR 16:399 (May 1990), LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§1531. Transfer of Ownership

A. Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator must notify the new owner or operator in writing of the requirements of LAC 33:V.Subpart 1.

B. An owner's or operator's failure to notify the new owner or operator of the requirements in no way relieves the new owner or operator of his obligation to comply with all applicable requirements.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 15:378 (May 1989), LR 16:220 (March 1990), LR 16:399 (May 1990), LR 18:1256 (November 1992).

Chapter 17. Air Emission Standards

§1701. Applicability

The regulations in this Chapter apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in LAC 33:V.1501 and 1705).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1703. Definitions

As used in this Chapter, all terms not defined herein shall have the meanings given them in LAC 33:V.109.

Air Stripping Operation—a desorption operation employed to transfer one or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

Bottoms Receiver—a container or tank used to receive and collect the heavier bottoms fractions of the distillation feedstream that remain in the liquid phase.

Closed-Vent System—a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

Condenser—a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

Connector—flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, "connector" means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

Continuous Recorder—a data-recording device recording instantaneous data values at least every 15 minutes, or more frequently if reasonably available technology exists which will achieve increased recording frequency.

Control Device—an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse, or sale (e.g., a primary condenser on a solvent recovery unit) is not a control device.

Control Device Shutdown—the cessation of operation of a control device for any purpose.

Distillate Receiver—a container or tank used to receive and collect liquid material (condensed) from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

Distillation Operation—an operation, either batch or continuous, separating one or more feedstream(s) into two or more exit streams, each exit stream having component concentrations different from those in the feedstream(s). The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

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

Equipment—each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange, and any control devices or systems required by this Chapter.

Flame Zone—the portion of the combustion chamber in a boiler occupied by the flame envelope.

Flow Indicator—a device that indicates whether gas flow is present in a vent stream.

First Attempt at Repair—to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

Fractionation Operation—a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

Hazardous Waste Management Unit Shutdown—a work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous waste management unit or part of a hazardous waste management unit for less than 24 hours or a scheduled, routine work practice such as cessation of operation on a holiday or weekend is not a hazardous waste management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous waste management unit shutdowns.

Hot Well—a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

In Gas/Vapor Service—a piece of equipment that contains or contacts a hazardous waste stream that is in the gaseous state at operating conditions.

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

In Light Liquid Service—a piece of equipment that contains or contacts a waste stream where the vapor pressure of one or more of the components in the stream is greater than 0.3 kilopascals (kPa) at 20°C, the total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20°C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

In Situ Sampling Systems—nonextractive samplers or in-line samplers.

In Vacuum Service—equipment operating at an internal pressure that is at least 5 kPa below ambient pressure.

Malfunction—any sudden failure of a control device or a hazardous waste management unit or failure of a hazardous waste management unit to operate in a normal or usual manner, so that organic emissions are increased.

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

Pressure Release—the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

Process Heater—a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that are heated to produce steam.

Process Vent—any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank (e.g., distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well) associated with hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.

Repaired—equipment is adjusted, or otherwise altered, to eliminate a leak.

Sensor—a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.

Separator Tank—a device used for separation of two immiscible liquids.

Solvent Extraction Operation—an operation or method of separation in which a solid or solution is contacted with a liquid solvent (the two being mutually insoluble) to preferentially dissolve and transfer one or more components into the solvent.

Start-Up—the setting in operation of a hazardous waste management unit or control device for any purpose.

Steam Stripping Operation—a distillation operation in which vaporization of the volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

Surge Control Tank—a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

Thin-Film Evaporation Operation—a distillation operation that employs a heating surface consisting of a large-diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating

assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

Vapor Incinerator—any enclosed combustion device that is used for destroying organic compound vapors and does not extract energy in the form of steam or process heat.

Vented—discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading (working losses) or by natural means such as diurnal temperature changes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

Subchapter A. Process Vents

§1705. Applicability

The regulations in this Subchapter apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in LAC 33:V.1501).

A. Except for LAC 33:V.1711.D. and E, this Subchapter applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 parts per million by weight (ppmw), if these operations are conducted in:

1. units subject to the permitting requirements of LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43; or

2. hazardous waste recycling units located on hazardous waste management facilities otherwise subject to the permitting requirements of LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43.

B. If the owner or operator of process vents subject to the requirements of LAC 33:V.1707-1715 has received a permit under LAC 33:V.Subpart 1 prior to December 21, 1990, the requirements of LAC 33:V.1707-1715 must be incorporated when the permit is reissued under LAC 33:V.705 or reviewed under LAC 33:V.315.

[Note: The requirements of LAC 33:V.1707-1715 apply to process vents on hazardous waste recycling units previously exempt under LAC 33:V.4115.A. Other exemptions under LAC 33:V.105.D, 1109.E, and 1501.C are not affected by these requirements.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 18:723 (July 1992), LR 20:1000 (September 1994).

§1707. Standards: Process Vents

A. The owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous wastes with organic concentrations of at least 10 ppmw shall either:

1. reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr); or

2. reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.

B. If the owner or operator installs a closed-vent system and control device to comply with the provisions of LAC 33:V.1707.A, the closed-vent system and control device must meet the requirements of LAC 33:V.1709.

C. Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests must conform with the requirements of LAC 33:V.1711.C.

D. When an owner or operator and the administrative authority do not agree on determinations of vent emissions and/or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the procedures in LAC 33:V.1711.C shall be used to resolve the disagreement.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1709. Standards: Closed-Vent Systems and Control Devices

A. Compliance

1. Owners or operators of closed-vent systems and control devices used to comply with provisions of LAC 33:V.Chapter 17 shall comply with the provisions of this Section.

2. The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this Subchapter on the effective date that the facility becomes subject to the provisions of this Subchapter must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 18 months after the effective date that the facility becomes subject to this Subchapter for

installation and start-up. All units that begin operation after December 21, 1990, must comply with the rules immediately (i.e., must have control devices installed and operating on start-up of the affected unit); the two-year implementation schedule does not apply to these units.

B. Control Devices. A control device involving vapor recovery (e.g., a condenser or adsorber) shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of LAC 33:V.1707.A.1 for all affected process vents can be attained at an efficiency less than 95 weight percent.

C. Combustion Device. An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760°C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

D. Flare

1. Visible Emissions. A flare shall be designed for and operated with no visible emissions as determined by the methods specified in LAC 33:V.1709.E.1, except for periods not to exceed a total of five minutes during any two consecutive hours.

2. Flame. A flare shall be operated with a flame present at all times, as determined by the methods specified in LAC 33:V.1709.F.2.c.

3. Combustible Heating Value. A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted, or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in LAC 33:V.1709.E.2.

4. Steam-Assisted or Nonassisted

a. A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in LAC 33:V.1709.E.3, of less than 18.3 m/s (60 ft/s), except as provided in LAC 33:V.1709.D.4.b and c.

b. A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in LAC 33:V.1709.E.3, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

c. A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in LAC 33:V.1709.E.3, of less than the velocity, V_{max}, as determined by the method specified in LAC 33:V.1709.E.4, and less than 122 m/s (400 ft/s), is allowed.

5. Air-Assisted. An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in LAC 33:V.1709.E.5.

6. Compliance. A flare used to comply with this Section shall be steam-assisted, air-assisted, or nonassisted.

E. Visible Emissions

1. Reference Method 22 in LAC 33:III.6079 shall be used to determine the compliance of a flare with the visible emission provisions of this Subchapter. The observation period is two hours and shall be used according to Method 22.

2. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \left[\sum_{i=1}^{n} C_i H_i\right]$$

where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is 20° C;

K = Constant, 1.74 X 10^{-1} (1/ppm) (g mol/scm) (MJ/kcal), where standard temperature for (g mol/scm) is 20°C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in LAC 33:III.6071 and measured for hydrogen and carbon monoxide by ASTM D 1946-82; and

H_i = Net heat of combustion of sample component i, kcal/9 mol at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382-83 if published values are not available or cannot be calculated.

3. The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by the methods in LAC 33:III.Chapter 60 as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

4. The maximum allowed velocity in m/s, V_{max}, for a flare complying with LAC 33:V.1709.D.4.c shall be determined by the following equation:

$$LOG_{10}(V_{max}) = \frac{(H_T + 28.8)}{31.7}$$

where:

28.8 = constant;

31.7 = constant;

H_T = the net heating value as determined in LAC 33:V.1709.E.2.

5. The maximum allowed velocity in m/s, V_{max}, for an air-assisted flare shall be determined by the following equation:

$$V_{max} = 8.706 + 0.7084\ (H_T)$$

where:

8.706 = constant;

0.7084 = constant;

H_T = the net heating value as determined in LAC 33:V.1709.E.2.

F. Inspection and Monitoring. The owner or operator shall monitor and inspect each control device required to comply with this Section to ensure proper operation and maintenance of the control device by implementing the following requirements.

1. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet but before the point at which the vent streams are combined.

2. Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

a. For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone.

b. For a catalytic vapor incinerator, a temperature-monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet, and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

c. For a flare, a heat-sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

d. For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature-monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ± 0.5°C, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone.

e. For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter or parameters that indicate that good combustion operating practices are being used.

f. For a condenser, either:

i. a monitoring device equipped with a continuous recorder to measure the concentration level of the total organic compounds in the exhaust vent stream from the condenser, or

ii. a temperature-monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed at a location in the exhaust vent stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

g. For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

i. a monitoring device equipped with a continuous recorder to measure the concentration level of the total organic compounds in the exhaust vent stream from the carbon bed, or

ii. a monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

3. Inspect the readings from each monitoring device required by LAC 33:V.1709.F.1 and 2 at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure that the control device operates in compliance with the requirements of this Section.

G. Carbon Adsorption System, Regenerative. An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly on-site in the control device shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined interval that is no longer than the carbon service life established as a requirement of LAC 33:V.1713.B.4.c.vi.

H. Carbon Adsorption System, Nonregenerative. An owner or operator using a carbon adsorption system such as

a carbon canister that does not regenerate the carbon bed directly on-site in the control device shall replace the existing carbon in the control device with fresh carbon regularly by using one of the following procedures:

1. Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of LAC 33:V.1713.B.4.c.vii, whichever is longer.

2. Replace the existing carbon with fresh carbon at a regular, predetermined interval that is less than the design carbon replacement interval established as a requirement of LAC 33:V.1713.B.4.c.vii.

I. Alternative Process or Operational Parameters. An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

J. Alternative Control Device: Documentation

An owner or operator of an affected facility seeking to comply with the provisions of LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, 37 by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

K. Closed-Vent Systems: Design and Monitoring

1. Closed-vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified in LAC 33:V.1711.B.

2. Closed-vent systems shall be monitored to determine compliance with this Section during the initial leak detection monitoring, which shall be conducted by the date that the facility becomes subject to the provisions of this Section, annually, and at other times as requested by the administrative authority.

3. Detectable emissions, as indicated by an instrument reading greater than 500 ppm and visual inspections, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected.

4. A first attempt at repair shall be made no later than five calendar days after the emission is detected.

L. Closed-Vent Systems: Operation. Closed-vent systems and control devices used to comply with provisions of this Subchapter shall be operated at all times when emissions may be vented to them.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 20:1000 (September 1994).

§1711. Test Methods and Procedures

A. Each owner or operator subject to the provisions of this Subchapter shall comply with the test methods and procedures requirements provided in this Section.

B. When a closed-vent system is tested for compliance with no detectable emissions, as required in LAC 33:V.1709.K, the test shall comply with the following requirements.

1. Monitoring shall comply with Reference Method 21 in LAC 33:III.6077.

2. The detection instrument shall meet the performance criteria of Reference Method 21.

3. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4. Calibration gases shall be:

a. zero air (less than 10 ppm of hydrocarbon in air);

b. a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5. The background level shall be determined as set forth in Reference Method 21.

6. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible, as described in Reference Method 21.

7. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

C. Performance tests to determine compliance with LAC 33:V.1707.A and with the total organic compound concentration limit of LAC 33:V.1709.C shall comply with the following:

1. Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

a. Method 2 in LAC 33:III.6003 for velocity and volumetric flow rate.

b. Method 18 in LAC 33:III.6071 for organic content.

c. Each performance test shall consist of three separate runs; each run shall be conducted for at least one hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.

d. Total organic mass flow rates shall be determined by the following equation:

$$E_h = Q_{2sd}\left[\sum_{i=1}^{n} C_i MW_i\right][0.0416][10^{-6}]$$

where:

E_h = total organic mass flow rate, kg/h;

Q_{2sd} = volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

n = number of organic compounds in the vent gas;

C_i = organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

MW_i = molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416 = conversion factor for molar volume, kg-mol/m^3 (@ 293 K and 760 mm Hg); and

10^{-6} = conversion from ppm, ppm^{-1}.

e. The annual total organic emission rate shall be determined by the following equation:

$$E_A = (E_h)(H)$$

where:

E_A = total organic mass emission rate, kg/y;

E_h = total organic mass flow rate for the process vent, kg/h; and

H = total annual hours of operations for the affected unit, h.

f. Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates (E_h as determined in LAC 33:V.1711.C.1.d) and by summing the annual total organic mass emission rates (E_A, as determined in LAC 33:V.1711.C.1.e) for all affected process vents at the facility.

2. The owner or operator shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

3. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

a. sampling ports adequate for the test methods specified in LAC 33:V.1711.C.1;

b. safe sampling platform(s);

c. safe access to sampling platform(s); and

d. utilities for sampling and testing equipment.

4. For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the administrative authority's approval, be determined using the average of the results of the two other runs.

D. To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this Subchapter, the owner or operator must make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods.

1. Direct measurement of the organic concentration of the waste using the following procedures:

a. The owner or operator must take a minimum of four grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.

b. For waste generated on-site, the grab samples must be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated off-site, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

c. Each sample shall be analyzed, and the total organic concentration of the sample shall be computed using Method 9060 or 8240 of SW-846 (as found in LAC 33:V.Chapter 49.Appendix A).

d. The arithmetic mean of the results of the analyses of four samples shall apply for each waste stream managed ... the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit.

2. Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

E. The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted, annual average total organic concentrations less than 10 ppmw shall be made as follows:

1. by the effective date that the facility becomes subject to the provisions of this Subchapter or by the date when the waste is first managed in a waste management unit, whichever is later; and

2. for continuously generated waste, annually; or

3. whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

F. When an owner or operator and the administrative authority do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the procedures in Method 8240 may be used to resolve the dispute.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 20:1000 (September 1994).

§1713. Recordkeeping Requirements

A. Compliance

1. Each owner or operator subject to the provisions of this Subchapter shall comply with the recordkeeping requirements of this Section.

2. An owner or operator of more than one hazardous waste management unit subject to the provisions of this Subchapter may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

B. Implementation Schedule and Documentation. Owners and operators must record the following information in the facility operating record:

1. For facilities that comply with the provisions of LAC 33:V.1709.A.2, an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be in the facility operating record by the effective date that the facility becomes subject to the provisions of this Subchapter.

2. Up-to-date documentation of compliance with the process vent standards in LAC 33:V.1707, including:

a. Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan).

b. Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (i.g., temperatures, flow rates, or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (e.g., managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

3. Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan must include:

a. a description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program;

b. a detailed engineering description of the closed-vent system and control device including:

i. manufacturer's name and model number of control device;

ii. type of control device;

iii. dimensions of the control device;

iv. capacity; and

v. construction materials;

c. a detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

4. Documentation of compliance with LAC 33:V.1709 shall include the following information:

a. a list of all information references and sources used in preparing the documentation;

b. records, including the dates, of each compliance test required by LAC 33:V.1709.K;

c. if engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions" or other engineering texts acceptable to the administrative authority that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with LAC 33:V.1713.B.4.c.i through vii may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below;

i. for a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time;

ii. for a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet;

iii. for a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone;

iv. for a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in LAC 33:V.1709.D;

v. for a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet;

vi. for a carbon adsorption system such as a fixed-bed absorber that regenerates the carbon bed directly on-site in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon;

vii. for a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly on-site in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for the carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule;

d. a statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

e. a statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of LAC 33:V.1707.A is achieved at an efficiency less than 95 weight percent, or the total organic emission limits of LAC 33:V.1707.A for all affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement;

f. if performance tests are used to demonstrate compliance, all test results.

C. Design: Documentation, Monitoring, Operating, and Inspection. Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37 shall be recorded and kept up-to-date in the facility operating record. The information shall include:

1. a description and the date of each modification made to the closed-vent system or control device design;

2. identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with LAC 33:V.1709.F.1 and 2;

3. monitoring, operating, and inspection information required by LAC 33:V.1709.F-K;

4. date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

a. for a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760°C, each period when the combustion temperature is below 760°C;

b. for a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater, each period when the combustion zone temperature is more than 28°C below the design average combustion zone temperature established as a requirement of LAC 33:V.1713.B.4.c.i;

c. for a catalytic vapor incinerator, each period when:

i. temperature of the vent stream at the catalyst bed inlet is more than 28°C below the average temperature of the inlet vent stream established as a requirement of LAC 33:V.1713.B.4.c.ii, or

ii. temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of LAC 33:V.1713.B.4.c.ii;

d. for a boiler or process heater, each period when:

i. flame zone temperature is more than 28°C below the design average flame zone temperature established as a requirement of LAC 33:V.1713.B.4.c.iii, or

ii. position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of LAC 33:V.1713.B.4.c.iii;

e. for a flare, each period when the pilot flame is not ignited;

f. for a condenser that complies with LAC 33:V.1709.F.2.f.i, each period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of LAC 33:V.1713.B.4.c.v;

g. for a condenser that complies with LAC 33:V.1709.F.2.f.ii, each period when:

i. temperature of the exhaust vent stream from the condenser is more than 6°C above the design average exhaust vent stream temperature established as a requirement of LAC 33:V.1713.B.4.c.v; or

ii. temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet established as a requirement of LAC 33:V.1713.B.4.c.v;

h. for a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly on-site in the control device and complies with LAC 33:V.1709.F.2.g.i, each period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of LAC 33:V.1713.B.4.c.v;

i. for a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly on-site in the control device and complies with LAC 33:V.1709.F.2.g.ii, each period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of LAC 33:V.1713.B.4.c.vi;

5. explanation for each period recorded under LAC 33:V.1713.C.4 of the cause for the control device operating parameter exceeding the design value and the measures implemented to correct the control device operation;

6. for a carbon adsorption system operated subject to requirements specified in LAC 33:V.1709.G or H.2, the date when existing carbon in the control device is replaced with fresh carbon;

7. for a carbon adsorption system operated subject to requirements specified in LAC 33:V.1709.H.1, a log that records:

a. date and time when the control device is monitored for carbon breakthrough and the monitoring device reading; and

b. date when existing carbon in the control device is replaced with fresh carbon;

8. date of each control device start-up and shutdown.

D. Record Retention. Records of the monitoring, operating, and inspection information required by LAC 33:V.1713.C.3-8 must be kept on site for three years.

E. Alternative Control Devices. For a control device other than a thermal vapor incinerator, catalytic vapor incinerator,

flare, boiler, process heater, condenser, or carbon adsorption system, the administrative authority will specify the appropriate recordkeeping requirements.

F. Log. Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in LAC 33:V.1707 including supporting documentation as required by LAC 33:V.1711.D.2 when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 18:723 (July 1992), LR 20:1000 (September 1994).

§1715. Reporting Requirements

A. A semiannual report shall be submitted by owners and operators subject to the requirements of this Subchapter to the administrative authority by dates specified by the administrative authority. The report shall include the following information:

1. the Environmental Protection Agency identification number, name, and address of the facility; and

2. for each month during the semiannual reporting period, dates when the control device exceeded or operated outside of the design specifications as defined in LAC 33:V.1713.C.4 and as indicated by the control device monitoring required by LAC 33:V.1709.F and such exceedances were not corrected within 24 hours, or that a flare operated with visible emissions as defined in LAC 33:V.1709.D and as determined by Method 22 monitoring, the duration and cause of each exceedance or visible emissions, and any corrective measures taken.

B. If, during the semiannual reporting period, the control device does not exceed or operate outside of the design specifications as defined in LAC 33:V.1713.C.4 for more than 24 hours or a flare does not operate with visible emissions as defined in LAC 33:V.1709.D, a report to the administrative authority is not required.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

Subchapter B. Equipment Leaks

§1717. Applicability

A. The regulations in this Subchapter apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in LAC 33:V.1501).

B. Except as provided in LAC 33:V.1743.K, this Subchapter applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in:

1. units that are subject to the permitting requirements of LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43; or

2. hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43.

C. If the owner or operator of equipment subject to the requirements of LAC 33:V.1719 through 1745 has received a permit under LAC 33:V.Subpart 1 prior to December 21, 1990, the requirements of LAC 33:V.1719 through 1745 must be incorporated when the permit is reissued under LAC 33:V.705 or reviewed under LAC 33:V.315.

D. Each piece of equipment to which this Subchapter applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

E. Equipment that is in vacuum service is excluded from the requirements of LAC 33:V.1719 through 1735 if it is identified as required in LAC 33:V.1743.G.5.

[Note: The requirements of LAC 33:V.1719 through 1745 apply to equipment associated with hazardous waste recycling units previously exempt under LAC 33:V.4115.A. Other exemptions under LAC 33:V.105.D, 1109.E, and 1501.C are not affected by these requirements.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 20:1000 (September 1994).

§1719. Standards: Pumps in Light Liquid Service

A. Monitoring

1. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §1741.B, except as provided in Subsections D, E, and F of this Section.

2. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

B. Leak Detection

1. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

2. If there are indications of liquids dripping from the pump seal, a leak is detected.

C. Repair

1. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in LAC 33:V.1733.

2. A first attempt at repair (e.g., tightening the packing gland) shall be made no later than five calendar days after each leak is detected.

D. Dual Mechanical Seal Exemption. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of LAC 33:V.1719.A provided the following requirements are met.

1. Operation and Equipment. Each dual mechanical seal system must be:

a. operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

b. equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of LAC 33:V.1735; or

c. equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere.

2. Barrier Fluid System. The barrier fluid system must not be a hazardous waste with organic concentrations 10 percent or greater by weight.

3. Barrier Fluid System Sensor. Each barrier fluid system must be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

4. Pump Inspection. Each pump must be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

5. Seal System and Sensor Function

a. Each sensor as described in LAC 33:V.1719.D.3 must be checked daily or be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly.

b. The owner or operator must determine, on the basis of design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

6. Leak Detection and Repair

a. If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both on the basis of the criterion determined in LAC 33:V.1719.D.5.b, a leak is detected.

b. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in LAC 33:V.1733.

c. A first attempt at repair (e.g., relapping the seal) shall be made no later than five calendar days after each leak is detected.

E. No Detectable Emission Exemption. Any pump that is designated, as described in LAC 33:V.1743.G.2, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of LAC 33:V.1719.A, C, and D if the pump meets the following requirements:

1. The pump must have no externally actuated shaft penetrating the pump housing.

2. The pump must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in LAC 33:V.1741.C.

3. The pump must be tested for compliance with LAC 33:V.1719.E.2 initially upon designation, annually, and at other times as requested by the administrative authority.

F. Closed Vent System Exemption. If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of LAC 33:V.1735, it is exempt from the requirements of LAC 33:V.1719.A-E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1721. Standards: Compressors

A. Equipment. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in LAC 33:V.1721.H and I.

B. Seal System. Each compressor seal system as required in LAC 33:V.1721.A shall be:

1. operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure, or

2. equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of LAC 33:V.1735, or

3. equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to atmosphere.

C. Barrier Fluid System. The barrier fluid must not be a hazardous waste with organic concentrations 10 percent or greater by weight.

D. Barrier Fluid System Sensor. Each barrier fluid system as described in LAC 33:V.1721.A through C shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

E. Seal System and Sensor Function

1. Each sensor as required in LAC 33:V.1721.D shall be checked daily or shall be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary

of an unmanned plant site, in which case the sensor must be checked daily.

2. The owner or operator shall determine, on the basis of design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

F. Leak Detection. If the sensor indicates failure of the seal system, the barrier fluid system, or both on the basis of the criterion determined under LAC 33:V.1721.E.2, a leak is detected.

G. Leak Repair

1. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in LAC 33:V.1733.

2. A first attempt at repair (e.g., tightening the packing gland) shall be made no later than five calendar days after each leak is detected.

H. Closed-Vent System Exemption. A compressor is exempt from the requirements of LAC 33:V.1721.A and B if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of LAC 33:V.1735, except as provided in LAC 33:V.1721.I.

I. No Detectable Emission Exemption. Any compressor that is designated, as described in LAC 33:V.1743.G.2, for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of LAC 33:V.1721.A-H if the compressor:

1. is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in LAC 33:V.1741.C; and

2. is tested for compliance with LAC 33:V. 1721.I.1 initially upon designation, annually, and at other times as required by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1723. Standards: Pressure Relief Devices in Gas/ Vapor Service

A. Operation. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in LAC 33:V.1741.C.

B. Monitoring

1. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than five calendar days after each pressure release, except as provided in LAC 33:V.1733.

2. No later than five calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in LAC 33:V.1741.C.

C. Exemption. Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in LAC 33:V.1735 is exempt from the requirements of LAC 33:V.1723.A and B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1725. Standards: Sampling Connection Systems

A. Each sampling connection system shall be equipped with a closed purge system or closed-vent system.

B. Each closed-purge system or closed-vent system required in LAC 33:V.1725.A shall:

1. return the purged hazardous waste stream directly to the hazardous waste management process line with no detectable emissions to the atmosphere; or

2. collect and recycle the purged hazardous waste stream with no detectable emissions to the atmosphere; or

3. be designed and operated to capture and transport all the purged hazardous waste stream to a control device that complies with the requirements of LAC 33:V.1735.

C. In situ sampling systems are exempt from the requirements of LAC 33:V.1725.A and B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1727. Standards: Open-Ended Valves or Lines

A. Equipment

1. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.

2. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.

B. Operation. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that

the valve on the hazardous waste stream end is closed before second valve is closed.

C. Compliance. When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with LAC 33:V.1727.A at all other times.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1729. Standards: Valves in Gas/Vapor Service or in Light Liquid Service

A. Monitoring, General. Each valve in gas/vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in LAC 33:V.1741.B and shall comply with LAC 33:V.1729.B through E, except as provided in LAC 33:V.1729.F, G, and H, and LAC 33:V.1737 and 1739.

B. Leak Detection. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

C. Monitoring Intervals

1. Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

2. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months.

D. Repair, General

1. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in LAC 33:V.1733.

2. A first attempt at repair shall be made no later than five calendar days after each leak is detected.

E. Repair Methods. First attempts at repair include, but are not limited to, the following best practices where practicable:

1. tightening of bonnet bolts;

2. replacement of bonnet bolts;

3. tightening of packing gland nuts; and

4. injection of lubricant into lubricated packing.

F. No Detectable Emission Exemption. Any valve that is designated, as described in LAC 33:V.1743.G.2, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of LAC 33:V.1729.A if the valve:

1. has no external actuating mechanism in contact with the hazardous waste stream;

2. is operated with emissions less than 500 ppm above background as determined by the method specified in LAC 33:V.1741.C; and

3. is tested for compliance with LAC 33:V.1729.F.2 initially upon designation, annually, and at other times as requested by the administrative authority.

G. Unsafe-to-Monitor Exemption. Any valve that is designated, as described in LAC 33:V.1743.H.1, as an unsafe-to-monitor valve is exempt from the requirements of LAC 33:V.1729.A if:

1. the owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with LAC 33:V.1729.A; and

2. the owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

H. Difficult-to-Monitor Exemption. Any valve that is designated, as described in LAC 33:V. 1743.H.2, as a difficult-to-monitor valve is exempt from the requirements of LAC 33:V.1729.A if:

1. the owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than two meters above a support surface;

2. the hazardous waste management unit within which the valve is located was in operation before June 21, 1990; and

3. the owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1731. Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors

A. Monitoring. Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within five days by the method specified in LAC 33:V.1741.B if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

B. Leak Detection. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

C. Repair

1. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in LAC 33:V.1733.

2. The first attempt at repair shall be made no later than five calendar days after each leak is detected.

D. Repair Methods. First attempts at repair include, but are not limited to, the best practices described under LAC 33:V.1729.E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1733. Standards: Delay of Repair

A. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous waste management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous waste management unit shutdown.

B. Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous waste management unit and that does not continue to contain or contact hazardous waste with organic concentrations at least 10 percent by weight.

C. Delay of repair for valves will be allowed if:

1. the owner or operator determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair;

2. repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with LAC 33:V.1735.

D. Delay of repair for pumps will be allowed if:

1. repair requires the use of a dual mechanical seal system that includes a barrier fluid system;

2. repair is completed as soon as practicable, but not later than six months after the leak was detected.

E. Delay of repair beyond a hazardous waste management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous waste management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous waste management unit shutdown will not be allowed unless the next hazardous waste management unit shutdown occurs sooner than six months after the first hazardous waste management unit shutdown.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1735. Standards: Closed-Vent Systems and Control Devices

Owners or operators of closed-vent systems and control devices shall comply with the provisions of LAC 33:V.1709.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1737. Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Percentage of Valves Allowed to Leak

A. An owner or operator subject to the requirements of LAC 33:V.1729 may elect to have all valves within a hazardous waste management unit comply with an alternative standard that allows no greater than two percent of the valves to leak.

B. The following requirements shall be met if an owner or operator decides to comply with the alternative standard of allowing two percent of the valves to leak.

1. An owner or operator must notify the administrative authority that the owner or operator has elected to comply with the requirements of this Section.

2. A performance test as specified in LAC 33:V.1737.C shall be conducted initially upon designation, annually, and at other times requested by the administrative authority.

3. If a valve leak is detected, it shall be repaired in accordance with LAC 33:V.1729.D and E.

C. Performance tests shall be conducted in the following manner:

1. All valves subject to the requirements of LAC 33:V.1729 within the hazardous waste management unit shall be monitored within one week by the methods specified in LAC 33:V.1741.B.

2. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

3. The leak percentage shall be determined by dividing the number of valves subject to the requirements in LAC 33:V.1729 for which leaks are detected by the total number of valves subject to the requirements in LAC 33:V.1729 within the hazardous waste management unit.

D. If an owner or operator decides to comply with this Section no longer, the owner or operator must notify the administrative authority in writing that the work practice standard described in LAC 33:V.1729.A-E will be followed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1739. Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Skip Period Leak Detection and Repair

A. Alternative Work Practices

1. An owner or operator subject to the requirements of LAC 33:V.1729 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in LAC 33:V.1739.B.2 and 3.

2. An owner or operator must notify the administrative authority before implementing one of the alternative work practices.

B. Leak Detection Skip Period

1. An owner or operator shall comply with the requirements for valves, as described in LAC 33:V.1729, except as described in LAC 33:V.1739.B.2 and 3.

2. After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves subject to the requirements in LAC 33:V.1729.

3. After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves subject to the equirements in LAC 33:V.1729.

4. If the percentage of valves leaking is greater than two percent, the owner or operator shall monitor monthly in compliance with the requirements in LAC 33:V.1729, but may again elect to use this Section after meeting the requirements of LAC 33:V.1729.C.1.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§1741. Test Methods and Procedures

A. Each owner or operator subject to the provisions of this Subchapter shall comply with the test methods and procedures requirements provided in this Section.

B. Leak detection monitoring, as required in LAC 33:V.1719-1739, shall comply with the following requirements:

1. Monitoring shall comply with Reference Method 21 in LAC 33:III.6077.

2. The detection instrument shall meet the performance criteria of Reference Method 21.

3. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4. Calibration gases shall be:

a. zero air (less than 10 ppm of hydrocarbon in air); and

b. a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

C. When equipment is tested for compliance with no detectable emissions, as required in LAC 33:V.1719.E, 1721.I, 1723, and 1729.F, the test shall comply with the following requirements:

1. The requirements of LAC 33:V.1741.B.1-4 shall apply.

2. The background level shall be determined as set forth in Reference Method 21.

3. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

4. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

D. In accordance with the waste analysis plan required by LAC 33:V.1519.B, an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:

1. methods described in ASTM Methods D 2267-88, E 169-87, E 168-88, E 260-85;

2. method 9060 or 8240 of SW-846 (as found in LAC 33:V.Chapter 49.Appendix A; or

3. application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced. A waste determination by knowledge must be documented. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

E. If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determinations can be revised only after following the procedures in LAC 33:V.1741.D.1 or 2.

F. When an owner or operator and the administrative authority do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in LAC 33:V.1741.D.1 or 2 can be used to resolve the dispute.

G. Samples used in determining the percentage organic content shall be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

H. To determine whether pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D-2879-86.

I. Performance tests to determine whether a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of LAC 33:V.1711.C.1-4.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 20:1000 (September 1994).

§1743. Recordkeeping Requirements

A. Compliance with Recordkeeping

1. Each owner or operator subject to the provisions of this Subchapter shall comply with the recordkeeping requirements of this Section.

2. An owner or operator of more than one hazardous waste management unit subject to the provisions of this Subchapter may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

B. Facility Operating Record. Owners and operators must record the following information in the facility operating record.

1. For each piece of equipment to which LAC 33:V.Chapter 17, Subchapter B, applies:

a. equipment identification number and hazardous waste management unit identification;

b. approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan);

c. type of equipment (e.g., a pump or pipeline valve);

d. percent-by-weight total organics in the hazardous waste stream at the equipment;

e. hazardous waste state at the equipment (e.g., gas/vapor or liquid); and

f. method of compliance with the standard (i.e., "monthly leak detection and repair" or "equipped with dual mechanical seals").

2. For facilities that comply with the provisions of LAC 33:V.1709.A.2, an implementation schedule as specified in LAC 33:V.1709.A.2.

3. Where an owner or operator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in LAC 33:V.1713.B.3.

4. Documentation of compliance with LAC 33:V.1735, including the detailed design documentation or performance test results specified in LAC 33:V.1713.B.4.

C. Leak Detection. When each leak is detected as specified in LAC 33:V.1719, 1721, 1729, and 1731, the following requirements apply.

1. A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with LAC 33:V.1731.A, and the date the leak was detected, shall be attached to the leaking equipment.

2. The identification on equipment, except on a valve, may be removed after it has been repaired.

3. The identification on a valve may be removed after it has been monitored for two successive months as specified in LAC 33:V.1729.C, and no leak has been detected during those two months.

D. Inspection Log. When each leak is detected as specified in LAC 33:V.1719, 1721, 1729, and 1731, the following information shall be recorded in an inspection log and shall be kept in the facility operating record:

1. the instrument and operator identification numbers and the equipment identification number;

2. the date evidence of a potential leak was found in accordance with LAC 33:V.1731.A;

3. the date the leak was detected and the dates of each attempt to repair the leak;

4. repair methods applied in each attempt to repair the leak;

5. "above 10,000" if the maximum instrument reading measured by the methods specified in LAC 33:V.1741.B after each repair attempt is equal to or greater than 10,000 ppm;

6. "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

7. documentation supporting the delay of repair of a valve in compliance with LAC 33:V.1733.C;

8. the signature of the owner or operator (or the designee authorized by the owner or operator in writing in the operating

record) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown;

9. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days; and

10. the date of successful repair of the leak.

E. Design Documentation and Monitoring, Operating, and Inspection Information. Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of LAC 33:V.1735 shall be recorded and kept up-to-date in the facility operating record as specified in LAC 33:V.1713.C. Design documentation is specified in LAC 33:V.1713.C.1 and 2, and monitoring, operating, and inspection information in LAC 33:V.1713.C.3-8.

F. Control Device Exemptions. For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the administrative authority will specify the appropriate recordkeeping requirements.

G. Equipment Information Log. The following information pertaining to all equipment subject to the requirements in LAC 33:V.1719 through 1735 shall be recorded in a log that is kept in the facility operating record.

1. Identification Numbers: General. A list of identification numbers for equipment (except welded fittings) subject to the requirements of this Subchapter shall be kept in the log.

2. Identification Numbers: No Detectable Emission Equipment

a. A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of LAC 33:V.1719.E, 1721.I, and 1729.F, shall be kept in the log.

b. The designation of this equipment as subject to the requirements of LAC 33:V.1719.E, 1721.I, or 1729.F shall be signed by the owner or operator.

3. Identification Numbers: Pressure Relief Devices. A list of equipment identification numbers for pressure relief devices required to comply with LAC 33:V.1723.A shall be kept in the log.

4. Compliance Test. The following compliance test information shall be included:

a. the dates of each compliance test required in LAC 33:V.1719.E, 1721.I, 1723, and 1729.F;

b. the background level measured during each compliance test; and

c. the maximum instrument reading measured at the equipment during each compliance test.

5. Identification Numbers: Equipment in Vacuum Service. A list of identification numbers for equipment in vacuum service shall be kept in the log.

H. Identification Numbers: Valves. The following information pertaining to all valves subject to the requirements of LAC 33:V.1729.G and H shall be recorded in a log that is kept in the facility operating record:

1. a list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve; and

2. a list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

I. Valve Information Log. The following information shall be recorded in the facility operating record for valves complying with LAC 33:V.1739:

1. a schedule of monitoring; and

2. the percentage of valves found leaking during each monitoring period.

J. Pump Seal System Information Log. The following information shall be recorded in a log that is kept in the facility operating record:

1. criteria required in LAC 33:V.1719.D.5.b and 1721.E.2 and an explanation of the design criteria; and

2. any changes to these criteria and the reasons for the changes.

K. Exemption Log. The following information shall be recorded in a log that is kept in the facility operating record for use in determining exemptions as provided in the applicability Section of this Subchapter and other specific Subchapters.

1. An analysis determining the design capacity of the hazardous waste management unit shall be recorded in the log.

2. A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in LAC 33:V.1719 through 1735 and an analysis determining whether these hazardous wastes are heavy liquids shall be recorded in the log.

3. An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in LAC 33:V.1719 through 1735 shall be recorded in the log. The record shall include supporting documentation as required in LAC 33:V.1741.D.3 when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be

subject to the requirements in LAC 33:V.1719 through 1735, then a new determination is required.

L. Record Retention Period for Equipment Leak Information. Records of the equipment leak information required by LAC 33:V.1743.D and the operating information required by LAC 33:V.1743.E must be kept for three years.

M. Compliance with Subchapter. The owner or operator of any facility that is subject to this Subchapter and to regulations in LAC 33:III.3730 through 3749 or LAC 33:III.Chapter 51, Subchapter H, may elect to determine compliance with this Subchapter by documentation either pursuant to LAC 33:V.1743 or pursuant to those provisions of LAC 33:III.Chapter 37 or Chapter 51, to the extent that the documentation under the regulation in LAC 33:III.Chapter 37 or Chapter 51 duplicates the documentation required under this Subchapter. The documentation under the regulation at LAC 33:III.Chapter 37 or Chapter 51 shall be kept with or made readily available with the facility operating record.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), LR 18:723 (July 1992).

§1745. Reporting Requirements

A. A semiannual report shall be submitted by owners and operators subject to the requirements of this Subchapter to the administrative authority by dates specified by the administrative authority. The report shall include the following information.

1. The Environmental Protection Agency identification number, name, and address of the facility shall be included.

2. For each month during the semiannual reporting period, the following shall be included:

a. the equipment identification number of each valve for which a leak was not repaired as required in LAC 33:V.1729.D;

b. the equipment identification number of each pump for which a leak was not repaired as required in LAC 33:V.1719.C and D.6; and

c. the equipment identification number of each compressor for which a leak was not repaired as required in LAC 33:V.1721.G.

3. Dates of hazardous waste management unit shutdowns that occurred within the semiannual reporting period shall be included.

4. For each month during the semiannual reporting period, dates when the control device installed as required by LAC 33:V.1719, 1721, 1723, or 1725 exceeded or operated outside of the design specifications as defined in LAC 33:V.1743.E and as indicated by the control device monitoring required by LAC 33:V.1735 and was not corrected within 24 hours, the duration and cause of each exceedance, and any corrective measures taken shall be included.

B. If, during the semiannual reporting period, leaks from valves, pumps, and compressors are repaired as required in LAC 33:V.1729.D, LAC 33:V.1719.C and D.6, and LAC 33:V.1721.G, respectively, and the control device does not exceed or operate outside of the design specifications as defined LAC 33:V.1743.E for more than 24 hours, a report to the administrative authority is not required.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

Chapter 18. Containment Buildings

§1801. Applicability

The requirements of this Section apply to owners or operators who store or treat hazardous waste in units designed and operated under LAC 33:V.1802. These provisions became effective on February 18, 1993, although an owner or operator may have notified the administrative authority of his intent to be bound by this Section, or its federal equivalent at an earlier time. The owner or operator is not subject to the definition of land disposal in RCRA section 3004(k) provided that the unit:

1. is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the hazardous wastes to which they are exposed, climatic conditions, and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls;

2. has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit;

3. when used to manage liquids:

a. has a primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;

b. has a liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and

c. has a secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time, unless the unit has been granted a variance

from the secondary containment system requirements under LAC 33:V.1802.B.4;

4. has controls as needed to permit fugitive dust emissions to meet the no visible emission standard in LAC 33:V.1802.C.1.d; and

5. has been designed and is operated to ensure containment and prevent the tracking of materials from the unit by personnel or equipment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§1802. Design and Operating Standards

A. All containment buildings must comply with the following design standards:

1. the containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-on) and to ensure containment of managed wastes;

2. the floor and containment walls of the unit, including the secondary containment system if required under LAC 33:V.1802.B, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the hazardous wastes to which they are exposed, climatic conditions, and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The administrative authority will consider standards established by professional organizations generally recognized by the industry, such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM), in judging the structural integrity requirements of LAC 33:V.1802.A. If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:

a. they provide an effective barrier against fugitive dust emissions under LAC 33:V.1802.C.1.d; and

b. the unit is designed and operated in a fashion that ensures that wastes will not actually come in contact with these openings;

3. incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail;

4. a containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and be appropriate for the physical and chemical characteristics of the waste to be managed.

B. For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include:

1. a primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g., a geomembrane covered by a concrete wear surface);

2. a liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building;

a. the primary barrier must be sloped to drain liquids to the associated collection system; and

b. liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time;

3. a secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time;

a. the requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum:

i. constructed with a bottom slope of 1 percent or more; and

ii. constructed of a granular drainage material with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more;

b. if treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building;

c. the secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building (Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of LAC 33:V.1907.D.1.

In addition, the containment building must meet the requirements of LAC 33:V.1907.B and C.1 and 2 to be considered an acceptable secondary containment system for a tank.);

4. for existing units other than 90-day generator units, the administrative authority or EPA may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of this Section. In making this demonstration, the owner or operator must:

a. have provided written notice to the administrative authority of their request by November 16, 1992. This notification must describe the unit and its operating practices with specific reference to the performance of existing containment systems and specific plans for retrofitting the unit with secondary containment;

b. respond to any comments from the administrative authority on these plans within 30 days; and

c. fulfill the terms of the revised plans, if such plans are approved by the administrative authority.

C. Owners or operators of all containment buildings must:

1. use controls and practices to ensure containment of the hazardous waste within the unit; and, at a minimum:

a. maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier;

b. maintain the level of the stored/treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;

c. take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste. An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and

d. take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see LAC 33:III.6079. Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator) must be operated and maintained with sound air pollution control practices (see LAC 33:III.3544 for guidance). This state of no visible emissions must be maintained effectively at all times during normal operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit;

2. obtain certification by a qualified registered professional engineer that the containment building design meets the requirements of LAC 33:V.1802.A-C. For units placed into operation prior to February 18, 1993, this certification must be placed in the facility's operating record (on-site files for generators who are not formally required to have operating records) no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit;

3. promptly repair any condition which the owner or operator detects throughout the active life of the containment building that could lead to or has caused a release of hazardous waste in accordance with the following procedures:

a. upon detection of a condition that has lead to a release of hazardous waste (e.g., upon detection of leakage from the primary barrier) the owner or operator must:

i. enter a record of the discovery in the facility operating record;

ii. immediately remove the portion of the containment building affected by the condition from service;

iii. determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and

iv. within seven days after the discovery of the condition, notify the administrative authority of the condition and, within 14 working days, provide a written notice to the administrative authority with a description of the steps taken to repair the containment building and the schedule for accomplishing the work;

b. the administrative authority will review the information submitted, make a determination regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing;

c. upon completing all repairs and cleanup, the owner or operator must notify the administrative authority in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with LAC 33:V.1802.C.3.a.iv; and

4. inspect and record in the facility's operating record, at least once every seven days, data gathered from monitoring equipment and leak detection equipment as well as the containment building and the area immediately surrounding the containment building to detect signs of releases of hazardous waste.

D. For containment buildings that contain areas both with and without secondary containment, the owner or operator must:

1. design and operate each area in accordance with the requirements enumerated in LAC 33:V.1802.A-C;

2. take measures to prevent the release of liquids or wet materials into areas without secondary containment; and

3. keep in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without secondary containment.

E. Notwithstanding any other provision of this Chapter, the administrative authority may waive requirements for secondary containment for a permitted containment building where the owner or operator demonstrates that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements and where containment of managed wastes and liquids can be ensured without a secondary containment system.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§1803. Closure and Post-closure Care

A. At closure of a containment building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate and manage them as hazardous waste unless LAC 33:V.109.*Hazardous Waste* applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings must meet all of the requirements specified in LAC 33:V.Chapters 35 and 37.

B. If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in LAC 33:V.1803.A, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (LAC 33:V.2521). In addition, for the purposes of closure, post-closure, and financial responsibility, such a containment building is then considered to be a landfill and the owner or operator must meet all of the requirements for landfills specified in LAC 33:V.Chapters 35 and 37.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

Chapter 19. Tanks

§1901. Applicability

The requirements of this Chapter apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste except as otherwise provided in LAC 33:V.1901.A and B or LAC 33.V.105.D.

A. Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements of LAC 33:V.1907. To demonstrate the absence or presence of free liquids in the stored/treated waste, EPA Method 9095 (Paint Filter Liquids), "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846), must be used.

B. Tank systems, including sumps, as defined in LAC 33:V.109, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in LAC 33:V.1907.A.

C. Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in LAC 33:V.109 and regulated under LAC 33:V.Chapter 28, must meet the requirements of this chapter.

D. Tanks meeting the requirements for the accumulation time exclusion of LAC 33:V.305.C and 1109.E.1 are subject to the requirements of LAC 33:V.1903.A, 1905.B-H, 1907.A.6, 1907.B-I, 1909, 1911, 1913, 1915.D, 1917, and 1919.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 16:614 (July 1990), LR 18:1375 (December 1992).

§1903. Assessment of Existing Tank System's Integrity

A. For each existing tank system that does not have secondary containment meeting the requirements of LAC 33:V.1907.B-I, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided in LAC 33:V.1903.B.5.c, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified, registered professional engineer, in accordance with LAC 33:V.513, that attests to the tank system's integrity by November 20, 1988. Tanks excluded from permitting requirements under LAC 33:V.1109.E.1 must have an assessment as described in this Section by November 20, 1990.

B. This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture or fail. At a minimum, this assessment must consider the following:

1. design standards(s), if available, according to which the tank and ancillary equipment were constructed;

2. hazardous characteristics of the waste(s) that have been and will be handled;

3. existing corrosion protection measures;

4. documented age of the tank system, if available (otherwise, an estimate of the age); and

5. results of a leak test, internal inspection or other tank integrity examination such that:

a. for non-enterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets and high water table effects, and

b. for other than non-enterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination, that is certified by an independent, qualified, registered professional engineer in accordance with LAC 33:V.513, that addresses cracks, leaks, corrosion and erosion.

c. tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986, must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.

d. if, as a result of the assessment conducted in accordance with LAC 33:V.1903.A, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of LAC 33:V.1913.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 16:614 (July 1990), LR 18:1256 (November 1992).

§1905. Design and Installation of New Tank Systems or Components

A. Owners or operators of new tank systems or components must obtain and submit to the administrative authority, at time of submittal of Part II information, a written assessment, reviewed and certified by an independent, qualified registered professional engineer, in accordance with LAC 33:V.513, attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment must show that the foundation, structural support, seams, connections and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated and corrosion protection to ensure that it will not collapse, rupture or fail. This assessment, which will be used by the administrative authority to review and approve or disapprove the acceptability of the tank system design, must include, at a minimum, the following information:

1. design standard(s) according to which tank(s) and/or the ancillary equipment are constructed;

2. hazardous characteristics of the waste(s) to be handled;

3. for new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:

a. factors affecting the potential for corrosion, including but not limited to:

i. soil moisture content;

ii. soil pH;

iii. soil sulfides level;

iv. soil resistivity;

v. structure to soil potential;

vi. influence of nearby underground metal structures (e.g., piping);

vii. existence of stray electric current;

viii. existing corrosion-protection measures (e.g., coating, cathodic protection); and

b. the type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

i. corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, etc;

ii. corrosion-resistant coating (such as epoxy, fiberglass, etc.) with cathodic protection (e.g. impressed current or sacrificial anodes); and

iii. electrical isolation devices such as insulating joints, flanges, etc.

4. For underground tank systems components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and

5. Design considerations to ensure that:

a. tank foundations will maintain the load of a full tank;

b. tank systems will be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of LAC 33:V.1503.A.3; and

c. tank systems will withstand the effects of frost heave.

B. The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified installation inspector or an independent, qualified, Louisiana registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems or component, must inspect the system for the presence of any of the following items:

1. weld breaks;

2. punctures;

3. scrapes of protective coatings;

4. cracks;

5. corrosion;

6. other structural damage or inadequate construction/installation.

All discrepancies must be remedied before the tank system is covered, enclosed or placed in use.

C. New tank systems or components that are placed underground and that are backfilled must be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

D. All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system must be performed prior to the tank system being covered, enclosed, or placed into use.

E. Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

F. The owner or operator must provide the type and degree of corrosion protection recommended by an independent corrosion expert, licensed in Louisiana, based on the information provided under LAC 33:V.1905.A.3 of this Section, or other corrosion protection if the administrative authority believes other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.

G. The owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of LAC 33:V.1905.A, C, D, E and F of this Section, that attest that the tank system was properly designed and installed and that repairs, pursuant to LAC 33:V.1905.B, C and D of this Section, were performed. These written statements must also include the certification statement as required in LAC 33:V.513.

~~H. Owners or operators of new tanks systems or components subject to the accumulation time exclusion of LAC 33:V.1109.E.1 must obtain and submit to the administrative authority, prior to placing the tank system in service, a written assessment, reviewed and certified by an independent registered professional engineer, in accordance with LAC 33:V.513, attesting that the tank system has sufficient structural integrity and is acceptable for storing or treating hazardous waste. The assessment must show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed, and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it will not collapse, rupture, or fail. The assessment, which will be used by the administrative authority to review the acceptability of the tank system design, must include at a minimum the requirements specified in LAC 33:V.1905.A.1-5.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 16:614 (July 1990), LR 16:683 (August 1990).

§1907. Containment and Detection of Releases

A. In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section must be provided (except as provided in LAC 33:V.1907.F and G):

1. for all new tank systems or components, prior to their being put into service;

2. for all existing tank systems used to store or treat EPA Hazardous Waste Nos. F020, F021, F022, F023, F026 and F027, within two years after November 20, 1988;

3. for those existing tank systems of known and documented age, within two years after November 20, 1988 or when the tank system has reached 15 years of age, whichever comes later;

4. for those existing tank systems for which the age cannot be documented with eight years of November 20, 1988, but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches 15 years of age, or within two years of November 20, 1988, whichever comes later; and

5. for tank systems that store or treat materials that become hazardous wastes subsequent to November 20, 1988, within the time intervals required in LAC 33:V.1907.A.1-4 except that the date that a material becomes a hazardous waste must be used in place of November 20, 1988;

6. existing tanks of known and documented age and subject to the accumulation time exclusion of LAC 33:V.1109.E.1, November 20, 1991, or by 15 years of age, whichever comes later.

B. Secondary containment systems must be:

1. designed, installed and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater or surface water at any time during the use of the tank system; and

2. capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

C. To meet the requirements of Subsection B of this Section, secondary containment systems must be at a minimum:

1. constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);

2. placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

3. provide with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the owner or operator can demonstrate to the administrative authority that existing detection technologies or site conditions will not allow detection of a release within 24 hours; and

4. sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the administrative authority that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

D. Secondary containment for tanks must include one or more of the following devices:

1. a liner (external to the tank);

2. a vault;

3. a double-walled tank; or

4. an equivalent device as approved by the administrative authority.

E. In addition to the requirements of LAC 33:V.1907.B-D, secondary containment systems must satisfy the following requirements.

1. External liner systems must be:

a. designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

b. designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.

c. free of cracks or gaps; and

d. designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).

2. Vault systems must be:

a. designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

b. designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

c. constructed with chemical-resistant water stops in place at all joints (if any);

d. provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

e. provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

i. meets the definitions of ignitable waste under LAC 33:V.4903.B of this Part; or

ii. meets the definition of reactive waste under LAC 33:V.4903.D of this Part, and may form an ignitable or explosive vapor.

f. provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

3. Double-walled tanks must be:

a. designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

b. protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

c. provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator can demonstrate to the administrative authority, and the administrative authority concludes that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

F. Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of LAC 33:V.1907.B and C, except for:

1. aboveground piping (exclusive of flanges, joints, valves and other connections) that are visually inspected for leaks on a daily basis;

2. welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a daily basis;

3. sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks daily; and

4. pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

G. The owner or operator may obtain a variance from the requirements of this Section if the administrative authority finds, as a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater; or surface water at least as effectively as secondary containment during the active life of the tank system - that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with LAC 33:V.1907.G.2 of this Section, be exempted from the secondary containment requirements of this Section.

1. In deciding whether to grant a variance based on a demonstration of equivalent protection of groundwater and surface water, the administrative authority will consider:

a. the nature and quantity of the wastes;

b. the proposed alternate design and operation;

c. the hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater, and

d. all other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.

2. In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the administrative authority will consider:

a. the potential adverse effects on groundwater, surface water, and land quality, taking into account:

i. the physical and chemical characteristics of the waste in the tank system, including its potential for migration;

ii. the hydrogeological characteristics of the facility and surrounding land;

iii. the potential for health risks caused by human exposure to waste constituents;

iv. the potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

v. the persistence and permanence of the potential adverse effects;

b. the potential adverse effects of a release on groundwater and quality, taking into account:

i. the quantity and quality of groundwater and the direction of groundwater flow;

ii. the patterns of rainfall in the region;

iii. the proximity and withdrawal rates of groundwater users;

iv. the current and future uses of groundwater in the area; and

v. the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality; and

c. the potential adverse effects of a release on surface water quality, taking into account:

i. the quantity and quality of groundwater and the direction of groundwater flow;

ii. the patterns of rainfall in the region;

iii. the proximity of the tank system to surface waters;

iv. the current and future uses of surface waters in the area, and any water quality standards established for those surface waters; and

v. the existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and

3. The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with requirements of LAC 33:V.1907.G.1 at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), must:

a. comply with the requirements of LAC 33:V.1913, except 1913.D, and

i. decontaminate or remove contaminated soil to the extent necessary to:

(a). enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

(b). prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and

ii. if contaminated soil cannot be removed or decontaminated in accordance with LAC 33:V.1907.G.3.i, comply with the requirements of LAC 33:V.1915.B.

4. The owner or operator of a tank system, for which a variance from secondary containment has been granted in accordance with the requirements of LAC 33:V.1907.G.1, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), must:

a. comply with requirements of LAC 33:V.1913.A-D, and

i. prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if groundwater has been contaminated, the owner or operator must comply with requirements of LAC 33:V.1915.B and,

ii. if repairing, replacing or reinstalling the tank system, provide secondary containment in accordance with the requirements of LAC 33:V.1907.A-F or reapply for a variance from secondary containment and meet the requirements for new tank systems in LAC 33:V.1905 if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil can be decontaminated or removed and groundwater or surface water has not been contaminated.

H. The following procedures must be followed in order to request a variance from secondary containment.

1. The administrative authority must be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in LAC 33:V.1907.G according to the following schedule:

a. for existing tank systems, at least 24 months prior to the date that secondary containment must be provided in accordance with LAC 33:V.1907.A;

b. for new tank systems, at least 30 days prior to entering into a contract for installation.

2. As part of the notification, the owner or operator must also submit to the administrative authority a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in LAC 33:V.1907.G.1 or 2.

3. The demonstration for a variance must be completed within 180 days after notifying the administrative authority of an intent to conduct the demonstration; and

4. If a variance is granted under this Paragraph, the administrative authority will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

I. All tank systems, until such time as secondary containment that meets the requirements of this Section is provided, must comply with the following.

1. For non-enterable underground tanks, a leak test that meets the requirements of LAC 33:V.1903.A or other tank integrity method, as approved or required by the administrative authority, must be conducted at least annually.

2. For other than non-enterable underground tanks, the owner or operator must either:

a. conduct a leak test as in LAC 33:V.1907.I.1 or 2;

b. develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified registered professional engineer. The schedule and procedure must be adequate to detect obvious cracks, leaks and corrosion or erosion that may lead to cracks and leaks. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments must be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated.

3. For ancillary equipment, a leak test or other integrity assessment as approved by the administrative authority must be conducted at least annually.

4. The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with LAC 33:V.1907.I.1-3.

5. If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in LAC 33:V.1907.I.1 through 3, the owner or operator must comply with the requirements of LAC 33:V.1913.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 14:790 (November 1988), LR 16:614 (July 1990).

§1909. General Operating Requirements

A. Hazardous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

B. The owner or operator must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

1. spill prevention controls (e.g., check valves, dry disconnect couplings);

2. overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff or bypass to a standby tank); and

3. maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

C. The owner or operator must comply with the requirements of LAC 33:V.1913 if a leak or spill occurs in the tank system.

D. Owners or operators must provide documentation, maintained on-site, that tanks subject to the accumulation time exclusion of LAC 33:V.1109.E have been emptied and a demonstration made that the tanks have been cleaned of all residues and/or sludges at least once in each 90-day period.

1. For tanks used to store similar wastes (compatible), cleaning/rinsing or removing hazardous materials and sludges to a level which will allow visible inspection of all tank interior surfaces is required.

2. For tanks that may be used to store dissimilar (incompatible) wastes, cleaning/rinsing by method(s) necessary to remove all hazardous materials to a level which precludes any incompatibility reactions and is sufficient to allow visible inspection of all tank interior surfaces is required.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 16:614 (July 1990).

§1911. Inspections

A. The owner or operator must develop and follow a schedule and procedure for inspecting overfill controls.

B. The owner or operator must inspect at least once each operating day.

1. aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

2. data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and

3. the construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).

C. The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

1. the proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and

2. all sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month).

D. The owner or operator must document in the operating record of the facility an inspection of those items in LAC 33:V.1911.A-C.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 14:790 (November 1988).

§1913. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements.

A. Cessation of Use; Prevent Flow or Addition of Wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

B. Removal of Waste from Tank System or Secondary Containment System

1. If the release was from the tank system, the owner/operator must, within 24 hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

2. If the material released was to a secondary containment system all released material must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

C. Containment of Visible Releases to the Environment. The owner/operator must immediately conduct a visual inspection of the release and, based upon that inspection:

1. prevent further migration of the leak or spill to soils or surface water; and

2. remove, and properly dispose of, any visible contamination of the soil or surface water.

D. Notifications, Reports (LAC 33:V.105.A)

1. Any release to the environment, except as provided in LAC 33:V.1913.D.2, must be reported to the administrative authority within 24 hours of its detection. If the release has

been reported pursuant to LAC 33:V.105.J, that report will satisfy this requirement.

2. A leak or spill of hazardous waste is exempted from this Paragraph if it is:

a. less than or equal to a quantity of one pound, and

b. immediately contained and cleaned-up.

3. Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the administrative authority:

a. likely route of migration of the release;

b. characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

c. results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the administrative authority as soon as they become available;

d. proximity to downgradient drinking water, surface water, and population areas; and

e. description of response actions taken or planned.

E. Provision of Secondary Containment, Repair or Closure.

1. Unless the owner/operator satisfies the requirements of LAC 33:V.1913.E.2 through E.3 the tank system must be closed in accordance with LAC 33:V.1915.

2. If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

3. If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

4. If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of LAC 33:V.1907 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of LAC 33:V.1913.F are satisfied. If a component is replaced to comply with the requirements of this Subparagraph, that component must satisfy the requirements for new tank systems or components in LAC 33:V.1905 and 1907. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with LAC 33:V.1907 prior to being returned to use.

F. Certification of Major Repairs. If the owner/operator has repaired a tank system in accordance with LAC 33:V.1913.E and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner/operator has obtained a certification by an independent, qualified, registered, professional engineer in accordance with LAC 33:V.513 that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the administrative authority within seven days after returning the tank system to use.

Note: The administrative authority may, on the basis of any information received that there is or has been a release of hazardous waste or hazardous constituents into the environment, issue an order requiring corrective action or such other response as is deemed necessary to protect human health or the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 13:651 (November 1987), LR 16:614 (July 1990).

§1915. Closure and Post-closure Care

A. At closure of a tank system, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless LAC 33:V.109.Hazardous Waste.6 applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems must meet all the requirements specified in LAC 33:V.Chapters 35 and 37.

B. If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in Subsection A of this Section, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills, LAC 33:V.2521. In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator must meet all the requirements for landfills specified in LAC 33:V.Chapters 35 and 37.

C. If an owner or operator has a tank system that does not have secondary containment that meets the requirements of LAC 33:V.1907.B and F and is not exempt from the secondary containment requirements in accordance with LAC 33:V.1907.G, then:

1. The closure plan for the tank system must include both a plan for complying with LAC 33:V.1915.A of this Section and a contingent plan for complying with LAC 33:V.1915.B of this Section.

2. A contingent post-closure plan for complying with LAC 33:V.1915.B of this Section must be prepared and submitted as part of the permit application.

3. The cost estimates calculated for closure and post-closure care must reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if those costs are greater than the costs of complying with the closure plan prepared for the expected closure under Subsection A of this Section.

4. Financial assurance must be based on the cost estimates in LAC 33:V.1915.C.3.

5. For the purposes of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the contingent plans must meet all of the closure, post-closure, and financial responsibility requirements for landfills under LAC 33:V.Chapters 35 and 37.

~~D. Owners or operators of tanks subject to the accumulation exclusion of LAC 33:V.1109.E.1 are exempt from the requirements of LAC 33:V.Chapters 35 and 37, except for LAC 33:V.3507.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 13:651 (November 1987), amended LR 16:614 (July 1990), LR 18:1256 (November 1992).

§1917. Special Requirements for Ignitable or Reactive Wastes

A. Ignitable or reactive waste must not be placed in tank systems, unless:

1. the waste is treated, rendered, or mixed before or immediately after placement in the tank system so that:

a. the resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste under LAC 33:V.4903.B or D of this Part, and

b. LAC 33:V.1517.B is complied with; or

2. the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

3. the tank system is used solely for emergencies.

B. The owner or operator of a facility where ignitable or reactive waste is stored or treated in a tank must comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's *Flammable and Combustible Liquids Code*, (Latest Edition).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 13:651 (November 1987).

§1919. Special Requirements for Incompatible Wastes

A. Incompatible wastes, or incompatible wastes and materials, must not be placed in the same tank system, unless LAC 33:V.1517.B is complied with.

B. Hazardous waste must not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless LAC 33:V.1517.B is complied with.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 13:651 (November 1987).

Chapter 21. Containers

§2101. Applicability

The regulations in this Chapter apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as specified in LAC 33:V.105.D, or if the container is empty (see LAC 33:V.109).

A. Containers not exempted from these regulations shall be considered hazardous and shall be disposed of or treated by an acceptable waste disposal or treatment method.

B. If a hazardous waste is emptied from a container, the residue remaining in the container is not considered a hazardous waste if the container is empty as defined in LAC 33:V.109. In that event, management of the container is exempt from the requirements of this Chapter.

C. Empty containers sent to a reclaimer are considered product, and thus are not subject to these rules and regulations. Residue from the reclaimer's operations must be disposed of in a permitted facility.

~~D. The storage of hazardous waste prohibited from land disposal must also be in accordance with the requirements of LAC 33:V.2205.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§2103. Condition of Containers

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the

hazardous waste from this container to a container that is in good condition or manage the waste in some other way that complies with the requirements of this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2105. Compatibility of Waste with Containers

The owner or operator must use a container made of or lined with materials which will not react with, or be incompatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2107. Management of Containers

A. A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

B. A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), repromulgated LR 18:1256 (November 1992).

§2109. Inspections

A. At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system. Remedial action as described in LAC 33:V.1513 shall be taken.

B. All containers must be stacked in such a fashion that each container identification label can be read from the access aisle.

C. All inspection records must be maintained according to the recordkeeping requirements of LAC 33:V.1529.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), repromulgated LR 18:1256 (November 1992).

§2111. Containment

A. Container storage areas must have a containment system that is designed and operated in accordance with LAC 33:V.2111.B except as otherwise provided by LAC 33:V.2111.C.

B. A containment system must be designed and operated as follows:

1. a base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

2. the base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

3. the containment system must have sufficient capacity to contain ten percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;

4. run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in LAC 33:V.2111.B.3 to contain any run-on which might enter the system;

5. spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system; and

6. if the collected material is a hazardous waste, it must be managed as a hazardous waste in accordance with all applicable requirements.

C. Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by LAC 33:V.2111.B, except as provided by LAC 33:V.2111.D or provided that:

1. the storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or

2. the containers are elevated or are otherwise protected from contact with accumulated liquid.

D. Storage areas that store containers holding the wastes listed below must have a containment system defined by LAC 33:V.2111.B even when these wastes do not contain free liquids:

F020, F021, F022, F023, F026, and F027.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990).

§2113. Special Requirements for Ignitable or Reactive Wastes

Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility property line. (See LAC 33:V.1517 for additional requirements or LAC 33:V.4321 for additional requirements for interim status facilities.)

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2115. Special Requirements for Incompatible Wastes

A. Incompatible wastes, or incompatible wastes and materials, must not be placed in the same container unless LAC 33:V.1517 or LAC 33:V.4321 for interim status facilities is complied with.

B. Hazardous wastes must not be placed in an unwashed container that previously held an incompatible waste or material.

C. A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, other device, or approved management technique.

D. The owner or operator must place the results of each waste analysis and trial test and any documented information regarding compatibility testing in the operating record of the facility.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 18:1256 (November 1992).

§2117. Closure

At closure, all hazardous waste and hazardous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed. At closure, as throughout the operating period, unless the owner or operator can demonstrate in accordance with LAC 33:V.109.Hazardous Waste.6 that the solid waste removed from the containment system is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of LAC 33:V.Chapters 9-43.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

Chapter 22. Prohibitions on Land Disposal

§2201. Purpose and Applicability

A. This Chapter is adopted pursuant to the authority of Act 1984, No. 803, as amended by Act 1986, No. 422, and Act 1987, No. 852, cited as Louisiana Revised Statutes Title 30, Section 2193.

B. The purpose of these regulations is to provide for prohibitions and incentives designed to encourage alternative methods of hazardous waste disposal, destruction, and reduction; to lessen the possibility of hazardous waste releases from existing land disposal sites; and to provide for the eventual prohibition of land disposal of hazardous waste.

C. The requirements of this Chapter apply to all persons who generate or transport hazardous waste and to owners and operators of hazardous waste treatment, storage, and disposal facilities.

D. The wastes prohibited in this Chapter are hereby deemed to be inappropriate for land disposal.

E. These regulations shall be construed and implemented to support the use of the following waste management practices in the following order of priority:

1. reduction of hazardous waste generated;

2. recycling of hazardous waste;

3. treatment of hazardous waste; and

4. land disposal of residuals from hazardous waste recycling and treatment.

F. The policies and determinations that the administrative authority makes pursuant to these regulations shall assert and reflect the primacy of waste reduction.

G. The prohibitions contained in this Chapter do not apply to farmers disposing of waste pesticides in accordance with LAC 33:V.105.D.5.

H. Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this Chapter, are not prohibited from land disposal if the wastes:

1. are disposed into a nonhazardous or hazardous injection well defined under LAC 43:XVII.Subpart 2.203.C; and

2. do not exhibit any prohibited characteristic of hazardous waste identified in LAC 33:V.4903 at the point of injection at the well head.

I. De minimis losses to wastewater treatment systems of commercial chemical product or chemical intermediates that are ignitable (D001), or corrosive (D002), and that contain underlying hazardous constituents as defined in LAC 33:V.2203 are not considered to be prohibited wastes. De minimis is defined as losses from normal material-handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges.

J. Land disposal prohibitions do not apply to laboratory wastes displaying the characteristic of ignitability (D001) or corrosivity (D002) that are commingled with other plant wastewaters under these designated circumstances: ignitable and corrosive laboratory wastes containing underlying hazardous constituents from laboratory operations that are mixed with other plant wastewaters at facilities whose ultimate discharge is subject to regulation under the CWA (including wastewaters at facilities which have eliminated the discharge of wastewater), provided that the annualized flow of laboratory wastewater into the facility's headwork does not exceed 1 percent or that the laboratory wastes' combined annualized average concentration does not exceed one part per million in the facility's headwork.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:398 (May 1990), LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 18:723 (July 1992), LR 21:266 (March 1995).

§2203. Definitions Applicable to this Chapter

A. When used in this Chapter the following terms have the meanings given below:

Cone of Influence — that area around the well within which increased injection zone pressures caused by injection into the waste injection well could drive fluids into an underground source of drinking water (USDW).

Confining Zone—a geological formation, group of formations, or part of a formation that is capable of limiting fluid movement above an injection zone.

Debris—solid material exceeding a 60-mm particle size that is intended for disposal and that is: a manufactured object, plant or animal matter, or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in LAC 33:V.Chapter 22.Subchapter B, process residuals (such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues), and intact containers of hazardous waste that are not ruptured and that retain at least 75 percent of their original volume. A mixture of debris that has not been treated to the standards provided by LAC 33:V.2230 with other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

Duly Authorized Representative—an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager or superintendent, or a position of equivalent responsibility (a duly authorized representative may be thus be either a named individual or any individual occupying a named position), designated or named in writing by one of the following:

a. for a corporation, by a responsible corporate officer; for the purposes of this Chapter, "responsible corporate officer" means:

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

ii. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. for a partnership or sole proprietorship, by a general partner or the proprietor, respectively;

c. for a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official.

Formation—a body of consolidated or unconsolidated rock characterized by a degree of lithologic homogeneity which is prevailingly, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface.

Halogenated Organic Compounds or HOCs—those compounds having a carbon-halogen bond which are listed in Table 5.

Hazardous Constituent(s)—those constituents listed in LAC 33:V.3105.Table 1.

Hazardous Debris—debris that contains a hazardous waste listed in LAC 33:V.4903 or that exhibits a characteristic of hazardous waste identified in LAC 33:V.4901.

Injection Interval—the part of the injection zone in which the well is screened, or in which the waste is otherwise directly emplaced.

Injection Zone—a geological formation, group of formations, or part of a formation receiving fluids through an injection well.

Land Disposal—placement in or on the land, except in a corrective action management unit, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt-dome formation, salt bed formation, underground mine or cave, or

placement in a concrete vault or bunker intended for disposal purposes.

Mechanical Integrity—an injection well has mechanical integrity if:

a. there is no significant leak in the casing, tubing, or packer; and

b. there is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore.

Nonwastewaters—wastes that do not meet the criteria for wastewaters defined in this Section.

Petitioner—a person, or his or her duly authorized representative, who has legal authority and responsibility for a facility that generates, transports, treats, stores, or disposes of any hazardous waste, and who submits a written request to the administrative authority for an exemption, extension, or variance to allow the land disposal of an otherwise prohibited waste.

Polychlorinated Biphenyls or PCBs—any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees, or any combination of substances which contains such substance.

Transmissive Fault or Fracture—a fault or fracture that has sufficient permeability and vertical extent to allow fluids to move between formations.

Treatment—any method, technique, or process, including incineration, occurring at permitted facilities or facilities operating under interim status that changes the physical, chemical, or biological character or composition of any hazardous waste such that the waste becomes nonhazardous, significantly less hazardous, or more suitable for land disposal because of removal or substantial reduction of undesirable properties, such as toxicity, mobility, persistence, reactivity, bioaccumulation, flammability, or corrosivity. Treatment does not include any of the following if one or more of the following is the only method used:

a. solidification of hazardous waste by the addition of absorbent material which produces a change only in the physical character of the waste without a corresponding change in the chemical character of the waste;

b. treatment occurring directly in or on the land, such as land treatment, except that treatment may include in situ treatment necessary for site remediation;

c. dilution of hazardous waste by the addition of nonhazardous material; and/or

d. evaporation in a surface impoundment.

Underground Source of Drinking Water or USDW—an aquifer or its portion:

a. which supplies any public water system; or

b. which contains a sufficient quantity of groundwater to supply a public water system, and

i. currently supplies drinking water for human consumption, or

ii. contains fewer that 10,000 mg/l total dissolved solids; and

c. which is not an aquifer exempted by the Department of Natural Resources, Office of Conservation.

Underlying Hazardous Constituent—any regulated constituent present at levels above the F039 constituent-specific treatment standard at the point of generation of the hazardous waste.

Wastewaters—wastes that contain less than one percent by weight total organic carbon (TOC) and less than one percent by weight total suspended solids (TSS), with the following exceptions:

a. F001, F002, F003, F004 and F005 wastewaters are solvent-water mixtures that contain less than one percent by weight TOC or less than one percent by weight total F001, F002, F003, F004, or F005 solvent constituents listed in Subchapter B, Table 2, of this Chapter.

b. K011, K013, and K014 wastewaters (as generated) contain less than five percent by weight TOC and less than one percent by weight TSS.

c. K103 and K104 wastewaters contain less than four percent by weight TOC and less than one percent by weight TSS.

B. All other terms are used as defined in Chapter 1 of these regulations

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:221 (March 1990), LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 21:266 (March 1995).

Subchapter A. Prohibitions

§2205. Storage of Prohibited Wastes

A. The storage of hazardous wastes prohibited from land disposal is prohibited except under the following conditions.

1. A generator may store such wastes in tanks, containers, or containment buildings on-site solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal if the generator complies with the requirements of LAC 33:V.2245. (A generator who exists on the effective date of a regulation under this Chapter and who must store hazardous wastes for longer than 90 days becomes an owner/operator of a storage facility and must obtain a final permit. Such a facility may qualify for interim status upon compliance

with the regulations governing interim status under Chapter 43 of this Part.)

2. An owner/operator of a hazardous waste treatment, storage, or disposal facility may store such wastes in tanks, containers, or containment buildings solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal provided that each container or tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility. Regardless of whether the tank itself is marked, an owner/operator must comply with the operating record requirements specified in LAC 33:V.1529 or 4357.

3. A transporter may store manifested shipments of such wastes at a transfer facility for 10 days or less with the approval of the administrative authority in accordance with LAC 33:V.1305.

B. An owner/operator of a treatment, storage, or disposal facility may store such wastes for up to one year provided that such storage is solely for the purpose of accumulating such quantities of hazardous wastes as are necessary to facilitate proper recovery, treatment, or disposal. In response to a request from the administrative authority, the owner/operator must prove that storage for less than one year is solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

C. An owner/operator of a treatment, storage, or disposal facility may store such wastes beyond one year with the approval of the administrative authority; however, the owner/operator bears the burden of proving that such storage is solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

D. The prohibition in Subsection A of this Section does not apply to hazardous wastes which are the subject of an approved exemption under LAC 33:V.2241 or 2242 or an approved case-by-case extension of time under LAC 33:V.2239 or a valid certification under LAC 33:V.2235.

E. The prohibition in Subsection A of this Section does not apply to hazardous wastes that:

1. meet the treatment standards specified under LAC 33:V.2225, 2227, or 2229; or

2. have been granted a variance under LAC 33:V.2231; or

3. if treatment standards have not been specified, are in compliance with the applicable prohibitions specified in LAC 33:V.2213.

F. Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm must be stored at a facility that meets the requirements of 40 CFR 761.65(b) and must be removed from storage and treated or disposed as required by this Chapter within one year of the date when such wastes are first placed into storage. The provisions of Subsection C of this Section do not apply to PCB wastes prohibited under LAC 33:V.2213.

G. Notwithstanding the above, any storage facility must be in full compliance with all applicable hazardous waste rules pertaining to storage.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:220 (March 1990), LR 17:658 (July 1991), LR 21:266 (March 1995).

§2207. Dilution Prohibited as a Substitute for Treatment

A. Except as provided in Subsection B of this Section, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a prohibited waste or the residual from treatment of a prohibited waste as a substitute for adequate treatment to achieve compliance with this Chapter, to circumvent the effective date of or otherwise avoid a prohibition listed in Subchapter A of this Chapter, or to circumvent a land disposal prohibition imposed by law.

B. Dilution of wastes that are hazardous only because they exhibit a characteristic in a treatment system that treats wastes subsequently discharged to a water of the United States pursuant to a permit issued under Section 402 of the Clean Water Act (CWA) or that treats wastes for purposes of pretreatment requirements under Section 307 of the CWA is not prohibited dilution for purposes of this Section unless a method has been specified as the treatment standard in LAC 33:V.2227, or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 21:266 (March 1995).

§2209. Waste-Specific Prohibitions—Solvent Wastes

A. The following prohibited spent solvents are thereby deemed to pose the greatest risk to the public when disposed of on land. Therefore, except as provided in LAC 33:V.2209.B, D, or E, the spent solvent wastes specified in LAC 33:V.Chapter 49 as Hazardous Waste Nos. F001, F002, F003, F004, and F005 are prohibited from land disposal.

B. Effective November 8, 1990, the F001-F005 solvent wastes which are contaminated soil and debris resulting from a response action taken under Section 104 or 106 of the Comprehensive Environmental Response, Compensation, and

Liability Act of 1980 (CERCLA) or a corrective action required under Subtitle C of the Resource Conservation and Recovery Act (RCRA) and the residues from treating these wastes are prohibited from land disposal. Between the effective date of these regulations and November 8, 1990, these wastes may be disposed only with the approval of the administrative authority and may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in LAC 33:V.2239.I.2.

C. The F001-F005 solvent wastes are prohibited from underground injection unless the solvent waste is a solvent-water mixture or solvent containing sludge having less than one percent total of the F001-F005 solvent constituents listed in Table 1 of this Chapter.

D. Except as provided in LAC 33:V.2205.E., effective August 8, 1990, all spent F001-F005 solvent wastes containing less than one percent total of the F001-F005 solvent constituents listed in Table 1 of this Chapter are prohibited from injection.

E. Effective July 20, 1991, all spent F002 and F005 wastes containing solvent constituents listed in Table 1-A of this Section are prohibited from underground injection.

F. The requirements of LAC 33:V.2209.A-D do not apply if:

1. an exemption from a prohibition has been granted pursuant to a petition under LAC 33:V.2241 or 2242 with respect to those wastes and units covered by the petition;

2. an extension of the effective date of a prohibition has been granted pursuant to LAC 33:V.2239 with respect to those wastes covered by the extension; or

3. the wastes meet the applicable treatment standards specified in Subchapter B of this Chapter or, where treatment standards are not specified, the wastes are in compliance with the applicable prohibition set forth in this Chapter.

TABLE 1

Acetone	Methylene Chloride (from the pharmaceutical industry)
N-Butyl Alcohol	Methyl Ethyl Ketone
Carbon Disulfide	Methyl Isobutyl Ketone
Carbon Tetrachloride	Nitrobenzene
Chlorobenzene	Pyridine
Cresols and Cresylic Acid	Tetrachloroethylene
Cyclohexanone	Toluene
1,2-dichlorobenzene	1,1,1-Trichloroethane
Ethyl Acetate	1,2,2-Trichloro-1,2,2-trifluoroethane
Ethyl Benzene	Trichloroethylene
Ethyl Ether	Trichlorofluoromethane
Isobutanol	Xylene
Methanol	
Methylene Chloride	

TABLE 1-A

Benzene	2-Nitropopane
2-Ethoxyethanol	1,1,2-Trichloroethane

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 17:658 (July 1991).

§2211. Waste-Specific Prohibitions—Dioxin-Containing Wastes

A. The following wastes containing dioxin are deemed to pose the greatest risk to the public when disposed of on land. Therefore, the dioxin-containing wastes specified in LAC 33:V.Chapter 49 as Hazardous Waste Nos. F020, F021, F023, F026, F027, and F028 are prohibited from land disposal.

B. The requirements of Subsection A of this Section do not apply if:

1. the wastes are treated to meet the standard of Subchapter B of this Chapter; or

2. the wastes are disposed of at a facility that has been granted an exemption under LAC 33:V.2241 or 2242; or

3. an extension of time has been granted under LAC 33:V.2239.

C. Between the effective date of these regulations and November 8, 1990, wastes which are contaminated soil or debris resulting from a response action taken under Section 104 or 106 of CERCLA or a corrective action taken under Subtitle C of RCRA may be land disposed with the approval of the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989).

§2213. Waste-Specific Prohibitions—California List Wastes

A. The following wastes are deemed to pose the greatest risk to the public when disposed of on land. The following hazardous wastes are prohibited from land disposal except in injection wells under the provisions of LAC 33:V.2213.C:

1. liquid hazardous wastes having a pH less than or equal to 2.0;

2. liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm;

3. hazardous wastes that contain halogenated organic compounds (HOCs) in total concentrations greater than or equal to 1,000 mg/l;

4. liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l;

5. liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following metals or compounds of these metals at concentrations greater than or equal to the concentration specified below:

a. arsenic, 500 mg/l;

b. cadmium, 100 mg/l;

c. chromium (VI), 500 mg/l;

d. lead, 500 mg/l;

e. mercury, 20 mg/l;

f. nickel, 134 mg/l;

g. selenium, 100 mg/l;

h. thallium, 130 mg/1.

B. The requirements of Subsection A of this Section do not apply until:

1. July 8, 1989, where the wastes are contaminated soil or debris not resulting from a response action taken under Section 104 or 106 of the CERCLA or a corrective action taken under Subtitle C of the RCRA. Until July 8, 1989, these wastes may be disposed in a landfill or surface impoundment with the approval of the administrative authority only if such disposal is in compliance with the requirements specified in LAC 33:V.2239.I.2.

2. November 8, 1990, where the wastes are contaminated soil or debris resulting from a response action taken under Section 104 or 106 of CERCLA or a corrective action taken under Subtitle C of RCRA. Until November 8, 1990, these wastes may be disposed of in a landfill or surface impoundment with the approval of the administrative authority only if such unit is in compliance with the requirements specified in LAC 33:V.2239.I.2.

C. The following hazardous wastes are prohibited from underground injection as indicated:

1. liquid hazardous wastes having a pH less than or equal to 2.0, effective August 8, 1990;

2. liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following heavy metals in amounts greater than or equal to the indicated concentrations, effective August 8, 1990:

Arsenic and/or compounds (as As)	500 mg/l
Cadmium and/or compounds (as Cd)	100 mg/l
Chromium (VI) and/or compounds (as Cr VI)	500 mg/l
Mercury and/or compounds (as Hg)	20 mg/l
Nickel and/or compounds (as Ni)	134 mg/l
Selenium and/or compounds (as Se)	100 mg/l
Thallium and/or compounds (as Tl)	130 mg/l
Lead and/or compounds (as Pb)	500 mg/l

3. liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides in concentrations greater than or equal to 1,000 mg/l, effective August 8, 1990;

4. liquid hazardous wastes that are primarily water and contain HOCs in total concentrations greater than or equal to 1,000 mg/l and less than 10,000 mg/l, effective August 8, 1990;

5. liquid hazardous wastes containing PCB concentrations greater than or equal to 50 ppm, effective on promulgation of these regulations; and

6. liquid hazardous wastes containing HOCs in total concentrations greater than or equal to 10,000 mg/l, effective on promulgation of these regulations.

D. The requirements of Subsections A-C of this Section do not apply if:

1. an exemption from a prohibition has been granted pursuant to a petition under LAC 33:V.2241 or 2242 with respect to those wastes and units covered by the petition;

2. an extension of the effective date of a prohibition has been granted pursuant to LAC 33:V.2239 with respect to those wastes covered by the extension; or

3. the wastes meet the applicable treatment standards specified in Subchapter B of this Chapter or, where treatment standards are not specified, the wastes are in compliance with the applicable prohibitions set forth in this Chapter.

E. The prohibitions and effective dates specified in Subsections A, B, and C of this Section do not apply where the waste is subject to a prohibition and effective date under this Subchapter for a specified HOC (such as waste solvent, F001-F005, see e.g., LAC 33:V.2209).

F. To determine whether or not a waste is a liquid under Subsections A and C of this Section, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846), latest edition.

G. Except as otherwise provided in this Subsection, the waste analysis, recordkeeping, and notice requirements of LAC 33:V.2245 and 2247 are applicable to wastes prohibited under this Chapter.

1. The initial generator of a liquid hazardous waste must test his or her waste (not an extract or filtrate) in accordance with the procedures specified in LAC 33:V.4903 or use knowledge of the waste to determine if the waste has a pH less than or equal to 2.0. If the liquid waste has a pH less than or equal to 2.0, it is prohibited from land disposal, and all

requirements of LAC 33:V.Chapter 22 are applicable, except as otherwise specified in this Section.

2. The initial generator of either a liquid hazardous waste containing PCBs or a liquid or nonliquid hazardous waste containing HOCs must test his or her waste (not an extract or filtrate), or use knowledge of the waste, to determine whether the concentration levels in the waste equal or exceed the prohibition levels specified in this Section. If the concentration of PCBs or HOCs in the waste is greater than or equal to the prohibition levels specified in this Section, the waste is prohibited from land disposal, and all requirements of this Chapter are applicable, except as otherwise specified.

3. If knowledge of the waste is used to comply with this Section, the administrative authority may require the generator to test his or her waste to determine compliance with these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991).

§2215. Waste-Specific Prohibitions—First Third Wastes

A. The following wastes are subject to the regulations of this Chapter:

F006, F007, F008, F009, K001, K004, K008, K011, K013, K014,K015, K016, K017, K018, K020, K021, K022, K024, K030, K031, K035, K036, K037, K044, K045, K046, K047, K048, K049, K050, K051, K052, K060, K061, K062, K069, K071, K073, K083, K084, K085, K086, K087, K099, K101, K102, K103, K104, K106, P001, P004, P005, P010, P011, P012, P015, P016, P018, P020, P030, P036, P037, P039, P041, P048, P050, P058, P059, P063, P068, P069, P070, P071, P081, P082, P084, P087, P089, P092, P094, P097, P102, P105, P108, P110, P115, P120, P122, P123, U007, U009, U010, U012, U016, U018, U019, U022, U029, U031, U036, U037, U041, U043, U044, U046, U050, U051, U053, U061, U063, U064, U066, U067, U074, U077, U078, U086, U089, U103, U105, U108, U115, U122, U124, U129, U130, U133, U134, U137, U151, U154, U155, U157, U158, U159, U171, U177, U180, U185, U188, U192, U200, U209, U210, U211, U219, U220, U221, U223, U226, U227, U228, U237, U238, U248, and U249.

B. Except in injection wells the following wastes are prohibited from land disposal: Hazardous Waste Numbers F006 (nonwastewaters), K001, K015 (wastewaters), K016, K018, K019, K020, K022 (nonwastewaters), K024, K030, K037, K044, K045, nonexplosive K046 (nonwastewaters), K047, K061 (nonwastewaters containing less than 15 percent zinc), K062, non-$CaSO_4$ K069 (nonwastewaters), K086, K087, K099, K103, and K104.

1. Effective August 8, 1988, and continuing until August 7, 1990, and effective July 20, 1991, through August 7, 1991, K061 wastes containing 15 percent zinc or greater are prohibited from land disposal pursuant to the treatment standards specified in LAC 33:V.2225 applicable to K061 wastes that contain less than 15 percent zinc. Effective January 1, 1991, until July 20, 1991, and after August 7, 1991, K061 wastes containing 15 percent zinc or greater are prohibited from land disposal.

2. Effective August 8, 1990, K062 and K104 hazardous wastes are prohibited from disposal in injection wells.

3. Effective January 1, 1991, the following wastes are prohibited from underground injection: Hazardous Waste Numbers F006 (nonwastewaters), K001, K015 (wastewaters), K016 (concentrations greater than one percent), K018, K019, K020, K022 (nonwastewaters), K024, K030, K037, K044, K045, nonexplosive K046 (nonwastewaters), K047, K061 (nonwastewaters containing less than 15 percent zinc), K062, non-$CaSO_4$ K069 (nonwastewaters), K086, K087, K099, and K103.

4. Effective June 7, 1991, the waste specified in LAC 33:V.Chapter 49 as EPA Hazardous Waste Number K016 (at concentrations less than one percent) is prohibited from underground injection.

C. Effective August 8, 1990, the wastes specified in LAC 33:V.Chapter 49 as Hazardous Waste Nos. K048, K049, K050, K051, K052 and K071 are prohibited from land disposal.

D. Effective August 8, 1990, the wastes specified in Subsection A of this Section as having a treatment standard in LAC 33:V.Chapter 22, Subchapter B, based on incineration and which are contaminated soil and debris are prohibited from land disposal.

E. Between November 8, 1988, and August 8, 1990, wastes included in Subsections C and D of this Section may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in LAC 33:V.2239.I.

F. The requirements of Subsections B-E of this Section do not apply if:

1. the wastes meet the applicable standards specified in LAC 33:V.Chapter 22, Subchapter B;

2. persons have been granted an exemption from a prohibition pursuant to a petition under LAC 33:V.2241 or 2242, with respect to those wastes and units covered by the petition; or

3. persons have been granted an extension to the effective date of a prohibition pursuant to LAC 33:V.2239, with respect to those wastes covered by the extension.

G. Between August 8, 1988, and May 8, 1990, and between January 1, 1991 and June 8, 1992, the wastes specified in Subsection A of this Section for which treatment standards under LAC 33:V.Chapter 22.Subchapter B, are not applicable, including those wastes subject to prohibitions under LAC 33:V.2213, but not including wastes subject to a treatment

standard under LAC 33:V.2227, are prohibited from disposal in a landfill or surface impoundment unless the wastes are the subject of a valid demonstration and certification pursuant to LAC 33:V.2235.

H. To determine whether a hazardous waste listed in LAC 33:V.2215 exceeds the applicable treatment standards specified in LAC 33:V.2225 and 2229, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable levels in LAC 33:V.Chapter 22, Subchapter B, the waste is prohibited from land disposal, and all requirements of LAC 33:V.Chapter 22 are applicable, except as otherwise specified.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991).

§2217. Waste-Specific Prohibitions—Second Third Wastes

List of wastes evaluated prior to June 8, 1990 to determine if they are inappropriate for land disposal:

A. Effective January 1, 1991 the following wastes are subject to regulation under this Chapter: F010, F011, F012, F024, K009, K010, K019, K025, K027, K028, K029, K038, K039, K040, K041, K042, K043, K095, K096, K097, K098, K105, P002, P003, P007, P008, P014, P026, P027, P029, P040, P043, P044, P049, P054, P057, P060, P062, P066, P067, P072, P074, P085, P098, P104, P106, P107, P111, P112, P113, P114, U002, U003, U005, U008, U011, U014, U015, U020, U021, U023, U025, U026, U028, U032, U035, U047, U049, U057, U058, U059, U060, U062, U070, U073, U080, U083, U092, U093, U094, U095, U097, U098, U099, U101, U106, U107, U109, U110, U111, U114, U116, U119, U127, U128, U131, U135, U138, U140, U142, U143, U144, U146, U147, U149, U150, U161, U162, U163, U164, U165, U168, U169, U170, U172, U173, U174, U176, U178, U179, U189, U193, U196, U203, U205, U206, U208, U213, U214, U215, U216, U217, U218, U235, U239, and U244.

B. Between January 1, 1991, and June 8, 1992, the wastes specified in Subsection A of this Section for which treatment standards under LAC 33:V.Chapter 22.Subchapter B, are not applicable, including those wastes subject to prohibitions under LAC 33:V.2213, but not including wastes subject to a treatment standard under LAC 33:V.2227, are prohibited from disposal in a landfill or surface impoundment unless the wastes are the subject of a valid demonstration and certification pursuant to LAC 33:V.2235.

C. To determine whether a hazardous waste listed in LAC 33:V.2215, 2217, or 2219 exceeds the applicable treatment standards specified in Subchapter B, Table 2, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Subchapter B levels, the waste is prohibited from land disposal and all requirements of LAC 33:V.Chapter 22 are applicable, except as otherwise specified.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991).

§2219. Waste-Specific Prohibitions—Third Third Wastes

List of wastes evaluated prior to January 1, 1991 to determine if they are inappropriate for land disposal:

A. Effective January 1, 1991, the following wastes are subject to regulation under this Chapter:

1. K002, K003, K005, K006, K007, K023, K026, K032, K033, K034, K093, K094, K100, P006, P009, P013, P017, P021, P022, P023, P024, P028, P031, P033, P034, P038, P042, P045, P046, P047, P051, P056, P064, P065, P073, P075, P076, P077, P078, P088, P093, P095, P096, P099, P101, P103, P109, P116, P118, P119, P121, U001, U004, U006, U017, U024, U027, U030, U033, U034, U038, U039, U042, U045, U048, U052, U055, U056, U068, U069, U071, U072, U075, U076, U079, U081, U082, U084, U085, U087, U088, U090, U096, U102, U112, U113, U117, U118, U120, U121, U123, U125, U126, U132, U136, U141, U145, U148, U152, U153, U156, U160, U166, U167, U181, U182, U183, U184, U186, U187, U190, U191, U194, U197, U201, U202, U204, U207, U222, U225, U234, U236, U240, U246, U247;

2. wastes identified as hazardous on the basis of a characteristic alone (e.g., corrosivity, reactivity, ignitability and toxicity);

3. wastewater residues (less than one percent total organic carbon and less than one percent total suspended solids) resulting from the following well-designed and well-operated treatment methods for wastes listed in LAC 33:V.2215 and 2217 for which the administrative authority has not promulgated wastewater treatment standards: metals recovery, metals precipitation, cyanide destruction, carbon adsorption, chemical oxidation, steam stripping, biodegradation, and incineration or other direct thermal destruction;

4. hazardous wastes listed in LAC 33:V.2215 and 2217 that are mixed hazardous/radioactive wastes;

5. multi-source leachate that is derived from disposal of any listed waste, except from hazardous wastes F020, F021, F022, F023, F026, F027, or F028;

6. nonwastewater forms of wastes listed in LAC 33:V.2215 that were originally disposed before August 17,

1988, and for which the administrative authority has promulgated "no land disposal" as the treatment standard ubchapter B, Table 2). This provision does not apply to aste codes K044, K045, K047, and K061 (high zinc subcategory).

7. Nonwastewater forms of wastes listed in LAC 33:V.2215 for which the administrative authority has promulgated "no land disposal" as the treatment standard (Table 2) that are generated in the course of treating wastewater forms of the wastes. This provision does not apply to waste codes K044, K045, K047, and K061 (high zinc subcategory);

8. nonwastewater forms of waste codes K015 and K083.

B. Effective January 1, 1991, the following wastes specified in LAC 33:V.Chapter 49 as EPA Hazardous Waste Numbers F006 (wastewaters), F006 Cyanide (nonwastewaters), F007, F008, F009, F010, F011, F012, F019, F024, F025, F039 (wastewaters), K002, K003, K004, K005 (wastewaters), K006, K007, K008, K009, K010, K011 (wastewaters), K013 (wastewaters), K014 (wastewaters), K015 (nonwastewaters), K017, K021, K022 (wastewaters), K023, K025, K026, K027, K028, K029, K031 (wastewaters), K032, K033, K034, K035, K036, K038, K039, K040, K041, K042, K043, K046 (wastewaters and reactive nonwastewaters), K060, K061 (wastewaters), K069 ($CaSO_4$ nonwastewaters and all wastewaters), K073, K083, K084 (wastewaters), K085, K093, K094, K095, K096, K097, K098, K100, K101 (wastewaters), K102 (wastewaters), K105, K106, K113, K114, K115, K116, P001, P002, P003, P004, P005, P006, P007, P008, P009, P010 (wastewaters), P011 (wastewaters), P012 (wastewaters), P013, P014, P015, P016, P017, P018, P020, P021, P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P036 (wastewaters), P037, P038 (wastewaters), P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P056, P057, P058, P059, P060, P062, P063, P064, P065 (wastewaters), P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P076, P077, P078, P081, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P105, P106, P108, P109, P110, P112, P113, P114, P115, P116, P118, P119, P120, P121, P122, P123, U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U040, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U059, U060, U061, U062, U063, U064, U066, U067, U068, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U134, U135, U136 (wastewaters), U137, U138, U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U151 (wastewaters), U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249 and the following wastes identified as hazardous based on a characteristic alone: D001, D002, D003, D004 (wastewaters), D005, D006, D007, D008 (except for lead materials stored before secondary smelting), D009 (wastewaters), D010, D011, D012, D013, D014, D015, D016, and D017 are prohibited from land disposal, except as otherwise specified in this Section.

C. Effective January 1, 1991, mixed radioactive/hazardous wastes specified in LAC 33:V.2215, 2217, or 2219 that are mixed radioactive and hazardous wastes are prohibited from underground injection. This effective date does not apply to the wastes listed in LAC 33:V.2213.C that were prohibited from underground injection on August 8, 1990.

D. Effective January 1, 1991, the waste specified in LAC 33:V.Chapter 49 as EPA Hazardous Waste Number F007 is prohibited from land disposal except when injected underground. Effective June 8, 1991, F007 is prohibited from underground injection.

E. Effective January 1, 1991, the following wastes specified in LAC 33:V.Chapter 49 as EPA Hazardous Waste Numbers K009 (wastewaters), K011 (nonwastewaters), K013 (nonwastewaters), and K014 (nonwastewaters) are prohibited from land disposal except when they are injected underground. Effective June 8, 1991, K009 (wastewaters), K011 (nonwastewaters), and K013 (nonwastewaters) are prohibited from underground injection.

F. Effective June 8, 1991, the wastes specified in LAC 33:V.Chapter 49 as F010, F024, K009, K010, K023, K027, K028, K029, K038, K039, K040, K043, K093, K094, K095, K096, K113, K114, K115, K116, P039, P040, P041, P043, P044, P062, P071, P085, P089, P094, P097, P109, U028, U058, U087, U088, U102, U107, U221, U223, and U235 having a treatment standard in Subchapter B of this Chapter based on incineration, and which are contaminated soils and debris, and hazardous waste number F006-Cyanide (nonwastewaters), are prohibited from land disposal. Between January 1, 1991, and June 8, 1991, such wastes may be disposed of in a landfill or surface impoundment, regardless of whether such unit is a new, replacement, or lateral expansion unit, only if such unit is in compliance with the technical requirements specified in LAC 33:V.2239.I.2.

G. Effective May 8, 1992, the following wastes are prohibited from land disposal:

1. wastes specified in LAC 33:V.Chapter 49 as EPA Hazardous Waste Numbers F039 (nonwastewaters), K031 (nonwastewaters), K084 (nonwastewaters), K101 (nonwastewaters), K102 (nonwastewaters), K106 (nonwastewaters), P010 (nonwastewaters), P011 (nonwastewaters), P012 (nonwastewaters), P036 (nonwastewaters), P038 (nonwastewaters), P065 (nonwastewaters), P087, P092 (nonwastewaters), U136 (nonwastewaters), U151 (nonwastewaters);

2. wastes identified as hazardous based on a characteristic alone and specified in LAC 33:V.Chapter 49 as EPA Hazardous Waste Numbers D004 (nonwastewaters) and D009 (nonwastewaters); and

3. RCRA hazardous wastes that contain naturally occurring radioactive materials.

H. Effective May 8, 1992, hazardous wastes listed in LAC 33:V.2215, 2217, and 2219 that are mixed radioactive/ hazardous wastes are prohibited from land disposal, except as provided in LAC 33:V.2219 other than underground injection which is regulated under LAC 33:V.2219.C.

I. Subject to applicable prohibitions in LAC 33:V.2209, 2211, and 2213, contaminated soil and debris are prohibited from land disposal as follows:

1. effective May 8, 1994, debris that is contaminated with wastes listed in LAC 33:V.2219.A and debris that is contaminated with any characteristic waste for which treatment standards are established in LAC 33:V.Chapter 22.Subchapter B are prohibited from land disposal;

2. effective May 8, 1994, mixed radioactive hazardous debris that is contaminated with wastes listed in LAC 33:V.2219.A and mixed radioactive hazardous debris that is contaminated with any characteristic waste for which treatment standards are established in LAC 33:V.Chapter 22.Subchapter B are prohibited from land disposal;

3. LAC 33:V.2219.I.1 and 2 shall not apply where the generator has failed to make a good-faith effort to locate treatment capacity suitable for its waste, has not utilized such capacity as it has found to be available, or has failed to file a report as required by LAC 33:V.2239.H by August 12, 1993 or within 90 days after the hazardous waste is generated (whichever is later) describing the generator's efforts to locate treatment capacity. Where LAC 33:V.2219.I.1 and 2 do not apply, all wastes described in these paragraphs are prohibited from land disposal effective May 8, 1993;

4. effective May 8, 1993, hazardous soil contaminated with wastes specified in this Section having treatment standards in LAC 33:V.Chapter 22.Subchapter D based on incineration or mercury retorting or vitrification and soils contaminated with hazardous wastes listed in LAC 33:V.2215.A, 2217, and 2219 that are mixed radioactive hazardous wastes are prohibited from land disposal;

5. when used in LAC 33:V.2219.I.1 and 2, debris is defined as follows:

a. debris as defined in LAC 33:V.2203.A; or

b. nonfriable inorganic solids that are incapable of passing through a 9.5-mm standard sieve and that require cutting, or crushing and grinding in mechanical sizing equipment prior to stabilization, limited to the following inorganic or metal materials:

i. metal slags (either dross or scoria);

ii. glassified slag;

iii. glass;

iv. concrete (excluding cementitious or pozzolanic stabilized hazardous wastes);

v. masonry and refractory bricks;

vi. metal cans, containers, drums, or tanks;

vii. metal nuts, bolts, pipes, pumps, valves, appliances, or industrial equipment; and

viii. scrap metal as defined in LAC 33:V.109.

J. Effective May 8, 1992, the wastes identified in LAC 33:V.Chapter 49 as hazardous based on a characteristic alone, designated as D002 (wastewaters and nonwastewaters), D003 (wastewaters and nonwastewaters), D007 (wastewaters and nonwastewaters), and D009 (nonwastewaters) are prohibited from underground injection. This effective date does not apply to the wastes listed in LAC 33:V.2213.C that were prohibited from underground injection on August 8, 1990.

K. Effective May 8, 1992, the wastes specified in LAC 33:V.Chapter 49 as EPA Hazardous Waste Numbers K011 (wastewaters), K013 (wastewaters), and K014 are prohibited from underground injection.

L. Between January 1, 1991, and May 8, 1992, wastes included in Subsections G, H, and I of this Section may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in LAC 33:V.2239.I.

M. The requirements of Subsections B through N of this Section do not apply if one of the following conditions is met:

1. The wastes meet the applicable standards specified in Subchapter B of this Chapter.

2. Persons have been granted an exemption from a prohibition pursuant to a petition under LAC 33:V.2237, 2241, or 2242 with respect to those wastes and units covered by the petition.

3. The wastes meet the applicable alternate standards established pursuant to a petition granted under LAC 33:V.2231.

4. Persons have been granted an extension to the effective date of a prohibition pursuant to LAC 33:V.2239, with respect to those wastes covered by the extension.

N. To determine whether a hazardous waste listed in LAC 33:V.2215, 2217, or 2219 exceeds the applicable treatment standards specified in Subchapter B, Table 2 of this Chapter, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable LAC 33:V.Chapter 22, Subchapter B levels, the waste is prohibited from land disposal, and all requirements of LAC 33:V.Chapter 22 are applicable, except as otherwise specified.

O. Between January 1, 1991, and June 8, 1992, the wastes specified in Subsection A of this Section for which treatment standards under LAC 33:V.Chapter 22.Subchapter B, are not applicable, including those wastes subject to prohibitions under LAC 33:V.2213, but not including wastes subject to a treatment standard under LAC 33:V.2227, are prohibited from disposal in a landfill or surface impoundment unless the wastes are the subject of a valid demonstration and certification pursuant to LAC 33:V.2235.

P. Effective May 8, 1993, D008 lead materials stored before secondary smelting are prohibited from land disposal. On or before March 1, 1993, the owner or operator of each secondary lead smelting facility shall submit to EPA the following:

1. a binding contractual commitment to construct or otherwise provide capacity for storing such D008 wastes prior to smelting which complies with all applicable storage standards;

2. documentation that the capacity to be provided will be sufficient to manage the entire quantity of such D008 wastes; and

3. a detailed schedule for providing such capacity.

[Note: Failure by a facility to submit such documentation shall render such D008 managed by that facility prohibited from land disposal effective March 1, 1993. In addition, no later than July 27, 1992 the owner or operator of each facility must place in the facility record documentation of the manner and location in which such wastes will be managed pending completion of such capacity, demonstrating that such management capacity will be adequate and complies with all applicable requirements of LAC 33:V.Subpart 1.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 21:266 (March 1995).

§2221. Schedule of Wastes Identified or Listed After November 8, 1984

A. The administrative authority shall review these regulations and shall study and identify additional wastes to be incorporated into the regulations and prohibited from land disposal. He or she shall also study and report on changes in technology which make alternative methods of treatment of hazardous waste available that may provide alternatives to land disposal. Such review shall be done on or before December 31 each year beginning with 1989.

B. The administrative authority shall develop a schedule within six months after the date of identification or listing of a new hazardous waste to make a land disposal determination.

C. Newly-Listed Wastes

1. Effective November 9, 1992, the wastes specified as EPA Hazardous Waste Numbers K107, K108, K109, K110, K111, K112, K117, K118, K123, K124, K125, K126, K131, K132, K136, U328, U353, and U359 are prohibited from land disposal.

2. Effective June 30, 1993, the wastes specified as EPA Hazardous Waste Numbers F037 and F038 that are not generated from surface impoundment cleanouts or closures are prohibited from land disposal.

3. Effective June 30, 1994, the wastes specified as EPA Hazardous Waste Numbers F037 and F038 that are generated from surface impoundment cleanouts or closures are prohibited from land disposal.

4. Effective June 30, 1994, radioactive wastes that are mixed with hazardous wastes specified as EPA Hazardous Waste Numbers K107, K108, K109, K110, K111, K112, K117, K118, K123, K124, K125, K126, K131, K132, K136, U328, U353, and U359 are prohibited from land disposal.

5. Effective June 30, 1994, debris contaminated with hazardous wastes specified as EPA Hazardous Waste Numbers F037 and F038, K107, K108, K109, K110, K111, K112, K117, K118, K123, K124, K125, K126, K131, K132, K136, U328, U353, and U359 and which is not contaminated with any other waste already subject to a prohibition are prohibited from land disposal.

6. Between June 30, 1992 and June 30, 1993, the wastes included in LAC 33:V.2221.C.2 may be disposed of in a landfill, only if such unit is in compliance with the requirements specified in LAC 33:V.2239.I.2 and may be generated in and disposed of in a surface impoundment only if such unit is in compliance with either LAC 33:V.2239.I.2 or LAC 33:V.2237.

7. Between June 30, 1992 and June 30, 1994, the wastes included in LAC 33:V.2221.C.4-5 may be disposed of in a landfill only if such unit is in compliance with LAC

~~33:V.2239.I.2 and may be generated in and disposed of in a~~ surface impoundment only if such units is in compliance LAC 33:V.2239.I.2 or LAC 33:V.2237.C.

8. The requirements of LAC 33:V.2221.C.1-5 do not apply if:

a. the wastes meet the applicable standards specified in LAC 33:V.22.Subchapter B;

b. a petitioner has been granted an exemption from a prohibition in accordance with a petition under LAC 33:V.2241, with respect to those wastes and units covered by the petition;

c. the wastes meet the applicable alternate standards established in accordance with a petition granted under LAC 33:V.2231; or

d. a person who generates, treats, stores, or disposes of hazardous waste has been granted an extension to the effective date of a prohibition in accordance with LAC 33:V.2239.

9. To determine whether a hazardous waste listed in LAC 33:V.2221.C exceeds the applicable treatment standards specified in LAC 33:V.Chapter 22.Table 2, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable LAC 33:V.Chapter 22.Subchapter B levels, the waste is prohibited from land disposal and all requirements of LAC 33:V.Chapter 22 are applicable, except as otherwise specified.

D. Waste-specific Prohibitions: Ignitable and Corrosive Characteristic Wastes Whose Treatment Standards Were Vacated

1. Effective August 9, 1993, the wastes specified in LAC 33:V.4903.B as D001 (and is not in the High TOC Ignitable Liquids Subcategory) and specified in LAC 33:V.4903.C as D002 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA) or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA) or that are zero-dischargers that engage in CWA-equivalent treatment before ultimate land disposal are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination, or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or better than these technologies.

2. Effective February 10, 1994, the wastes specified in LAC 33:V.4903.B as D001 (and is not in the High TOC Ignitable Liquids Subcategory) and specified in LAC 33:V.4903.C as D002 that are managed in systems defined in ~~40 CFR 144.6(e) and 146.6(c) as Class V injection wells that~~ do not engage in CWA-equivalent treatment before injection are prohibited from land disposal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 17:658 (July 1991), LR 21:266 (March 1995).

Subchapter B. Treatment Standards

§2223. Applicability of Treatment Standards

A. A prohibited waste identified in LAC 33:V.2225 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using the toxicity characteristic leaching procedure (TCLP) specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846), latest edition, does not exceed the value shown in Table 2, Subchapter B of this Chapter, for any hazardous constituent listed in Table 2, for that waste, except for D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136. These wastes (D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136) may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using either the TCLP or the EP toxicity test specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846, latest edition) does not exceed the concentrations shown in Subchapter B, Table 2, for that waste.

B. A prohibited waste for which a treatment technology is specified under LAC 33:V.2227.A or a hazardous debris for which a treatment technology is specified under LAC 33:V.2230 may be land disposed after it is treated using that specific technology or an equivalent treatment method approved by the administrative authority under the procedures set forth in LAC 33:V.2227.B. For waste displaying the characteristics of ignitability (D001) and reactivity (D003) that are diluted to meet the deactivation treatment standard in Tables 2 and 3 (DEACT) of this Chapter, the treater must comply with the precautionary measures specified in LAC 33:V.1517.B and 4321.B.

C. Except as otherwise specified in LAC 33:V.2229.C, a prohibited waste identified in LAC 33:V.2229 may be land disposed only if the constituent concentrations in the waste or treatment residue of the waste do not exceed the value shown in Table 2 of this Chapter for any hazardous constituent listed in Table 2 for that waste.

D. If a treatment technology is not specified under LAC 33:V.2227, a prohibited waste may be treated using any appropriate treatment technology to achieve compliance with this Chapter. (Best demonstrated available technologies [BDAT] for specific wastes are identified in documents referenced in Table 4.)

E. If a treatment standard has been established in LAC ~~33:V.2227 and 2229 for a hazardous waste that is itself~~

hazardous debris, the waste is subject to these standards rather than these standards for hazardous debris under LAC 33:V.2230.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 21:266 (March 1995).

§2225. Treatment Standards Expressed as Concentrations in Waste Extract

A. Table 2 of this Chapter identifies the prohibited wastes and the concentrations of their associated hazardous constituents that may not be exceeded in the extract of a waste or waste treatment residual extracted according to the TCLP specified in LAC 33:V.4901.Appendix A "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846), latest edition, for the allowable land disposal of such wastes. Compliance with these concentrations is required based upon grab samples.

B. When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the most stringent treatment standard for the constituent of concern except that mixtures of high- and low-zinc nonwastewater K061 are subject to the treatment standard for high-zinc K061.

C. The treatment standards for the constituents in F001-F005 which are listed in LAC 33:V.Chapter 22.Table 2 only apply to wastes which contain one, two, or all three of these constituents. If the waste contains any of these three constituents along with any of the other 26 constituents found in F001-F005, then only the treatment standards in LAC 33:V.Chapter 22.Table 2 are required.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 21:266 (March 1995).

§2227. Treatment Standards Expressed as Specified Technologies: Procedures for Approval of Alternative Treatments

A. The wastes specified in Subsections A.1-3 of this Section and in Table 2 of this Chapter must be treated using the technology or technologies specified in Subsections A.1-3 of this Section and in Table 2 of this Chapter.

1. Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70 or burned in high-efficiency boilers in accordance with the technical requirements of 40 CFR 761.60. Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70. Thermal treatment under this Section must also be in compliance with applicable requirements in these regulations.

2. Nonliquid hazardous wastes containing HOCs in total concentrations greater than or equal to 1,000 mg/kg and liquid HOC-containing wastes that are prohibited under LAC 33:V.2213 must be incinerated in accordance with the requirements of LAC 33:V.Chapter 31 or LAC 33:V.4513-4521. These treatment standards do not apply where the waste is subject to a treatment standard for a specific HOC (such as a hazardous waste chlorinated solvent for which a treatment standard is established under LAC 33:V.2225.A).

3. A mixture consisting of wastewater, the discharge of which is subject to regulation under either Section 307(b) of the Clean Water Act or R.S. 30:2071-2079 and de minimis losses of materials from manufacturing operations in which these materials are used as raw materials or are produced as products in the manufacturing process, and that meet the criteria of the D001 ignitable liquids containing greater than 10 percent total organic constituents (TOC) subcategory is subject to the DEACT treatment standard described in Table 3 of this Chapter. For purposes of this Paragraph, de minimis losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks from process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges.

B. Any person may submit an application to the administrative authority demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achievable by methods specified in Subsections A, C and D of this Section. The applicant must submit information demonstrating that his or her treatment method is in compliance with federal, state, and local requirements and is protective of human health and the environment. On the basis of such information and any other available information, the administrative authority may approve the use of the alternative treatment method if he or she finds that the alternative treatment method provides a measure of performance equivalent to those achieved by methods specified in Subsections A, C and D of this Section. Any approval must be stated in writing and may contain such provisions and conditions as the administrative authority deems appropriate. The person to whom such approval is issued must comply with all limitations contained in such a determination.

C. As an alternative to the otherwise applicable Subchapter B treatment standards, lab packs are eligible for land disposal provided all of the following requirements are met.

1. The lab packs comply with the applicable provisions of LAC 33:V.2519 and 4511.

2. All hazardous wastes contained in such lab packs are specified in Table 6 or Table 7 of LAC 33:V.Chapter 22.

3. The lab packs are incinerated in accordance with the requirements of LAC 33:V.Chapter 31 and Chapter 43, Subchapter N.

4. Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010 or D011 are treated in compliance with the applicable treatment standards specified for such wastes in Subchapter B of this Chapter.

D. A radioactive hazardous mixed waste with a specific technology-based treatment standard listed in Subchapter B, Table 2 of this Chapter is not subject to any other treatment standards for that waste code. A radioactive hazardous mixed waste for which Subchapter B, Appendix, Table 2 of this Chapter does not specifically list a technology-based treatment standard is subject to all other applicable treatment standards for that waste code. Hazardous debris containing radioactive waste is not subject to the treatment standards specified in LAC 33:V.Chapter 22.Table 2, but is subject to the treatment standards specified in LAC 33:V.2230.

E. Alternative Treatment Standards Based on HTMR. LAC 33:V.Chapter 22.Table 9 identifies alternative treatment standards for F006 and K062 nonwastewaters.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 21:286 (March 1995).

§2229. Treatment Standards Expressed as Waste Concentrations

A. Table 2 identifies the prohibited wastes and the concentrations of their associated hazardous constituents that may not be exceeded by the waste or treatment residual (not an extract of such waste or residual) for the allowable land disposal of such waste or residual. Compliance with these concentrations is required, based upon grab samples, unless otherwise noted in Subchapter B, Table 2.

B. When wastes with differing treatment standards for a particular regulated hazardous constituent are combined for treatment, the treatment residue must meet the most stringent treatment standard for that constituent.

C. Notwithstanding the prohibitions specified in Subsection A of this Section, treatment and disposal facilities may demonstrate (and certify pursuant to LAC 33:V.2247.C) compliance with the treatment standards for organic constituents specified by a footnote in Table 2 of this Chapter provided all of the following conditions are satisfied.

1. The treatment standards for the organic constituents were established on the basis of incineration in units operated in accordance with the technical requirements of LAC 33:V.Chapter 31 or LAC 33:V.Chapter 43, Subchapter N, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements.

2. The treatment or disposal facility has used the methods referenced in Subsection C.1 of this Section to treat the organic constituents.

3. The treatment or disposal facility has been unable to detect the organic constituents despite using its best good-faith efforts as defined by applicable guidance or standards set by the administrative authority. Until such guidance or standards are developed, the treatment or disposal facility may demonstrate such good-faith efforts by achieving a detection limit that does not exceed by an order of magnitude the treatment standards specified in Subchapter B, Table 2, for the regulated organic constituents.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991).

§2230. Treatment Standards for Hazardous Debris

A. Treatment Standards. Hazardous debris must be treated prior to land disposal unless the administrative authority determines that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard in Table 8 of this Chapter.

1. Hazardous debris must be treated for each contaminant subject to treatment defined by LAC 33:V.2230.B using the technology or technologies identified in Table 8 of this Chapter.

2. Hazardous debris that exhibits the characteristic of ignitablity, corrosivity, or reactivity identified under LAC 33:V.4903.B, C, and D, respectively, must be deactivated by treatment identified in Table 8 of this Chapter.

3. The treatment standard of Table 8 of this Chapter must be achieved for each type of debris contained in a mixture of debris types. If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

4. Debris that is contaminated with two or more contaminants subject to treatment identified under LAC 33:V.2230.B must be treated for each contaminant using one or more of the treatment technologies identified in Table 8 of this Chapter. If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

5. Hazardous debris that is also a waste PCB under 40 CFR part 761 is subject to the requirements of 40 CFR part 761 or the requirements of this Section, whichever is more stringent.

B. Hazardous debris must be treated for each "contaminant subject to treatment." The contaminants subject to treatment must be determined as follows:

1. the contaminants subject to treatment for debris that exhibit the Toxicity Characteristic (TC) by LAC 33:V.4903 are those EP constituents for which debris exhibits the TC toxicity characteristic;

2. the contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents for which BDAT standards are established for that waste under LAC 33:V.Chapter 22.Table 2;

3. hazardous debris that is reactive because of cyanide must be treated for cyanide.

C. Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 8 of this Chapter and does not exhibit a characteristic of hazardous waste identified under LAC 33:V.4903 after treatment is not a hazardous waste and need not be managed in a subtitle C facility. Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table 8 of this Chapter is a hazardous waste and must be managed in a subtitle C facility.

D. Treatment Residues

1. General Requirements

a. residue from the treatment of hazardous debris must be separated from the treated debris using simple physical or mechanical means; and

b. residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by LAC 33:V.Chapter 22.Subchapter B for the waste contaminating the debris.

2. Residue from the deactivation of ignitable, corrosive, or reactive characteristic hazardous debris (other than cyanide-reactive) that is not contaminated with a contaminant subject to treatment defined by LAC 33:V.2230.B must be deactivated prior to land disposal and is not subject to the waste-specific treatment standard of Table 2 of this Chapter.

3. Residue from the treatment of debris that is reactive because of cyanide must meet the treatment standards for D003.

4. Ignitable nonwastewater residue containing equal to or greater than 10 percent total organic carbon is subject to the technology-based standards for D001.

5. Layers of debris removed by spalling are hazardous debris that remain subject to the treatment standards of this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§2231. Variance from a Treatment Standard

A. Where the treatment standard is expressed as a concentration in a waste or waste extract and a waste cannot be treated to the specified level, or where the treatment technology is not appropriate to the waste, the generator or treatment facility may petition the administrative authority for a variance from the treatment standard. The petitioner bears the burden of proving that because the physical or chemical properties of the waste differ significantly from wastes analyzed in developing the treatment standard, the waste cannot be treated to specified levels or by the specified methods.

B. Each petition must be submitted to the administrative authority for consideration in accordance with the procedures in LAC 33:V.105.H.

C. After receiving a petition for a variance from a treatment standard, the administrative authority may request any additional information or samples that he or she may require to evaluate the petition. Additional copies of the complete petition may be requested as needed.

1. Each petition must include the following statement signed by the petitioner or a duly authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

2. Certification. Each petition for a variance must be certified by a Louisiana licensed professional engineer (PE) or by a master-level or senior-level Certified Hazardous Materials Manager (CHMM) who is in good standing with their professional organization.

D. The administrative authority will give public notice of the intent to approve or deny a petition and will provide the person requesting the variance and the public, through a newspaper notice in the official state journal and the local newspaper in the affected area, the cost of which will be charged to the person requesting the variance, the opportunity to submit written comments on the request and the conditions of the variance, allowing a 30-day comment period. The notices referred to in this Section will be provided in the local newspaper in three separate issues; however, the 30-day comment or notice period shall begin with the notice in the official state journal. The administrative authority will also, in response to a request or at his or her own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning the variance request. The administrative authority will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments.) The final decision on a variance from a treatment standard will also be published.

E. A generator, treatment facility, or disposal facility that is managing a waste covered by a variance from the treatment

standards must comply with the waste analysis requirements for prohibited wastes under LAC 33:V.2245 and 2247.

F. During the petition review process, the applicant is required to comply with all prohibitions on land disposal under this Chapter, unless a petition for a variance has been approved by the EPA, and the administrative authority grants an emergency variance. If EPA has approved the variance, the land disposal of the waste may continue for up to one year under an emergency variance issued by the administrative authority until the administrative authority makes a decision on the petition for variance. In no case shall an emergency variance extend beyond one year after the date of issuance. After the administrative authority issues a decision on the variance, the waste may be land disposed only in accordance with the provisions of the variance.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 21:266 (March 1995).

Subchapter C. Exceptions, Exemptions, and Extensions

§2233. Exceptions to Prohibitions

Prohibited wastes may not be land disposed unless:

A. an extension has been granted from the effective date of a prohibition pursuant to LAC 33:V.2239 for those wastes; or

B. an exemption from a prohibition has been granted pursuant to a petition under LAC 33:V.2241 or 2242 for specific wastes and units covered by the petition; or

C. an extension of the effective date or an exemption from a prohibition has been granted by EPA, and the administrative authority grants an emergency variance to allow continued land disposal. In such a case, the land disposal may continue until the administrative authority makes a decision regarding the extension or exemption. Following a decision by the administrative authority, the waste may be land disposed only in accordance with the provisions of the extension or exemption.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989).

§2235. Provisions for Disposal of Prohibited Wastes in Landfills and Surface Impoundments before January 1, 1991

A. Before January 1, 1991, wastes which are otherwise prohibited from land disposal under LAC 33:V.2215.G may be disposed in a landfill or surface impoundment which is in compliance with the requirements of LAC 33:V.2239 provided that the requirements of this Section are met.

1. Before such disposal, the person seeking to dispose of such wastes must make a good-faith effort to locate and contract with treatment and recovery facilities practically available which provide the greatest environmental benefit.

2. Such person must submit to the administrative authority a demonstration and certification that the requirements of Subsection A.1 of this Section have been met. The demonstration must include a list of facilities and facility officials contacted and their addresses, telephone numbers, and contact dates.

a. If a generator determines that there is no practically available treatment or recycling for his or her waste, he or she must indicate so in his or her demonstration and provide a written discussion of why he or she was not able to obtain treatment or recovery for that waste. The generator must also provide the following certification:

I certify under penalty of law that the requirements of LAC 33:V.2235.A.1 have been met and that disposal in a landfill or surface impoundment is the only practical alternative to treatment currently available. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

b. If a generator determines that there are practically available treatment or recycling technologies for his or her waste, he or she must contract to use the practically available technology that yields the greatest environmental benefit, as indicated in his or her demonstration. He or she must provide the following certification:

I certify under penalty of law that the requirements of LAC 33:V.2235.A.1 have been met and that I have contracted to treat or recycle my waste (or will otherwise provide treatment or recycling) by the practically available technology which yields the greatest environmental benefit, as indicated in my demonstration. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

3. Where the generator has determined that there is no practically available treatment or recycling for his or her waste, with the initial shipment of waste, such generator must submit a copy of the demonstration and the certification required in Subsection A.2.a of this Section to the receiving facility. For each subsequent waste shipment, only the certification must be submitted if the conditions being certified remain unchanged. Such generator must retain on-site a copy of the demonstration (if applicable) and certification required for each waste shipment for at least five years from the date that the waste that is the subject of such demonstration was last sent to on-site or off-site disposal. The five-year record retention requirement is automatically extended during the course of any unresolved enforcement action regarding the

regulated activity or as requested by the administrative authority.

4. Where the generator has determined that there is practically available treatment or recycling for his waste prior to disposal, with the initial shipment of waste, such generator must submit a copy of the demonstration and the certification required in Subsection A.2.b of this Section to the receiving facility. With each subsequent waste shipment, only the certification is required if the conditions certified remain unchanged. Such a generator must retain on-site a copy of the demonstration (if applicable) and certification required for each waste shipment for at least five years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site disposal. The five-year record retention requirement is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the administrative authority.

B. After receiving the demonstration and certification, the administrative authority may request any additional information that he or she deems necessary to evaluate the certification.

1. A generator who has submitted a certification under this Section must immediately notify the administrative authority when he or she has knowledge of any change in the conditions which formed the basis of his or her certification.

2. If, after review of the certification, the administrative authority determines that practically available treatment or recycling exists where the generator has certified otherwise, or that some other method of practically available treatment or recycling exists that yields greater environmental benefit than that which the generator has certified, the administrative authority may invalidate the certification.

3. If the administrative authority invalidates a certification, the generator must immediately cease further shipments of the wastes and inform all facilities that received the waste of such invalidation and keep records of such communication on-site in his or her files.

C. A treatment, recovery, or storage facility receiving wastes subject to a valid certification must keep copies of the generator's demonstration (if applicable) and certification in its operating records.

1. The owner or operator of a treatment or recovery facility must certify that he or she has treated the waste in accordance with the generator's demonstration. The following certification is required:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with treatment as specified in the generator's demonstration. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

2. The owner or operator of a treatment, recovery, or storage facility must send a copy of the generator's demonstration (if applicable) and certification under LAC 33:V.2235.A.2, and certification under LAC 33:V.2235.C.1 (if applicable) to the facility receiving the waste or treatment residues.

D. The owner or operator of a disposal facility must ensure that those wastes prohibited under LAC 33:V.2215.G are subject to a certification according to the requirements of this Section prior to disposal in a landfill or surface impoundment, and that the units receiving such wastes must meet the minimum technological requirements of LAC 33:V.2239.I.2

E. Once the administrative authority receives the certification, and provided that the wastes have been recycled or treated by the treatment (if any) determined by the generator to yield the greatest environmental benefit practically available, the wastes or treatment residuals may be disposed of in a landfill or surface impoundment unit meeting the requirements of LAC 33:V.2239.I.2, unless otherwise prohibited by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991).

§2237. Exemption for Surface Impoundments Treating Hazardous Waste

A. Prohibited wastes may be placed in a surface impoundment to be treated as defined and provided herein:

1. Treatment of such wastes must occur in the exempt impoundment.

2. The following conditions must be met:

a. Sampling and Testing. For wastes with treatment standards in Subchapter B of this Chapter and/or prohibition levels in Subchapter A of this Chapter, the residues from the treatment must be analyzed, as specified in LAC 33:V.2245, 2247, or 2213.F and G to determine if they meet the applicable treatment standards in Subchapter B of this Chapter, or where no treatment standards have been established for the waste, the applicable prohibition levels specified in Subchapter A of this Chapter. The sampling method, specified in the waste analysis plan under LAC 33:V.1519 or 4313 must be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

b. Removal

i. The following treatment residues (including any liquid wastes) must be removed at least once every year:

(a). residues which do not meet the treatment standards promulgated under Subchapter B of this Chapter;

(b). residues which do not meet the prohibition levels established under Subchapter A of this Chapter or imposed by statute (where no treatment standards have been established);

(c). residues which are from the treatment of wastes prohibited from land disposal under Subchapter A of this Chapter (where no treatment standards have been established and no prohibition levels apply); or

(d). residues from the management of listed wastes which are not delisted by EPA.

ii. Residues which are the subject of a valid certification under LAC 33:V.2235 made no later than one year after placement of the wastes in an impoundment are not required to be removed every year.

iii. If the volume of liquid flowing through the impoundment or series of impoundments in a one-year period is greater than the volume of the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement.

iv. The administrative authority may require removal of treatment residues more frequently than once per year.

c. Subsequent Management. Treatment residues may not be placed in any other surface impoundment for subsequent management unless the residues are the subject of a valid certification under LAC 33:V.2235, which allows disposal in surface impoundments meeting the requirements of LAC 33:V.2235.A.

d. Recordkeeping. The facility's waste analysis plan must specify the procedures and schedule for the sampling of impoundment contents, the analysis of test data, and the removal of residues which do not meet the treatment standards or prohibition levels (where no treatment standards have been established) or which are from the treatment of wastes prohibited from land disposal under Subchapter A (where no treatment standards have been established and no prohibition levels apply), as required under LAC 33:V.1519 or 4313 of these regulations.

e. Certification. Each waste analysis plan must be certified by a Louisiana licensed professional engineer (PE) or by a master-level or senior-level Certified Hazardous Materials Manager (CHMM) who is in good standing with their professional organization.

3. The impoundment must meet the applicable design requirements of LAC 33:V.Chapter 29 or 43 and be in compliance with applicable groundwater monitoring requirements of LAC 33:V.Chapter 33 or 43. However, these design requirements may be waived under the following circumstances.

a. The owner or operator has applied for and been granted a waiver of the design requirements by the administrative authority on the basis that the surface impoundment:

i. has at least one liner (and there is no evidence that such liner is leaking) and one compacted clay or other department-approved liner;

ii. is located more than one-quarter mile from an underground source of drinking water; and

iii. is in compliance with generally applicable groundwater monitoring requirements for facilities with permits.

b. The owner or operator has applied for and been granted a modification by the administrative authority to the design requirements on the basis of a demonstration that the surface impoundment is located, designed, and operated so as to ensure that no hazardous constituents will migrate into groundwater or surface water at any time.

4. The owner or operator must submit to the administrative authority a written certification that the requirements of LAC 33:V.2237.A.3 have been met and a copy of the waste analysis plan required under LAC 33:V.2237.A.2. The following certification is required:

I certify under penalty of law that the requirements of LAC 33:V.2237.A.3 of the Louisiana Hazardous Waste Regulations (LHWR) have been met for all surface impoundments being used to treat prohibited wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

B. Evaporation of hazardous constituents as the principal means of treatment is not considered to be treatment for purposes of an exemption under this Section.

C. Surface Impoundment Exemptions

1. This Subsection defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.

2. Wastes which are newly identified or listed under LAC 33:V.2221 after November 8, 1984, and stored in a surface impoundment that is newly subject to subtitle C of RCRA as a result of the additional identification or listing may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, notwithstanding that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of LAC 33:V.Chapter 43.Subchapter E within 12 months after promulgation of the listing or characteristic.

3. Wastes which are newly listed or identified under LAC 33:V.2221 after November 8, 1984 and treated in a surface impoundment that is newly subject to subtitle C of RCRA as a result of the additional listing or identification may continue to be treated in that surface impoundment,

notwithstanding that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in npliance with the requirements of LAC 33:Chapter 43.E ithin 12 months after promulgation of the listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the addition listing or characteristic, it must then be in compliance with LAC 33:V.2237.A and B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 17:658 (July 1991), LR 21:266 (March 1995).

§2239. Procedures for Case-by-Case Extensions of an Effective Date

A. Any person who generates, treats, stores, or disposes of a hazardous waste may submit an application to the administrative authority for an extension of the effective date of any applicable prohibition established under this Chapter. The applicant must provide the following, and in each case the burden of proof will be on the applicant:

1. written evidence of a good-faith effort to locate and contract with treatment, recovery, or disposal facilities to manage his or her waste in accordance with the effective date of the applicable restrictions established under these egulations;

2. written evidence of a binding contractual commitment to construct or otherwise provide alternative treatment, recovery (e.g., recycling), or disposal capacity that meets the treatment standards specified in Subchapter B of this Chapter or, where treatment standards have not been specified, evidence that such treatment, recovery, or disposal capacity is protective of human health and the environment;

3. written evidence that such alternative capacity cannot reasonably be made available by the applicable effective date due to circumstances beyond the applicant's control (this may include a showing that the alternative capacity cannot be achieved by the applicable effective date because of the technical and practical difficulties associated with it);

4. written evidence that the capacity that will be provided by the applicant will be sufficient to manage the entire quantity of the waste that is the subject of the application;

5. a detailed schedule for obtaining required operating and construction permits and an outline of how and when alternative capacity will be available;

6. written evidence of arrangements for adequate capacity to manage the subject waste during an extension and documentation of the locations of all sites at which the waste will be managed;

7. documentation to demonstrate that any waste managed in a surface impoundment or landfill during the extension period will meet the requirements of LAC 33:V.2239.I.2, and

8. documentation that he or she has a program or plan in effect to reduce the volume and toxicity of the waste he or she generates and that he or she has sought out the best available technology to reduce the toxicity, corrosiveness, virulent, or infectious character, or volume of the waste and that the waste cannot be further reduced through production modifications, nor can the waste or specific constituents of the waste be reclaimed or reused. The plan shall include:

a. a schedule of implementation and anticipated reductions in quantity and toxicity;

b. a list of technical process reductions considered and those rejected and the reasons for the rejections; and

c. an analysis of the impact of the reduction program or plan on all operations of the facility affecting the environment, including air and water discharges.

B. An authorized representative signing an application described under Subsection A of this Section shall make the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

C. After receiving an application for an extension, the administrative authority may request any additional information that he or she deems necessary to evaluate the application. Failure to segregate waste streams shall not constitute justification for a case-by-case extension for those wastes which are separable and treatable in an available facility.

D. Pending a decision on the application for an extension, the applicant is required to comply with all prohibitions on land disposal under this Chapter, except as may be allowed in LAC 33:V.2233.

E. An extension will apply only to the waste generated at the individual facility covered by the application; it will not apply to prohibited waste from any other facility.

F. On the basis of the information referred to in Subsection A of this Section, after notice and opportunity for public comment, the administrative authority may grant an extension of up to one year from the effective date of the prohibition. The administrative authority may continue this extension for up to one additional year at the applicant's request if the demonstration required in LAC 33:V.2239.A can still be made. In no event will an extension extend beyond 24 months from the applicable effective date specified in Subchapter A of this Chapter. The administrative authority will determine the length of any extension authorized on the basis of the time required to construct or obtain the type of capacity the applicant needs, as described in the completion

schedule discussed in Subsection A.5 of this Section. The administrative authority will give public notice of the intent to approve or deny a petition for extension and will provide an opportunity for public comment as provided in LAC 33:V.2243.

G. Any person granted an extension under this Section must immediately notify the administrative authority as soon as he or she has knowledge of any change in the conditions certified in the application.

H. Any person granted an extension under this Section shall submit written progress reports at intervals designated by the administrative authority which may not exceed six months. Such reports must describe the overall progress made toward constructing or otherwise providing alternative treatment, recovery, or disposal capacity; must identify any event which may cause or has caused a delay in the development of the capacity, and must summarize the steps taken to mitigate the delay. The administrative authority can revoke the extension at any time if the applicant does not make a good-faith effort to meet the schedule for completion, if the department denies or revokes any required permit, if conditions certified in the application change, or for any violation of the Louisiana Environmental Quality Act or regulations promulgated thereto.

I. Whenever the administrative authority establishes an extension to an effective date under this Section, the following will apply during the period that such extension is in effect.

1. The storage prohibitions under LAC 33:V.2205.A are waived.

2. Such hazardous waste may be disposed of in a landfill or surface impoundment only if the unit is in compliance with the technical requirements of the following provisions, regardless of whether such unit is existing, new, or a replacement or lateral expansion:

a. the landfill, if in interim status, is in compliance with the requirements of groundwater interim status standards LAC 33:V.4447-4461 and LAC 33:V.4495-4511 of these regulations;

b. the landfill, if permitted, is in compliance with the requirements of LAC 33:V.Chapter 33 and LAC 33:V.2503.C-E;

c. the surface impoundment, if in interim status, is in compliance with the requirements of LAC 33:V.4447-4461;

d. the surface impoundment, if permitted, is in compliance with the requirements of LAC 33:V.Chapters 29 and 33.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991).

§2241. Exemptions to Allow Land Disposal of a Prohibited Waste Except by Deep Well Injection

A. Any person seeking an exemption to allow land disposal except by deep well injection of a prohibited hazardous waste in a particular unit or units must submit a petition to the administrative authority that meets the following requirements:

1. The petition must show that no economically or environmentally reasonable alternative to land disposal is available, and the waste has undergone treatment by being stabilized, solidified, encapsulated, or through approved land treatment technique. No exception shall be granted to a generator for the land disposal of a waste stream if the waste stream can reasonably be eliminated or significantly reduced through waste reduction.

2. The petition must demonstrate, to a reasonable degree of certainty, that no hazardous constituents will migrate from the disposal unit for as long as the wastes remain hazardous. Migration prohibited by this Section includes migration into the air, land, or water. For the purpose of this Section, "no migration" means the waste is permanently confined within a department approved hazardous waste containment system.

B. A petition submitted pursuant to this Section must apply to land disposal of the specific prohibited waste at the individual disposal unit described in the showing and demonstration and will not apply to any other prohibited waste at that disposal unit or to that specific prohibited waste at any other disposal unit.

C. The showing referred to in Subsection A.1 of this Section must meet the following criteria.

1. The petitioner must show that he or she has made a good-faith effort, using economically and technically feasible and environmentally sound methods, to provide for use, reuse, reclamation, or other recycling of the waste other than for a use constituting disposal.

2. For each waste stream the petitioner must show that he or she has a program or plan in effect to reduce the volume and toxicity of the waste he or she generates and that he or she has sought out the best available technology to reduce the toxicity, corrosiveness, virulent or infectious character, or volume of the waste and that the waste cannot be further reduced through production modifications, nor can the waste or specific constituents of the waste be reclaimed or reused. The plan shall include:

a. a schedule of implementation and anticipated reductions in quantity and toxicity;

b. a list of technical process reductions considered and those rejected and the reasons for the rejections; and

c. an analysis of the impact of the reduction program or plan on all operations of the facility affecting the environment, including air and water discharges.

3. The petitioner must sign and present to the administrative authority the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this waste-reduction plan and all attachment documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

4. The petitioner must submit a report describing in detail the efforts undertaken since 1984 to reduce the volume and toxicity of waste generated. The report shall provide data indicating the change in volume and toxicity of waste actually achieved during each year in comparison to previous years, to the extent that such information is available. The report shall also document for each hazardous waste stream proposed for disposal in a land disposal unit a waste reduction analysis (WRA) showing that the petitioner has considered the economic and technical feasibility of alternative disposal methods in the following order: reduction, recycling, treatment, and disposal. The WRA must include:

a. an analysis of alternatives considered;

b. the costs of alternatives considered;

c. an assessment of the impact on other operations of the facility affecting the environment, including impacts on air and water discharges; and

d. a description of the availability of alternate capacity for use of alternative technologies.

D. The demonstration submitted by the petitioner referred to in Subsection A.2 of this Section must include the following components:

1. an identification of the specific waste and specific unit for which the demonstration will be made;

2. a waste analysis to describe fully the chemical and physical characteristics of the subject waste;

3. a comprehensive characterization of the disposal unit site, including an analysis of background air, soil, and water quality;

4. a monitoring plan which will detect migration from the disposal unit at the earliest practicable time; and

5. sufficient information to assure the administrative authority that the owner or operator of a land disposal unit receiving prohibited waste(s) will comply with other applicable federal, state, and local laws.

E. The demonstration referred to in Subsection A.2 of this Section must meet the following criteria:

1. All waste and environmental sampling, test, and analytical data must be accurate and reproducible to the extent that state-of-the-art techniques allow.

2. The administrative authority must approve all sampling, testing, and estimation techniques for chemical and physical properties of the waste and all environmental parameters.

3. Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements.

4. A quality assurance and quality control plan that addresses all aspects of the demonstration must be approved by the administrative authority.

5. An analysis must be performed to identify and quantify any aspects of the demonstration that contribute to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or hurricanes or other natural phenomena.

F. Each petition referred to in Subsection A of this Section must include the following:

1. A monitoring plan must be submitted that describes the monitoring program installed at and/or around the unit to verify continued compliance with the conditions of the exemption. The plan must provide information on the monitoring of the unit and/or the environment around the unit, including the following specific information:

a. the media monitored in cases where monitoring of the environment around the unit is required;

b. the type of monitoring conducted at the unit in cases where monitoring of the unit is required;

c. the location of the monitoring stations;

d. the monitoring interval (frequency of monitoring at each station);

e. the specific hazardous constituents to be monitored;

f. the implementation schedule for the monitoring program;

g. the equipment used at the monitoring station;

h. the sampling and analytical techniques employed;

i. the data recording/reporting procedures; and

j. the specific criteria and steps to be used to determine if hazardous constituents have migrated.

2. Where applicable, the administrative authority will specify as part of his or her approval of the petition the length of time that the monitoring program described in Subsection F.1 must be in place before prohibited waste is received at the unit.

3. The monitoring data collected according to the monitoring plan specified under Subsection F.1 of this Section must be sent to the administrative authority according to a format and schedule specified and approved in the monitoring plan.

4. A copy of the monitoring data collected under the monitoring plan specified under Subsection F.1 of this Section must be kept on-site at the facility in the operating record.

5. The monitoring program specified under Subsection F.1 of this Section shall meet the following criteria:

a. All sampling, testing, and analytical methods must be approved by the administrative authority and must provide accurate and reproducible data.

b. All estimation and modeling techniques must be approved by the administrative authority.

c. A quality assurance and quality control plan addressing all aspects of the monitoring program must be provided to and approved by the administrative authority.

G. Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

H. After a petition has been approved, the owner or operator must report any changes in conditions at the unit and/or the environment around the unit that depart from the conditions described in the exemption and that affect the potential for migration of hazardous constituents from the units as follows:

1. If the owner or operator plans to make changes to the unit design, construction, or operation, such changes must be proposed in writing, and the owner or operator shall submit a demonstration to the administrative authority at least 30 days before making the changes. The administrative authority will determine whether the proposed changes invalidate the terms of the petition and will determine the appropriate response. Any changes must be approved by the administrative authority prior to being made.

2. If the owner or operator discovers that a condition at the site which was modeled or predicted in the petition does not occur as predicted, this change must be reported, in writing, to the administrative authority within 10 days of discovery of the change. The administrative authority will determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance and revocation of the petition or petition modifications, or other responses.

I. If the owner or operator determines that hazardous constituent(s) are migrating from the unit, the owner or operator must immediately suspend receipt of prohibited wastes at the unit and notify the administrative authority within 24 hours and in writing within 10 days of the determination that a release has occurred. Following receipt of the notification, the administrative authority will determine within 60 days of receiving notification whether the owner or operator can continue to receive prohibited wastes in the unit and whether the exemption is to be revoked. The administrative authority shall also determine whether further examination of any migration is warranted under applicable provisions of LAC 33:V.Chapter 35 or 43.

J. After receiving a petition, the administrative authority may request any additional information that may reasonably be necessary to evaluate the petition.

K. The administrative authority will give public notice of the intent to approve or deny a petition and will provide an opportunity for public comment in accordance with LAC 33:V.Chapter 7, Subchapter C. and 2243. Notice will also be given when a final decision on a petition is issued.

L. The term of an exemption granted under this Section shall be no longer than the term of the final permit if the disposal unit is operating under a final permit, or up to a maximum of five years from the date of approval if the unit is operating under interim status. In either case, the term of the exemption granted shall expire upon the revocation or denial of a final permit or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached. The exemption must be reviewed at least once every three years.

M. During the petition review process, the applicant is required to comply with all prohibitions on land disposal under this Chapter, unless a petition for an exemption has been approved by the EPA, and the administrative authority grants an emergency variance. If EPA has approved the exemption, the land disposal of the waste may continue for up to one year under an emergency variance issued by the administrative authority until the administrative authority makes a decision on the petition for exemption. In no case shall an emergency variance extend beyond one year after the date of issuance. After the administrative authority issues a decision on the exemption, the waste may be land disposed only in accordance with the provisions of the exemption.

N. The petition granted by the administrative authority does not relieve the petitioner from compliance with all other applicable regulations.

O. Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm are not eligible for an exemption under this Section.

P. As a condition of the exemption, the petitioner must submit a report by March 1 of each calendar year during the term of the exemption that describes in detail the efforts undertaken during the preceding calendar year to reduce the

volume and toxicity of the waste generated. The report shall provide data indicating the change in volume and toxicity of waste actually achieved during the year in comparison to previous years.

Q. Whenever the administrative authority determines that the basis for approval of a petition may no longer be valid, he or she shall require a new demonstration in accordance with this Section.

R. Termination of an Approved Petition

1. The administrative authority may terminate an exemption granted under this Section for the following causes:

a. noncompliance by the petitioner with any condition of the exemption;

b. the petitioner's failure in the petition or during the review and approval to disclose fully all relevant facts, or the petitioner's misrepresentation of any relevant facts at any time; or

c. a determination that new information shows that the basis for approval of the petition is no longer valid.

2. The administrative authority shall terminate an exemption granted under this Section for the following causes: the petitioner's willful withholding during the review and approval of the petition of facts directly and materially relevant to the administrative authority's decision on the petition.

3. The administrative authority shall follow the procedures in LAC 33:V.323 in terminating any exemption under this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:220 (March 1990), LR 16:1057 (December 1990), LR 17:658 (July 1991).

§2242. Exemptions to Allow Land Disposal of a Prohibited Waste by Deep Well Injections

A. Any person seeking an exemption to allow land disposal by deep well injection of a prohibited hazardous waste in a particular injection well or wells must submit a petition to the administrative authority that does the following:

1. The petition must show that no other economically and environmentally reasonable alternative to disposal into an injection well is available. No exemption shall be granted to a generator for the land disposal of a waste stream if the waste stream can reasonably be eliminated or significantly reduced through waste reduction.

2. The petition must demonstrate to a reasonable degree of certainty that the waste shall be permanently confined as required by R.S. 30:2193 (E) (2) (d) and 30:2193 (A). For the purposes of this Section, permanent confinement means that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. Migration prohibited by this Section includes migration into the air, land or waters of the state where a discharge is not permitted.

B. A petition submitted pursuant to this Section must apply to land disposal of the specific prohibited waste into a specific injection well or wells described in the showing and demonstration and will not apply to any other prohibited waste at that injection well or wells or to that specific prohibited waste at any other injection well.

C. To comply with Subsection A.1 of this Section, the petitioner must show the following:

1. The petitioner must show that he or she has made a good-faith effort, using economically and technically feasible and environmentally sound methods, to provide for use, reuse, reclamation, or other recycling of waste in a manner other than for a use constituting disposal.

2. For each waste stream, the petitioner must show that he or she has a program or plan in effect to reduce the volume and toxicity of the waste he or she generates and that he or she has sought out the best technology available to reduce the toxicity, corrosiveness, virulent, or infectious character, or volume of the waste and that the waste cannot be further reduced through production modifications, nor can the waste or specific constituents of the waste be reclaimed or reused. The plan shall include:

a. a schedule of implementation and anticipated reductions in quantity and toxicity;

b. a list of technical process reductions considered and those rejected and the reasons for the rejections;

c. an analysis of the impact of the reduction program or plan on all operations of the facility affecting the environment, including air and water discharges; and

d. each waste reduction program or plan must be certified by a Louisiana licensed professional environmental engineer (PE) or by a master-level or senior-level Certified Hazardous Materials Manager (CHMM) who is in good standing with their professional organization.

3. The petitioner must sign and present to the administrative authority the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this waste reduction plan and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

4. The petitioner must submit a report describing in detail the efforts undertaken since 1984 to reduce the volume and

toxicity of waste generated. The report shall provide data indicating the change in volume and toxicity of waste actually achieved during each year in comparison to previous years, to the extent that such information is available. The report shall also document for each hazardous waste stream proposed for disposal in a land disposal unit a WRA showing that the petitioner has considered the economic and technical feasibility of alternative disposal methods in the following order: reduction, recycling, treatment, and disposal. The WRA must include:

a. an analysis of alternatives considered;

b. the costs of alternatives considered;

c. an assessment of the impact on other environmental programs of the facility, including impacts on air and water discharges; and

d. a description of the availability of alternate capacity for use of alternative technologies.

D. The demonstration required in LAC 33:V.2242.A.2 must include sufficient information to assure the administrative authority of the following:

1. The hydrogeological and geochemical conditions at the sites and the physiochemical nature of the waste stream(s) are such that one of the following reliable predictions can be made:

a. Fluid movement conditions are such that the injected fluids will not migrate within 10,000 years, either:

i. vertically upward out of the injection zone or

ii. laterally within the injection zone, to a point of discharge or interface with an underground source of drinking water (USDW).

b. If the injected fluids do migrate out of the injection zone or to a point of discharge or interface with a USDW within 10,000 years, the fluid will no longer be hazardous because of attenuation, transformation, or immobilization of hazardous constituents within the injection zone by hydrolysis, chemical interactions, or other means.

2. Any migration due to diffusion shall be accounted for in the demonstration required under Subsection D.1.a.

3. For each well the petitioner has done the following:

a. The petitioner has demonstrated that the injection well's area of review includes at least the two-mile radius around the bore hole. The administrative authority may specify a larger area of review on the basis of the calculated cone of influence around the well.

b. Using a protocol acceptable to the administrative authority, the petitioner has located, identified, and ascertained the conditions of all wells within the injection well's area of review (as specified in Subsection D.2.a.) that penetrate the injection zone or the confining zone.

c. The petitioner has submitted a corrective action plan that meets the substantive requirements of Subsection V of this Section; its implementation shall become a condition of petition approval.

d. The petitioner has submitted the results of pressure and radioactive tracer tests performed within one year prior to submission of the petition that may demonstrate the mechanical integrity of the well's long string casing, injection tube, annular seal, and bottom hole cement. In cases where the petition has not been approved or denied within one year after the initial demonstration of mechanical integrity, the administrative authority may require the owner or operator to perform the tests again and submit the results of the new tests.

E. A demonstration under LAC 33:V.2242.D.1.a shall identify the strata within the injection zone which will confine fluid movement above the injection interval and include a showing that this strata is free of known transmissive faults or fractures and that there is a confining zone above the injection zone.

F. A demonstration under LAC 33:V.2242.D.1.b shall identify the strata within the injection zone where waste transformation will be accomplished and include a showing that this strata is free of known transmissive faults or fractures and that there is a confining zone above the injection zone.

G. A demonstration may include information that:

1. treatment methods, the implementation of which shall become a condition of approval, will be used to reduce the toxicity or mobility of the wastes; or

2. a monitoring plan, the implementation of which shall become a condition of petition approval, will be used to enhance confidence in one or more aspects of the demonstration.

H. Any person who has been granted an exemption pursuant to this Section may submit a petition for reissuance of the exemption to include an additional prohibited waste or wastes or to modify any conditions placed on the exemption by the administrative authority. The administrative authority may reissue the exemption if the petitioner complies with the requirements of LAC 33:V.2242.A-F.

I. Any person who has been granted an exemption pursuant to this Section may submit a petition to modify an exemption to include an additional nonprohibited hazardous waste or wastes. The administrative authority may grant the modification if he or she determines, to a reasonable degree of certainty, that the additional waste or wastes will behave hydraulically and chemically in a manner similar to previously included wastes and that it will not interfere with the containment capability of the injection zone.

J. Information submitted in support of the exemption petition must meet the following criteria:

1. All waste analysis and any new testing performed by the petitioner should be accurate and reproducible and performed in accordance with quality assurance standards.

2. Estimation techniques shall be appropriate, and EPA-certified test protocols shall be used when available and appropriate.

3. Predictive models shall have been verified and validated; shall be appropriate for the specific site, waste streams, and injection conditions of the operation; and shall be calibrated for existing sites where sufficient data are available.

4. An approved quality assurance and quality control plan shall address all aspects of the demonstration.

5. Reasonably conservative values shall be used whenever values taken from the literature or estimated on the basis of known information are used instead of site-specific measurements.

6. An analysis shall be performed to identify and assess aspects of the demonstration that contribute significantly to uncertainty. The petitioner shall conduct a sensitivity analysis to determine the extent to which significant uncertainty may affect the demonstration. The demonstration shall then be based on conservative assumptions identified in the analysis.

K. Any petitioner under LAC 33:V.2242.D.1.a shall provide sufficient site-specific information to support the demonstration, such as:

1. thickness, porosity, permeability, and extent of the various strata in the injection zone;

2. thickness, porosity, permeability, extent, and continuity of the confining zone;

3. hydraulic gradient in the injection zone;

4. hydrostatic pressure in the injection zone; and

5. geochemical conditions of the site.

L. In addition to the information in LAC 33:V.2242.K, any petitioner under LAC 33:V.2242.D.1.b shall provide sufficient waste-specific information to ensure reasonably reliable predictions about the waste transformation. The petitioner shall provide the information necessary to support the demonstration, such as:

1. a description of the chemical processes or other means that will lead to waste transformation; and

2. results of laboratory experiments verifying the waste transformation.

M. Any petition submitted to the administrative authority pursuant to this Section shall include the following components:

1. an identification of the specific waste or wastes and the specific injection well or wells for which the demonstration will be made;

2. a waste analysis to describe fully the chemical and physical characteristics of the subject wastes;

3. such additional information as is required by the administrative authority to support the petition under this Section; and

4. this statement signed by the petitioner or a duly authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted for this petition and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

N. Ambient Monitoring

1. Based on a site-specific assessment of the potential for fluid movement from the well or injection zone, and on the potential value of monitoring wells to detect such movement, the administrative authority shall require the owner or operator to develop a monitoring program. At a minimum, the administrative authority shall require annual monitoring of the pressure build-up in the injection zone, including, at a minimum, a shutdown of the well for a time sufficient to conduct a valid observation of the pressure fall off curve.

2. The owner or operator shall include all of the following requirements in his or her monitoring program.

a. Continuous monitoring for pressure changes in the first aquifer overlying the confining zone shall be addressed. The owner or operator shall, on a quarterly basis, sample the aquifer and analyze for constituents specified by the administrative authority.

b. The use of indirect, geophysical techniques shall be required to determine the position of the waste front, the water quality in a formation designated by the administrative authority, or to provide other site-specific data.

c. Periodic monitoring of the groundwater quality in the first aquifer overlying the injection zone shall be required.

d. Periodic monitoring of the groundwater quality in the lowermost USDW shall be required.

e. Additional monitoring may be necessary to determine whether fluids are moving into or between USDWs.

3. The administrative authority may exempt the owner or operator from any requirements in Paragraph 2 which he or she deems to be unnecessary or not feasible, or which pose undue risks.

O. The administrative authority may require seismicity monitoring when he or she has reason to believe that the injection activity could cause seismic disturbances.

P. The administrative authority shall provide public notice and an opportunity for public comment in accordance with the procedures in LAC 33:V.Chapter 7.Subchapter C., and 2243, of the intent to approve or deny a petition. The administrative authority shall provide public notice of the final decision on a petition.

Q. If an exemption is granted it will apply only to the underground injection of the specific prohibited waste or wastes identified in the petition into a Class I hazardous waste injection well or wells specifically identified in the petition unless the exemption is modified or reissued pursuant to LAC 33:V.2242.H or I.

R. Whenever the administrative authority determines that the basis for approval of a petition may no longer be valid, he or she shall require a new demonstration in accordance with this Section.

S. Termination of an Approved Petition

1. The administrative authority may terminate an exemption granted under this Section for the following causes:

a. noncompliance by the petitioners with any condition of the exemption;

b. the petitioner's failure in the petition or during the review and approval to disclose fully all relevant facts, or the petitioner's misrepresentation of any relevant facts at any time; or

c. a determination that new information shows that the basis for approval of the petition is no longer valid.

d. should a petition be terminated pursuant to this Section for the reason that it has been determined that a technologically and economically feasible alternative to underground injection exists, the administrative authority may provide for a compliance schedule authorizing continued injection for the amount of time reasonably necessary to construct and/or implement such alternative.

2. The administrative authority shall terminate an exemption granted under this Section for the following causes:

a. the petitioner's willful withholding during the review and approval of the petition of facts directly and materially relevant to the administrative authority's decision on the petition;

b. a determination that there has been migration from the injection zone or the well that is not in accordance with the terms of the exemption, except that the administrative authority may at his or her discretion decide not to terminate where:

i. the migration resulted from a mechanical failure of the well that can be corrected promptly through a repair to the injection well itself or from an undetected well or conduit that can be plugged promptly; and

ii. the requirements of LAC 33:V.2242.V are satisfied.

3. The administrative authority shall follow the procedures in LAC 33:V.323 in terminating any exemption under this Section.

T. Whenever the owner or operator obtains evidence that injected wastes may have been released into an unauthorized zone, he or she must do the following:

1. The owner or operator shall immediately cease injection of waste fluids; and

a. notify the administrative authority within 24 hours of obtaining such evidence;

b. take all necessary steps to identify and characterize the extent of any release;

c. comply with any remediation plan specified by the administrative authority;

d. implement any remediation plan approved by the administrative authority; and

e. where such release is into a USDW currently serving as a water supply, place a notice in a newspaper of general circulation.

2. The administrative authority may allow the operator to resume injection prior to completing cleanup action if the owner or operator demonstrates that the injection operation will not endanger strata containing waters of the state where a discharge is not permitted.

U. Term of the Exemption

1. The term of an exemption granted under this Section shall be a maximum of five years from the date of approval.

2. The administrative authority may re-issue an exemption every five years after the initial petition approval, based on the submittal and review of all demonstrations stipulated in LAC 33:V.2242.C and Z.

3. At least once every 10 years, the administrative authority will require re-issuance of the exemptions based on a full technical review of each petition. The department will coordinate the timing of the review with the Department of Natural Resources (DNR) so that the petition review will coincide with DNR's UIC re-permitting review process.

4. The term of the exemption granted shall expire under the following conditions:

a. upon the revocation or denial of a Department of Natural Resources final permit; or

b. upon the termination of an EPA exemption; or

c. when the volume limit of waste to be land disposed during the term of petition is reached.

5. The permittee shall submit a request for reissuance of the exemption at least 180 days prior to the end of the term. If the applicant submits a timely and technically complete application, and the administrative authority, through no fault of the applicant, fails to act on the application for reissuance

on or before the expiration date of the existing exemption, the permittee may, with the written approval of the administrative authority, continue to operate under the terms and conditions of the existing exemption which shall remain in effect until final action on the application is taken by the administrative authority.

V. Corrective Action for Wells in the Area of Review

1. The petitioner shall submit a plan to the administrative authority outlining the protocol used to:

a. identify all wells penetrating the confining zone or injection zone within the area of review; and

b. determine whether wells are adequately completed or plugged.

2. The petitioner shall identify the location of all wells within the area of review that penetrate the injection zone or the confining zone and shall submit the following information to the administrative authority:

a. a tabulation of all wells within the area of review that penetrate the injection zone or the confining zone; and

b. a description of each well or type of well and any records of its plugging or completion.

3. For wells that the administrative authority determines are improperly plugged, completed, or abandoned, or for which plugging or completion information is unavailable, the applicant shall also submit a plan consisting of such steps or modifications as are necessary to prevent movement of fluids into strata containing waters of the state where a discharge is not permitted. Where the plan is adequate, the administrative authority shall incorporate it into the exemption as a condition. Where the administrative authority's review indicates that the petitioner's plan is inadequate (based at a minimum on the factors in Paragraph 5 of this Section), the administrative authority shall:

a. require the applicant to revise the plan;

b. prescribe a plan for corrective action as a condition of the exemption; or

c. deny the exemption.

4. Requirements

a. For existing hazardous waste injection wells, any exemption issued requiring corrective action other than pressure limitations shall include a compliance schedule requiring any corrective action accepted or prescribed under Subsection V.3 of this Section. Any such compliance schedule shall provide for compliance no later than two years after issuance of the exemption and shall require observance of appropriate pressure limitations under Paragraph 4.c. until all other corrective action measures have been implemented.

b. For new hazardous waste injection wells, no owner or operator may begin injection until all corrective actions required under this Section have been taken.

c. The administrative authority may require pressure limitations in lieu of plugging. If pressure limitations are used in lieu of plugging, the administrative authority shall require as a condition of the exemption that injection pressure be so limited that pressure in the injection zone at the site of any improperly completed or abandoned well within the area of review would not be sufficient to drive fluids into strata containing waters of the state where a discharge is not permitted.

5. In determining the adequacy of corrective action proposed by the applicant under Subsection V of this Section and in determining the additional steps needed to prevent fluid movement into strata containing waters of the state where a discharge is not permitted, the administrative authority shall consider the following criteria and factors:

a. nature and volume of injected fluid;

b. nature of native fluids or by-products of injection;

c. geology;

d. hydrology;

e. history of the injection operations;

f. completion procedures in effect at the time the well was closed;

g. closure procedures in effect at the time the well was closed;

h. hydraulic connections with USDWs;

i. reliability of the procedures used to identify abandoned wells; and

j. any other factors which might affect the movement of fluids into strata containing waters of the state where a discharge is not permitted.

W. During the petition review process, the applicant is required to comply with all prohibitions on land disposal under this Chapter, unless a petition for an exemption has been approved by the EPA, and the administrative authority grants an emergency variance. If EPA has approved the exemption, the land disposal of the waste may continue for up to one year under an emergency variance issued by the administrative authority until the administrative authority makes a decision on the petition for exemption. The administrative authority may extend an emergency variance beyond one year; however, such approval is solely based on the agency's inability to review the petition during the first one year variance. The administrative authority shall either grant or deny the petition within the extended emergency variance period, no later than June 1, 1995, for petitions submitted prior to June 1, 1992. After the administrative authority issues a decision on the exemption, the waste may be land disposed only in accordance with the provision of the exemption.

X. The petition granted by the administrative authority does not relieve the petitioner from compliance with all other applicable regulations.

Y. Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm are not eligible for an exemption under this Section.

Z. As a condition of the exemption, the petitioner must submit a report by March 1 of each calendar year during the term of the exemption, describing in detail the efforts undertaken during the preceding calendar year to reduce the volume and toxicity of the waste generated. The report shall provide data indicating the change in volume and toxicity of waste actually achieved during the year in comparison to previous years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 15:1067 (December 1989), LR 16:221 (March 1990), LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 19:187 (February 1993), LR 21:266 (March 1995).

§2243. Administrative Procedures for Exemptions under LAC 33:V.2241 and 2242 and Case-by-Case Extensions of an Effective Date under LAC 33:V.2239

Before making a final decision on the exemption or extension request, the administrative authority will provide the person requesting the exemption and the public through a newspaper notice in the official state journal and the local newspaper in the affected area, the cost of which will be charged to the person requesting the exemption, the opportunity to submit written comments on the request on the conditions of the exemption or extension, allowing a 45-day comment period. The notices referred to in this Section will be provided in the local newspaper in three separate issues; however, the comment or notice period shall begin with the notice in the official state journal. The administrative authority will also, in response to a request or at his or her own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning the exemption or extension request. The administrative authority will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments.)

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990).

Subchapter D. Testing, Recordkeeping and Notice Requirements

§2245. Generators' Waste Analysis, Waste Minimization, Recordkeeping, and Notice Requirements

A. Except as specified in LAC 33:V.2213, if a generator's waste is listed in LAC 33:V.Chapter 49, the generator must test his or her waste or test an extract developed using the TCLP and methods specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846), third edition or use knowledge of the waste to determine if the waste is prohibited from land disposal under this Chapter. Except as specified in LAC 33:V.2213, if a generator's waste exhibits one or more of the characteristics set out at LAC 33:V.4903, the generator must test an extract using the EP toxicity test specified in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846, latest edition) or use knowledge of the waste to determine if the waste is prohibited from land disposal under this Chapter. If the generator determines that his waste displays the characteristic of ignitability (D001) and is not in the High TOC Ignitable Liquids Subcategory or is not treated by INCIN, FSUBS, or RORGS of LAC 33:V.Chapter 22.Table 3 or the characteristic of corrosivity (D002) and the waste is prohibited under LAC 33:V.2221.D, the generator must determine what underlying hazardous constituents as defined in LAC 33:V.2303 are reasonably expected to be present in the D001 or D002 waste.

B. If a generator determines that he or she is managing a waste prohibited under this Chapter, and the waste does not meet the applicable treatment standards or the waste is prohibited under LAC 33:V.2213 with each shipment of waste the generator must notify the treatment or storage facility in writing of the appropriate treatment standards set forth in Subchapter B of this Chapter and any applicable prohibitions set forth in LAC 33:V.2213. The notice must include the following information:

1. EPA Hazardous Waste Number, as specified in LAC 33:V.Chapter 49;

2. the corresponding treatment standards for wastes F001-F005, F039, wastes prohibited pursuant to LAC 33:V.2213 or the Act, and for underlying hazardous constituents (as defined in LAC 33:V.2203) in D001 and D002 wastes if those wastes are prohibited under LAC 33:V.2221.D. Treatment standards for all other prohibited wastes must either be included or be referenced by including on the notification the applicable wastewater (as defined in LAC 33:V.2203) or nonwastewater (as defined in LAC

33:V.2203) category, the applicable subdivisions made within waste code based on waste-specific criteria (such as D003 active cyanides), and the section(s) and paragraph(s) in LAC 33:V.Chapter 22 where the applicable treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in Table 2 of this Chapter, the applicable five-letter treatment code found in Table 3 of this Chapter (e.g., INCIN, WETOX) must also be listed on the notification;

3. the manifest number associated with the shipment of waste;

4. waste analysis data, where available; and

5. for hazardous debris, the contaminants subject to treatment as provided by LAC 33:V.2230 and the following statement: "This hazardous debris is subject to the alternative treatment standards of LAC 33:V.2230."

C. If a generator determines that he or she is managing a waste prohibited under this Chapter and determines that the waste can be land disposed without further treatment, with each shipment of waste he or she must submit to the treatment, storage, or land disposal facility a notice and certification stating that the waste meets the applicable treatment standards set forth in Subchapter B of this Chapter and the applicable prohibitions set forth in LAC 33:V.2213. Generators of hazardous debris that is excluded from the definition of hazardous waste under LAC 33:V.109 (i.e., debris that the administrative authority has determined does not contain hazardous waste), however, are not subject to these notification and certification requirements.

1. The notice must include the following information:

a. EPA Hazardous Waste Number; and

b. the corresponding treatment standards for wastes F001-F005, F039, wastes prohibited pursuant to LAC 33:V.2213 or the Act, and for underlying hazardous constituents (as defined in LAC 33:V.2203) in D001 and D002 wastes if those wastes are prohibited under LAC 33:V.2221.D. Treatment standards for all other prohibited wastes must either be included or be referenced by including on the notification the applicable wastewater (as defined in LAC 33:V.2203) or nonwastewater (as defined in LAC 33:V.2203) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanides), and the section(s) and paragraph(s) in LAC 33:V.Chapter 22 where the applicable treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in Subchapter B, Table 2 of this Chapter, the applicable five-letter treatment code found in Subchapter B, Table 3 of this Chapter (e.g., INCIN, WETOX) must also be listed on the notification;

c. the manifest number associated with the shipment of waste; and

d. waste analysis data, where available.

2. The certification must be signed by a duly authorized representative and must state the following:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste and can support this certification that the waste complies with the treatment standards specified in LAC 33:V.2213 of the Louisiana Hazardous Waste Regulations and all applicable prohibitions set forth in LAC 33:V.2213 of the Louisiana Hazardous Waste Regulations. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of fines and imprisonment.

D. If a generator's waste is subject to a case-by-case extension under LAC 33:V.2239 or an exemption under LAC 33:V.2241 or 2242, or a variance under Subchapter B of this Chapter, with each shipment of waste he or she must submit a notice to the facility receiving his waste, stating that the waste is not prohibited from land disposal. The notice must include the following information:

1. EPA Hazardous Waste Number;

2. the corresponding treatment standards for wastes F001-F005, F039 and wastes prohibited pursuant to LAC 33:V.2213 or the Act. Treatment standards for all other prohibited wastes must either be included or be referenced by including on the notification the applicable wastewater (as defined in LAC 33:V.2203) or nonwastewater (as defined in LAC 33:V.2203) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanides), and the section(s) and paragraph(s) in LAC 33:V.Chapter 22 where the applicable treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in Subchapter B, Table 2, the applicable five-letter treatment code found in Subchapter B, Table 3 (e.g., INCIN, WETOX), also must be listed on the notification;

3. the manifest number associated with the shipment of waste;

4. waste analysis data, where available;

5. the date the waste is subject to the prohibitions; and

6. for hazardous debris, the contaminants subject to treatment as provided by LAC 33:V.2230 and the following statement: "This hazardous debris is subject to the alternative treatment standards of LAC 33:V.2230."

E. If a generator is managing a prohibited waste in tanks, containers, or containment buildings regulated under LAC 33:V.1109.E and is treating such waste in such tanks, containers, or containment buildings to meet applicable treatment standards under Subchapter B of this Chapter, the generator must develop and follow a written waste analysis plan that describes the procedures the generator will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of

LAC 33:V.Chapter 22.Subchapter B.Table 8, however, are not subject to these waste analysis requirements.) The plan must be kept on-site in the generator's records and the following requirements must be met:

1. The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s) being treated, and contain all information necessary to treat the waste(s) in accordance with the requirements of this Chapter, including the selected testing frequency.

2. Such plan must be filed with the administrative authority a minimum of 30 days prior to the treatment activity, with delivery verified.

3. Wastes shipped off-site pursuant to this Section must comply with the notification requirements of LAC 33:V.2245.C.

F. If a generator determines whether the waste is prohibited solely on the basis of his or her knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines whether the waste is prohibited on the basis of tests of this waste or an extract developed using the TCLP and test methods in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846), third edition, all waste analysis data must be retained on-site in the generator's files.

G. If a generator determines that a prohibited waste that the generator is managing was excluded from the definition of hazardous or solid waste or exempted from regulation under LAC 33:V.Chapters 1, 39, or 41 after the waste was generated or moved from the point of generation, the generator must place a one-time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from the regulation under LAC 33:V.Subpart 1, and the disposition of the waste, in the facility's file.

H. Generators must retain on-site a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced pursuant to this Section for at least five years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. The five-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the administrative authority. The requirements of this Paragraph apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under LAC 33:V.Chapters 1, 39, or 41, or exempted from regulation under LAC 33:V.Subpart 1, after generation.

I. If a generator is managing a lab pack that contains organometallic wastes identified in Subchapter D, Table 7, and wishes to use the alternative treatment standards under LAC 33:V.2227, with each shipment of waste the generator must submit a notice to the treatment facility in accordance with LAC 33:V.2245.B. The generator must also comply with the requirements in Subsections F and G of this Section, and must submit the following certification, which must be signed by a duly authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste, and that the lab pack contains only the wastes specified in Table 7 of LAC 33:V.Chapter 22, Subchapter D, or solid wastes not subject to regulation under LAC 33:V.Chapter 49. I am aware that there are significant penalties for submitting a false certification, including the possibility of fines and imprisonment.

J. If a generator is managing a lab pack that contains organic wastes specified in Subchapter D, Table 6, and wishes to use the alternative treatment standards under LAC 33:V.2227, with each shipment of waste the generator must submit a notice to the treatment facility in accordance with LAC 33:V.2245.B. The generator must also comply with the requirements in Subsections F and G of this Section, and must submit the following certification, which must be signed by a duly authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste and that the lab pack contains only organic wastes specified in Table 6 of LAC 33:V.Chapter 22, Subchapter D, or solid wastes not subject to regulation under LAC 33:V.Chapter 49. I am aware that there are significant penalties for submitting a false certification, including the possibility of fines and imprisonment.

K. Certification. Each waste minimization plan must be certified by a Louisiana registered professional engineer (PE) or by a master-level or senior-level Certified Hazardous Materials Manager (CHMM) who is in good standing with their professional organization.

L. All generators shall develop and retain a waste minimization plan on-site. The plan shall be submitted to the administrative authority within 30 days of receipt of request. The plan shall include ongoing and proposed waste minimization projects and tentative beginning dates for proposed projects.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 21:266 (March 1995), LR 21:267 (March 1995).

§2246. Special Rules Regarding Wastes That Exhibit a Characteristic

A. The initial generator of a solid waste must determine each EPA Hazardous Waste Number (waste code) applicable

to the waste in order to determine the applicable treatment standards under this Chapter. For purposes of LAC 33:V.Chapter 22, the waste will carry the waste code for any applicable listing under LAC 33:V.4901. In addition, the waste will carry one or more of the waste codes under LAC 33:V.4903 where the waste exhibits a characteristic, except in the case when the treatment standard for the waste code listed in LAC 33:V.4901 operates in lieu of the standard for the waste code under LAC 33:V.4903, as specified in Subsection B of this Section. If the generator determines that his waste displays the characteristic of ignitability (D001) and is not in the High TOC Ignitable Liquids Subcategory or is not treated by INCIN, FSUBS, or RORGS of LAC 33:V.Chapter 22.Subchapter B.Table 3 or the characteristic of corrosivity (D002) and the waste is prohibited under LAC 33:V.2221.D, the generator must determine what underlying hazardous constituents as defined in LAC 33:V.2203 are reasonably expected to be present in the D001 or D002 waste.

B. Where a prohibited waste is both listed under LAC 33:V.4901 and exhibits a characteristic under LAC 33:V.4903, the treatment standard for the waste code listed in LAC 33:V.4901 will operate in lieu of the standard for the waste code under LAC 33:V.4903, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

C. In addition to any applicable standards determined from the initial point of generation, no prohibited waste that exhibits a characteristic under LAC 33:V.4903 may be land disposed unless the waste complies with the treatment standards under LAC 33:V.Chapter 22, Table 2.

D. Wastes that exhibit a characteristic are also subject to the requirements of LAC 33:V.2245, except that once the waste is no longer hazardous, it may be disposed of according to the provisions of LAC 33:VII. For each shipment of such wastes to a solid waste disposal facility, the initial generator or the treatment facility need not send a notification pursuant to LAC 33:V.2245 to such facility. The notification and certification must be updated if the process or operation generating the waste changes and/or if the solid waste disposal facility changes. However, the generator need only notify the administrative authority on an annual basis if such changes occur. In such circumstances, a notification and certification must be sent to the administrative authority by the end of the calendar year, but no later than December 31.

1. The notification must include the following information:

a. name and address of the nonhazardous treatment, storage, or disposal facility receiving the waste shipment;

b. a description of the waste as initially generated, including the applicable EPA Hazardous Waste Number(s) and treatability group(s); and

c. the treatment standards applicable to the waste at the point of generation.

2. The certification must be signed by a duly authorized representative and must state the language specified in LAC 33:V.2247.C.

E. Generators or treaters who first claim that hazardous debris is excluded from the definition of hazardous waste under LAC 33:V.109 (i.e., debris treated by an extraction or destruction technology provided by LAC 33:V.Chapter 22, Table 8, and debris that the administrative authority has determined does not contain hazardous waste) are subject to the following notification and certification requirements:

1. a one-time notification must be submitted to the administrative authority including the following information:

a. the name and address of the nonhazardous treatment, storage, or disposal facility receiving the treated debris;

b. a description of the hazardous debris as initially generated, including the applicable EPA Hazardous Waste Number(s); and

c. for debris excluded under LAC 33:V.109, the technology from LAC 33:V.Chapter 22, Table 8, used to treat the debris;

2. the notification must be updated if the debris is shipped to a different facility and, for debris excluded under LAC 33:V.109, if a different type of debris is treated or if a different technology is used to treat the debris;

3. for debris excluded under LAC 33:V.109, the owner or operator of the treatment facility must document and certify compliance with the treatment standards of LAC 33:V.Chapter 22, Table 8 as follows:

a. records must be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards;

b. records must be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and

c. for each shipment of treated debris, a certification of compliance with the treatment standards must be signed by an authorized representative and placed in the facility's files. The certification must state the following: "I certify under penalty of law that the debris has been treated in accordance with the requirements of LAC 33:V.Chapter 22.Table 8. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment."

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§2247. Owners or Operators of Treatment or Disposal Facilities: Testing, Waste Minimization, Recordkeeping and Notice Requirements

A. Treatment facilities must test their wastes as frequently as specified in their waste analysis plans, as required by LAC 33:V.1519 or 4313. Such testing must be performed as provided in Subsections A.1-3 of this Section.

1. For wastes with treatment standards expressed as concentrations in the waste extract (LAC 33:V.2225), the owner or operator of the treatment facility must test the treatment residues, or an extract of such residues developed using the TCLP and the test methods in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846), third edition, to assure that the treatment residues or extract meet the applicable treatment standards.

2. For wastes prohibited under LAC 33:V.2227 of this Chapter or the Act which are not subject to any treatment standards under Subchapter B of this Chapter, the owner or operator of the treatment facility must test the treatment residues according to the generator testing requirements specified in LAC 33:V.2213 to assure that the treatment residues comply with the applicable prohibitions.

3. For wastes with treatment standards expressed as concentrations in the waste under LAC 33:V.2229, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to ensure that the treatment residues meet the applicable treatment standards.

B. A notice must be sent with each waste shipment to the land disposal facility which includes the following information, except that debris excluded from the definition of hazardous waste under LAC 33:V.109 (i.e., debris treated by an extraction or destruction technology provided by LAC 33:V.Chapter 22.Table 8 and debris that the administrative authority has determined does not contain hazardous waste) is subject to the notification and certification requirements of LAC 33:V.2247.H rather than these notification requirements:

1. EPA Hazardous Waste Number;

2. the corresponding treatment standards for wastes F001-F005, F039, wastes prohibited in accordance with LAC 33:V.2213 or RCRA section 3004(d) and for underlying hazardous constituents (as defined in LAC 33:V.2203) in D001 and D002 wastes if those wastes are prohibited under LAC 33:V.2219.A.2. Treatment standards for all other restricted wastes must either be included or be referenced by including on the notification the applicable wastewater (as defined in LAC 33:V.2203) or nonwastewater (as defined in LAC 33:V.2203) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanides), and the LAC 33:V section(s) and paragraph(s) where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in LAC 33:V.2227, the applicable five-letter treatment code found in LAC 33:V.22.Appendix, Table 3 (e.g., INCIN, WETOX) must also be included on the notification;

3. the manifest number associated with the shipment of waste; and

4. waste analysis data, where available.

C. The treatment facility must submit a certification with each shipment of waste or treatment residue of a prohibited waste to the land disposal facility stating that the waste or treatment residue has been treated in compliance with the applicable performance standards specified in Subchapter B of this Chapter and the applicable prohibitions set forth in LAC 33:V.2213 or the Act. Debris excluded from the definition of hazardous waste under LAC 33:V.109 (i.e., debris treated by an extraction or destruction technology provided by Table 8 of this Chapter and debris that the administrative authority has determined does not contain hazardous waste), however, is subject to the notification and certification requirements of LAC 33:V.2246.E rather than the certification requirements of LAC 33:V.2247.C.

1. For wastes with treatment standards expressed as concentrations in the waste extract or in the waste (LAC 33:V.2225 or 2229), or for wastes prohibited under LAC 33:V.2213 of this Chapter or the Act which are not subject to any treatment standards under Subchapter B of the Chapter, the certification must be signed by a duly authorized representative and must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in LAC 33:V.Chapter 22, Subchapter B, and all applicable prohibitions set forth in LAC 33:V.2213 without dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fines and imprisonment.

2. For wastes with treatment standards expressed as technologies (LAC 33:V.2227), the certification must be signed by a duly authorized representative and must state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of LAC 33:V.2227 of the Louisiana Hazardous Waste Regulations. I am aware that there are significant penalties for submitting a false certification, including the possibility of fines and imprisonment.

3. For wastes with treatment standards expressed as concentrations in the waste pursuant to LAC 33:V.2229, if compliance with the treatment standards in Subchapter B of this Chapter is based in part or in whole on the analytical detection limit alternative specified in LAC 33:V.2229.C, the certification also must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with LAC 33:V.Chapter 31 or Chapter 43.Subchapter N, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good-faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fines and imprisonment.

D. If the waste or treatment residue will be further managed at a different treatment or storage or disposal facility, the treatment, storage, or disposal facility sending the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators in LAC 33:V.2245.B and C.

E. For wastes that are subject to the prohibitions under LAC 33:V.2215.G and are not subject to the prohibitions in LAC 33:V.2213, with each shipment of such waste the owner or operator must notify any subsequent treatment, storage, or disposal facility, in writing, of any applicable prohibitions set forth in LAC 33:V.2215.G. The notice must include the following information:

1. EPA Hazardous Waste Number;

2. the applicable prohibitions set forth in LAC 33:V.2215.G;

3. the manifest number associated with the shipment of waste; and

4. waste analysis data, where available.

F. Where the wastes are recyclable materials used in a manner constituting disposal and exempt in accordance with the provisions in LAC 33:V.4139.A.2 regarding treatment standards and prohibition levels,, the owner or operator of a treatment facility (the recycler) is not required to notify the receiving facility, pursuant to LAC 33:V.2247.D. The recycling facility also must keep records of the name and location of each entity receiving the hazardous waste-derived product, the dates of each shipment, copies of analytical results, and the amount of waste-derived product in each shipment. With each shipment of such wastes, the owner or operator of the recycling facility must submit to the administrative authority the certification described in LAC 33:V.2247.C and a notice which includes the following information:

1. EPA Hazardous Waste Number;

2. the corresponding treatment standards and all applicable prohibitions set forth in LAC 33:V.Chapter 22;

3. waste analysis data, where available.

G. Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to LAC 33:V.4139.A.2-4, the owner or operator of any land disposal facility disposing of any waste subject to restrictions under this Chapter must do the following:

1. He or she must have copies of the notice and certification specified in either Subsection B, C, D, or E of this Section and the certification specified in LAC 33:V.2245, if applicable.

2. He must test the waste or an extract of the waste or treatment residue developed using the test method described in this Chapter or using any methods required for generators under LAC 33:V.2213 of this Chapter to assure that the wastes or treatment residues comply with the applicable treatment standards set forth in Subchapter B of this Chapter and all applicable prohibitions set forth in LAC 33:V.2213 of this Chapter or the Act. Such testing must be performed as frequently as specified in the facility's waste analysis plan, as required by LAC 33:V.1519 or 4313.

3. Where the owner or operator is disposing of any waste that is subject to the prohibitions under LAC 33:V.2215.G but not subject to the prohibitions set forth in LAC 33:V.2213, he or she must ensure that such waste is the subject of a valid certification according to the requirements of LAC 33:V.2235 prior to disposal in a landfill or surface impoundment unit and that such disposal is in accordance with the requirements of LAC 33:V.2239. The same requirement applies to any waste that is subject to the prohibitions under LAC 33:V.2215 or the prohibitions in LAC 33:V.2213.

H. All treatment, storage, and disposal facilities shall develop and retain a waste minimization plan onsite. The plan shall be submitted to the administrative authority within 30 days of receipt of request. The plan shall include ongoing and proposed waste minimization projects and tentative beginning dates for proposed projects.

I. Certification. Each waste minimization plan must be certified by a Louisiana registered professional engineer (PE) or by a master-level or senior-level Certified Hazardous Materials Manager (CHMM) who is in good standing with their professional organization.

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Table 2

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	**Regulated Constituent(s)**	**Constituent Concentrations in Wastes (CCW) mg/kg[a]**	**Constituent Concentrations Waste Extract (CCWE) mg/L[a]**	**Constituent Concentrations in Wastes (CCW) mg/L[a]**
D001 - Ignitable liquids, high-TOC nonwastewater subcategory (≥10% TOC)		FSUBS; RORGS; or INCIN	—	—
D001 - Ignitable liquids, low-TOC nonwastewater Subcategory (1% <TOC< 10%)		DEACT	—	—
D001 - Ignitable liquids, wastewater subcategory (<1% TOC and <1% TSS)		—	—	DEACT
D001 - Ignitable compressed gases		DEACT[c]	—	—
D001 - Ignitable reactives		DEACT	—	—
D001 - Oxidizers		DEACT	—	DEACT
D002 - Acid subcategory		DEACT	—	DEACT
D002 - Alkaline subcategory		DEACT	—	DEACT
D002 - Other corrosives		DEACT	—	DEACT
D002 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D003 - Reactive cyanides subcategory	Cyanides (Total) Cyanides (Amenable)	590[b] 30[b]	— —	Reserved 0.86
D003 - Reactive sulfides subcategory		DEACT (May not be diluted)	—	DEACT (May not be diluted)
D003 - Explosives subcategory		DEACT	—	DEACT
D003 - Water reactives subcategory		DEACT	—	—
D003 - Other reactives subcategory		DEACT	—	DEACT
D004 - Arsenic	Arsenic	—	5.0[b]	5.0
D004 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D005 - Barium	Barium	—	100	100
D005 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D006 - Cadmium	Cadmium	—	1.0	1.0
D006 - Cadmium batteries subcategory		RTHRM	—	—

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
D006 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D007 - Chromium	Chromium (Total)	—	5.0	5.0
D007 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D008 - Lead	Lead	—	5.0[b]	5.0
D008 - Radioactive lead solids[c]		MACRO	—	—
D008 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D008 - Lead acid batteries[d]		RLEAD	—	—
D009 - Low-mercury subcategory (<260 mg/kg total mercury)	Mercury	—	0.20	0.20
D009 - High-mercury subcategory (≥260 mg/kg total mercury)		RMERC; or IMERC	—	0.20
D009 - Hydraulic oil contaminated with mercury and radioactive materials subcategory		IMERC	—	—
D009 - Elemental mercury contaminated with radioactive materials		AMLGM	—	—
D009 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D010 - Selenium	Selenium	—	5.7	1.0
D010 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D011 - Silver	Silver	—	5.0	5.0
D011 - Radioactive high-level wastes generated during the reprocessing of fuel rods subcategory		HLVIT	—	—
D012 - Endrin	Endrin	0.13[e]	—	BIODG. or INCIN
D013 - Lindane	Lindane	0.066[e]	—	CARBN. or INCIN
D014 - Methoxychlor	Methoxychlor	0.18[e]	—	WETOX. or INCIN
D015 - Toxaphene	Toxaphene	1.3[e]	—	BIODG. or INCIN
D016 - 2,4-D	2,4-D	10.0[e]	—	CHOXD. BIODG. or INCIN
D017 - 2,4,5-TP (Silvex)	2,4,5-TP	7.9[e]	—	CHOXD. or INCIN

Table 2

Treatment Standards for Characteristic and Listed Wastes

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F001 - Spent halogenated solvents used in degreasing[c]	Carbon Tetrachloride	5.6	0.96	0.057[f]
	Methylene chloride	33	0.96	0.089[f]
	Tetrachloroethylene	5.6	0.05	0.056[f]
	1,1,1-Trichloroethane	5.6	0.41	0.054[f]
	Trichloroethylene	5.6	0.091	0.054[f]
	1,1,2-Trichloro-1,2,2-trifluoromethane	28	0.96	0.057[f]
	Trichloromonofluoromethane	33	0.96	0.02[f]
F002 - Spent halogenated solvents[c]	Chlorobenzene	5.7	0.05	0.057[f]
	1,2-Dichlorobenzene	—	0.125	0.65[f]
	Methylene chloride	33	0.96	0.089[f]
	Methylene chloride (from the pharmaceutical industry)	—	—	0.44
	Tetrachloroethylene	5.6	0.05	0.056[f]
	1,1,1-Trichloroethane	5.6	0.41	0.054[f]
	1,1,2-Trichloroethane	7.6[a]	—	0.030
	Trichloroethylene	5.6	0.091	0.054[f]
	1,1,2-Trichloro-1,2,2-trifluoromethane	28	0.96	0.057[f]
	Trichloromonofluoromethane	33	0.96	0.02[f]
F003 - Spent nonhalogenated solvents[c]	Acetone	160	0.59	0.28[f]
	n-Butyl alcohol	2.6	5.0	5.6[f]
	Cyclohexanone	—	4.8	0.125[f]
	Ethyl acetate	33	0.75	0.34[f]
	Ethylbenzene	6.0	0.053	0.057[f]
	Ethyl Ether	160	0.75	0.12[f]
	Methanol	—	0.75	0.25[f]
	Methyl isobutyl ketone	33	0.33	0.14[f]
	Xylenes (Total)	28	0.15	0.32[f]
F004 - Spent nonhalogenated solvents[c]	Cresols (and cresylic acid)	—	0.75	2.82[f]
	Nitrobenzene	14	0.125	0.068[f]
F005 - Spent nonhalogenated solvents[c]	Benzene	3.7[a]	—	0.070
	Carbon disulfide	—	4.80	1.05[f]
	2-Ethoxyethanol	INCIN	—	BIODG; or INCIN
	Isobutanol	—	5.0	5.0[f]
	Methyl ethyl ketone	36	0.75	0.28[f]
	2-Nitropropane	INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
	Pyridine	16	0.33	0.014[f]
	Toluene	28	0.33	0.08[f]
F006 - Wastewater treatment sludges from electroplating operations	Cadmium	—	0.066	1.6
	Chromium (Total)	—	5.2	0.32
	Lead	—	0.51	0.040
	Nickel	—	0.32	0.44
	Silver	—	0.072	—
	Cyanides (Total)	590	—	1.2
	Cyanides (Amenable)	30	—	0.86

~~Table 3~~

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
F007 - Spent cyanide plating bath solutions from electroplating operations	Cadmium	—	0.066	—
	Chromium (Total)	—	5.2	0.32
	Cyanides (Total)	590	—	1.9
	Cyanides (Amenable)	30	—	0.10
	Lead	—	0.51	0.04
	Nickel	—	0.32	0.44
	Silver	—	0.072	—
F008 - Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process	Cadmium	—	0.066	—
	Chromium (Total)	—	5.2	0.32
	Cyanides (Total)	590	—	1.9
	Cyanides (Amenable)	30	—	0.10
	Lead	—	0.51	0.04
	Nickel	—	0.32	0.44
	Silver	—	0.072	—
F009 - Spent stripping and cleaning bath solution from electroplating operations where cyanides are used in the process	Cadmium	—	0.066	—
	Chromium (Total)	—	5.2	0.32
	Cyanides (Total)	590	—	1.9
	Cyanides (Amenable)	30	—	0.10
	Lead	—	0.51	0.04
	Nickel	—	0.32	0.44
	Silver	—	0.072	—
F010 - Quenching bath sludge from oil baths from metal heat treating operations where cyanides are used in the process	Cyanides (Total)	1.5	—	1.9
	Cyanides (Amenable)	—	—	0.10
F011 - Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations	Cadmium	—	0.066	—
	Chromium (Total)	—	5.2	0.32
	Cyanides (Total)	110	—	1.9
	Cyanides (Amenable)	9.1	—	0.10
	Lead	—	0.51	0.04
	Nickel	—	0.32	0.44
	Silver	—	0.072	—
F012 - Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in process	Cadmium	—	0.066	—
	Chromium (Total)	—	5.2	0.32
	Cyanides (Total)	110	—	1.9
	Cyanides (Amenable)	9.1	—	0.10
	Lead	—	0.51	0.04
	Nickel	—	0.32	0.44
	Silver	—	0.072	—
F019 - Wastewater treatment sludges from the chemical conversion coating of aluminum	Cyanides (Total)	590[b]	—	1.2
	Cyanides (Amenable)	30[b]	—	0.86
	Chromium (Total)	—	5.2	0.32

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
P020-P023 - Dioxin-containing wastes	HxCDD-All Hexachlorodibenzo-p-dioxins	—	<1 ppb	<1 ppb
	HxCDF-All Hexachlorodibenzofurans	—	<1 ppb	<1 ppb
	PeCDD-All Pentachlorodibenzo- p-dioxins	—	<1 ppb	<1 ppb
	PeCDF-All Pentachlorodibenzofurans	—	<1 ppb	<1 ppb
	TCDD-All Tetrachlorodibenzo-p-dioxins	—	<1 ppb	<1 ppb
	TCDF-All Tetrachlorodibenzofurans	—	<1 ppb	<1 ppb
	2,4,5-Trichlorophenol	—	<0.05 ppm	<0.05 ppm
	2,4,6-Trichlorophenol	—	<0.05 ppm	<0.05 ppm
	2,3,4,6-Tetrachlorophenol	—	<0.05 ppm	<0.05 ppm
	Pentachlorophenol	—	<0.01 ppm	<0.01 ppm
P024 - Waste from the production of chlorinated aliphatic hydrocarbons	2-Chloro-1,3-butadiene	INCIN and 0.28[g]	—	INCIN and 0.28[g]
	3-Chloropropene	INCIN and 0.28[g]	—	INCIN and 0.28[g]
	1,1-Dichloroethane	INCIN and 0.014[g]	—	INCIN and 0.014[g]
	1,2-Dichloroethane	INCIN and 0.014[g]	—	INCIN and 0.014[g]
	1,2-Dichloropropane	INCIN and 0.014[g]	—	INCIN and 0.014[g]
	cis-1,3-Dichloropropene	INCIN and 0.014[g]	—	INCIN and 0.014[g]
	trans-1,3-Dichloropropene	INCIN and 0.014[g]	—	INCIN and 0.014[g]
	Bis(2-ethylhexyl)phthalate	INCIN and 1.8[g]	—	INCIN and 0.036[g]
	Hexachloroethane	INCIN and 1.8[g]	—	INCIN and 0.036[g]
	Chromium (Total)	—	0.073	0.35
	Lead	—	Reserved	—
	Nickel	—	0.088	0.47
F025 - Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of chlorinated aliphatics	Chloroform	6.2[g]	—	0.046[j]
	1,2-Dichloroethane	6.2[g]	—	0.21[j]
	1,1-Dichloroethylene	6.2[g]	—	0.025[j]
	Methylene chloride	31[g]	—	0.089[j]
	Carbon tetrachloride	6.2[g]	—	0.057[j]
	1,1,2-Trichloroethane	6.2[g]	—	0.054[j]
- Light ends subcategory	Trichloroethylene	5.6[g]	—	0.054[j]
	Vinyl chloride	33[g]	—	0.27[j]
- Spent filters/aids and desiccants subcategory	Chloroform	6.2[g]	—	0.046[j]
	Methylene chloride	31[g]	—	0.089[j]
	Carbon tetrachloride	6.2[g]	—	0.057[j]
	1,1,2-Trichloroethane	6.2[g]	—	0.054[j]
	Trichloroethylene	5.6[g]	—	0.054[j]
	Vinyl chloride	33[g]	—	0.27[j]
	Hexachlorobenzene	37[g]	—	0.055[j]
	Hexachlorobutadiene	28[g]	—	0.055[j]
	Hexachloroethane	30[g]	—	0.055[j]

Table 2

Treatment Standards for Characteristic and Listed Wastes

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F026-F028 - Dioxin-containing wastes	HxCDD-All Hexachlorodibenzo-p-dioxins	—	<1 ppb	<1 ppb
	HxCDF-All Hexachlorodibenzofurans	—	<1 ppb	<1 ppb
	PeCDD-All Pentachlorodibenzo-p-dioxins	—	<1 ppb	<1 ppb
	PeCDF-All Pentachlorodibenzofurans	—	<1 ppb	<1 ppb
	TCDD-All Tetrachlorodibenzo-p-dioxins	—	<1 ppb	<1 ppb
	TCDF-All Tetrachlorodibenzo-furans	—	<1 ppb	<1 ppb
	2,4,5-Trichlorophenol	—	<0.05 ppm	<0.05 ppm
	2,4,6-Trichlorophenol	—	<0.05 ppm	<0.05 ppm
	2,3,4,6-Tetrachlorophenol	—	<0.05 ppm	<0.05 ppm
	Pentachlorophenol	—	<0.01 ppm	<0.01 ppm
F037 - Any sludge generated from the gravitational separation of oil/ water/solids during the storage or treatment of process wastewaters from petroleum refineries	Acenaphthene	—	—	0.059
	Anthracene	28	—	0.059
	Benzene	14	—	0.14
	Benzo(a)anthracene	20	—	0.059
	Benzo(a)pyrene	12	—	0.061
	Benzo(2-ethylhexyl)phthalate	7.3	—	0.28
	Chrysene	15	—	0.059
	Di-n-butyl phthalate	3.6	—	0.057
	Ethylbenzene	14	—	0.057
	Flourene	—	—	0.059
	Napthalene	42	—	0.059
	Phenanthrene	34	—	0.059
	Phenol	3.6	—	0.039
	Pyrene	36	—	0.067
	Toluene	14	—	0.08
	Xylene(s)	22	—	0.32
	Cyanides (Total)	1.8	—	0.028
	Chromium (Total)	—	1.7	0.2
	Lead	—	—	0.037
	Nickel	—	0.20	—
F038 - Any sludge and/or float generated from the physical and/or chemical separation of oils/water/solids in process wastewaters and oily cooling wastewaters from wastewaters from petroleum refineries	Benzene	14	—	0.14
	Benzo(a)pyrene	12	—	0.061
	Bis(2-ethylhexyl)phthalate	7.3	—	0.28
	Chrysene	15	—	0.059
	Di-n-butyl phthalate	3.6	—	0.057
	Ethylbenzene	14	—	0.057
	Flourene	—	—	0.059
	Napthalene	42	—	0.059
	Phenanthrene	34	—	0.059
	Phenol	3.6	—	0.039
	Pyrene	36	—	0.067
	Toluene	14	—	0.080
	Xylene(s)	22	—	0.32
	Cyanides (Total)	1.8	—	0.028
	Chromium (Total)	—	1.7	0.2
	Lead	—	—	0.037
	Nickel	—	0.20	

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[c]
F039 - Multi-source leachate organics (see also F039 multi-source leachate inorganics)	Acetone	160[f]	—	0.28[j]
	Acenaphthalene	3.4[g]	—	0.059[j]
	Acenaphthene	4.0[g]	—	0.059[j]
	Acetonitrile	—	—	0.17[j]
	Acetophenone	9.7[g]	—	0.010[j]
	2-Acetylaminofluorene	140[g]	—	0.059[j]
	Acrolein	—	—	0.29[j]
	Acrylonitrile	84[g]	—	0.24[j]
	Aldrin	0.066[g]	—	0.021[j]
	4-Aminobiphenyl	—	—	0.13[j]
	Aniline	14[g]	—	0.81[j]
	Anthracene	4.0[g]	—	0.059[j]
	Aramite	—	—	0.36[j]
	Aroclor 1016	0.92[g]	—	0.013[j]
	Aroclor 1221	0.92[g]	—	0.014[j]
	Aroclor 1232	0.92[g]	—	0.013[j]
	Aroclor 1242	0.92[g]	—	0.017[j]
	Aroclor 1248	0.92[g]	—	0.013[j]
	Aroclor 1254	1.8[g]	—	0.014[j]
	Aroclor 1260	1.8[g]	—	0.014[j]
	alpha-BHC	0.066[g]	—	0.00014[j]
	beta-BHC	0.066[g]	—	0.00014[j]
	delta-BHC	0.066[g]	—	0.023[j]
	gamma-BHC	0.066[g]	—	0.0017[j]
	Benzene	36[g]	—	0.14[j]
	Benzo(a)anthracene	8.2[g]	—	0.059[j]
	Benzo(b)fluoranthene	3.4[g]	—	0.055[j]
	Benzo(k)fluoranthene	3.4[g]	—	0.059[j]
	Benzo(g,h,i)perylene	1.5[g]	—	0.0055[j]
	Benzo(a)pyrene	8.2[g]	—	0.061[j]
	Bromodichloromethane	15[g]	—	0.35[j]
	Bromoform (Tribromomethane)	15[g]	—	0.63[j]
	Bromomethane (methyl bromide)	15[g]	—	0.11[j]
	4-Bromophenyl phenyl ether	15[g]	—	0.055[j]
	n-Butyl alcohol	2.6[g]	—	5.6[j]
	Butyl benzyl phthalate	7.9[g]	—	0.017[j]
	2-sec-Butyl-4,6-dinitrophenol	2.5[g]	—	0.066[j]
	Carbon tetrachloride	5.6[g]	—	0.057[j]
	Carbon disulfide	—	—	0.014[j]
	Chlordane	0.13[g]	—	0.0033[j]

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	p-Chloroaniline	16[g]	—	0.46[j]
	Chlorobenzene	5.7[g]	—	0.057[j]
	Chlorobenzilate	—	—	0.10[j]
	2-Chloro-1,3-butadiene	—	—	0.057[j]
	Chlorodibromomethane	15[g]	—	0.057[j]
	Chloroethane	6.0[g]	—	0.27[j]
	bis-(2-Chloroethoxy) methane	7.2[g]	—	0.036[j]
	bis-(2-Chloroethyl) ether	7.2[g]	—	0.033[j]
	Chloroform	5.6[g]	—	0.046[j]
	bis-(2-Chloroisopropyl) ether	7.2[g]	—	0.055[j]
	p-Chloro-m-cresol	14[g]	—	0.018[j]
	Chloromethane (Methyl chloride)	33[g]	—	0.19[j]
	2-Chloronaphthalene	5.6[g]	—	0.055[j]
	2-Chlorophenol	5.7[g]	—	0.044[j]
	3-Chloropropylene	28[g]	—	0.036[j]
	Chrysene	8.2[g]	—	0.059[j]
	o-Cresol	5.6[g]	—	0.11[j]
	Cresol(m- and p-isomers)	3.2[g]	—	0.77[j]
	Cyclohexanone	—	—	0.36[j]
	1,2-Dibromo-3-chloropropane	15[g]	—	0.11[j]
	1,2-Dibromoethane (Ethylene dibromide)	15[g]	—	0.028[j]
	Dibromomethane	15[g]	—	0.11[j]
	2,4-Dichlorophenoxyacetic acid (2,4-D)	10[g]	—	0.72[j]
	o,p'-DDD	0.087[g]	—	0.023[j]
	p,p'-DDD	0.087[g]	—	0.023[j]
	o,p'-DDE	0.087[g]	—	0.031[j]
	p,p'-DDE	0.087[g]	—	0.031[j]
	o,p'-DDT	0.087[g]	—	0.0039[j]
	p,p'-DDT	0.087[g]	—	0.0039[j]
	Dibenzo(a,h)anthracene	8.2[g]	—	0.055[j]
	Dibenzo(a,e)pyrene	—	—	0.061[j]
	m-Dichlorobenzene	6.2[g]	—	0.036[j]
	o-Dichlorobenzene	6.2[g]	—	0.088[j]
	p-Dichlorobenzene	6.2[g]	—	0.090[j]
	Dichlorodifluoromethane	7.2[g]	—	0.23[j]
	1,1-Dichloroethane	7.2[g]	—	0.059[j]
	1,2-Dichloroethane	7.2[g]	—	0.21[j]
	1,1-Dichloroethylene	33[g]	—	0.025[j]
	trans-1,2-Dichloroethylene	33[g]	—	0.054[j]
	2,4-Dichlorophenol	14[g]	—	0.044[j]

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	2,6-Dichlorophenol	14[g]	—	0.044[j]
	1,2-Dichloropropane	18[g]	—	0.85[j]
	cis-1,3-Dichloropropene	18[g]	—	0.036[j]
	trans-1,3-Dichloropropene	18[g]	—	0.036[j]
	Dieldrin	0.13[g]	—	0.017[p]
	Diethyl phthalate	28[g]	—	0.20[j]
	2,4-Dimethyl phenol	14[g]	—	0.036[j]
	Dimethyl phthalate	28[g]	—	0.047[p]
	Di-n-butyl phthalate	28[g]	—	0.057[p]
	1,4-Dinitrobenzene	2.3[g]	—	0.32[j]
	4,6-Dinitro-o-cresol	160[g]	—	0.28[j]
	2,4-Dinitrophenol	160[g]	—	0.12[j]
	2,4-Dinitrotoluene	140[g]	—	0.32[j]
	2,6-dinitrotoluene	28[g]	—	0.55[j]
	Di-n-octyl phthalate	28[g]	—	0.017[p]
	Di-n-propylnitrosoamine	14[g]	—	0.40[j]
	Diphenylamine	—	—	0.52[j]
	1,2-Diphenyl hydrazine	—	—	0.087[p]
	Diphenylnitrosamine	—	—	0.40[j]
	1,4-Dioxane	170[g]	—	0.12[j]
	Disulfoton	6.2[g]	—	0.017[p]
	Endosulfan I	0.066[g]	—	0.023[j]
	Endosulfan II	0.13[g]	—	0.029[p]
	Endosulfan sulfate	0.13[g]	—	0.029[p]
	Endrin	0.13[g]	—	0.0028[p]
	Endrin aldehyde	0.13[g]	—	0.025[j]
	Ethyl acetate	33[g]	—	0.34[j]
	Ethyl cyanide	360[g]	—	0.24[j]
	Ethyl benzene	6.0[g]	—	0.057[p]
	Ethyl ether	160[g]	—	0.12[j]
	bis-(2-Ethylhexyl) phthalate	28[g]	—	0.28[j]
	Ethyl methacrylate	160[g]	—	0.14[j]
	Ethylene oxide	—	—	0.12[j]
	Famphur	15[g]	—	0.017[p]
	Fluoranthene	8.2[g]	—	0.068[p]
	Fluorene	4.0[g]	—	0.059[p]
	Fluorotrichloromethane	33[g]	—	0.020[j]
	Heptachlor	0.066[g]	—	0.0012[p]
	Heptachlor epoxide	0.066[g]	—	0.016[j]
	Hexachlorobenzene	37[g]	—	0.055[j]
	Hexachlorobutadiene	28[g]	—	0.055[j]
	Hexachlorocyclopentadiene	3.6[g]		0.057[p]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
	Hexachlorodibenzofurans	0.001[g]	—	0.000063[j]
	Hexachlorodibenzo-p-dioxins	0.001[g]	—	0.000063[j]
	Hexachloroethane	28[g]	—	0.055[j]
	Hexachloropropene	28[g]	—	0.035[j]
	Indeno(1,2,3-c,d)pyrene	8.2[g]	—	0.0055[j]
	Iodomethane	65[g]	—	0.19[j]
	Isobutanol	170[g]	—	5.6[j]
	Isodrin	0.066[g]	—	0.021[j]
	Isosafrole	2.6[g]	—	0.081[j]
	Kepone	0.13[g]	—	0.0011[j]
	Methacrylonitrile	84[g]	—	0.24[j]
	Methanol	—	—	5.6[j]
	Methapyrilene	1.5[g]	—	0.081[j]
	Methoxychlor	0.18[g]	—	0.25[j]
	3-Methylcholanthrene	15[g]	—	0.0055[j]
	4,4-Methylene-bis-(2-Chloro-aniline)	35[g]	—	0.50[j]
	Methylene chloride	33[g]	—	0.089[j]
	Methyl ethyl ketone	36[g]	—	0.28[j]
	Methyl isobutyl ketone	33[g]	—	0.14[j]
	Methyl methacrylate	160[g]	—	0.14[j]
	Methyl methanesulfonate	—	—	0.018[j]
	Methyl parathion	4.6[g]	—	0.014[j]
	Naphthalene	3.1[g]	—	0.059[j]
	2-Naphthylamine	—	—	0.52[j]
	p-Nitroaniline	28[g]	—	0.028[j]
	Nitrobenzene	14[g]	—	0.068[j]
	5-Nitro-o-toluidine	28[g]	—	0.32[j]
	4-Nitrophenol	29[g]	—	0.12[j]
	N-Nitrosodiethylamine	28[g]	—	0.40[j]
	N-Nitrosodimethylamine	—	—	0.40[j]
	N-Nitroso-di-n-butylamine	17[g]	—	0.40[j]
	N-Nitrosomethylethylamine	2.3[g]	—	0.40[j]
	N-Nitrosomorpholine	2.3[g]	—	0.40[j]
	N-Nitrosopiperidine	35[g]	—	0.013[j]
	N-Nitrosopyrrolidine	35[g]	—	0.013[j]
	Parathion	4.6[g]	—	0.014[j]
	Pentachlorobenzene	37[g]	—	0.055[j]
	Pentachlorodibenzofurans	0.001[g]	—	0.000063[j]
	Pentachlorodibenzo-p-dioxins	0.001[g]	—	0.000063[j]
	Pentachloronitrobenzene	4.8[g]	—	0.055[j]
	Pentachlorophenol	7.4[g]	—	0.089[j]
	Phenacetin	16[g]	—	0.081[j]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
	Phenanthrene	3.1[g]	—	0.059[j]
	Phenol	6.2[g]	—	0.039[j]
	Phorate	4.6[g]	—	0.021[j]
	Phthalic anhydride	—	—	0.069[j]
	Pronamide	1.5[g]	—	0.093[j]
	Pyrene	8.2[g]	—	0.067[j]
	Pyridine	16[g]	—	0.014[j]
	Safrole	22[g]	—	0.081[j]
	Silvex (2,4,5-TP)	7.9[g]	—	0.72[j]
	2,4,5-T	7.9[g]	—	0.72[j]
	1,2,4,5-Tetrachlorobenzene	19[g]	—	0.055[j]
	Tetrachlorodibenzofurans	0.001[g]	—	0.000063[j]
	Tetrachlorodibenzo-p-dioxins	0.001[g]	—	0.000063[j]
	1,1,1,2-Tetrachloroethane	42[g]	—	0.057[j]
	1,1,2,2-Tetrachloroethane	42[g]	—	0.057[j]
	Tetrachloroethylene	5.6[g]	—	0.056[j]
	2,3,4,6-Tetrachlorophenol	37[g]	—	0.030[j]
	Toluene	28[g]	—	0.080[j]
	Toxaphene	1.3[g]	—	0.0095[j]
	1,2,4-Trichlorobenzene	19[g]	—	0.055[j]
	1,1,1-Trichloroethane	5.6[g]	—	0.054[j]
	1,1,2-Trichloroethane	5.6[g]	—	0.054[j]
	Trichloroethylene	5.6[g]	—	0.054[j]
	2,4,5-Trichlorophenol	37[g]	—	0.18[j]
	2,4,6-Trichlorophenol	37[g]	—	0.035[j]
	1,2,3-Trichloropropane	28[g]	—	0.85[j]
	1,1,2-Trichloro-1,2,2-trifluoroethane	28[g]	—	0.057[j]
	Tris (2,3-dibromopropyl) phosphate	—	—	0.11[j]
	Vinyl chloride	33[g]	—	0.27[j]
	Xylene(s)	28[g]	—	0.32

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
F039 - Multi-source leachate inorganics (see also F039 multi-source leachate organics)	Cyanides (Total)	1.8[g]	—	1.2[j]
	Fluoride	—	—	35[j]
	Sulfide	—	—	14[j]
	Antimony	—	0.23	1.9[j]
	Arsenic	—	5.0	1.4[j]
	Barium	—	52	1.2[j]
	Beryllium	—	—	0.82[j]
	Cadmium	—	0.066	0.20[j]
	Chromium (Total)	—	5.2	0.37[j]
	Copper	—	—	1.3[j]
	Lead	—	0.51	0.28[j]
	Mercury	—	0.025	0.15[j]
	Nickel	—	0.32	0.55[j]
	Selenium	—	5.7	0.82[j]
	Silver	—	0.072	0.29[j]
	Thallium	—	—	1.4[j]
	Vanadium	—	—	0.042[j]
	Zinc	—	—	1.0[j]
K001 - Bottom sediment sludge from the treatment of wastewaters from wood-preserving processes that use creosote and/or pentachlorophenol	Naphthalene	1.5[g]	—	0.031[g]
	Pentachlorophenol	7.4[g]	—	0.018[g]
	Phenanthrene	1.5[g]	—	0.031[g]
	Pyrene	1.5[g]	—	0.028[g]
	Toluene	28[g]	—	0.028[g]
	Xylenes (Total)	33[g]	—	0.032[g]
	Lead	—	0.51	0.037[g]
K002 - Wastewater treatment sludge from the production of chrome yellow and orange pigments	Chromium (Total)	—	0.094	0.9[j]
	Lead	—	0.37	3.4[j]
K003 - Wastewater treatment sludge from the production of molybdate orange pigments	Chromium (Total)	—	0.094	0.9[j]
	Lead	—	0.37	3.4[j]
K004 - Wastewater treatment sludge from the production of zinc yellow pigments	Chromium (Total)	—	0.094	0.9[j]
	Lead	—	0.37	3.4[j]
K005 - Wastewater treatment sludge from the production of chrome green pigments	Chromium (Total)	—	0.094	0.9[j]
	Lead	—	0.37	3.4[j]
	Cyanides (Total)	Reserved	—	0.74[j]
K006 - Wastewater treatment sludge from the production of chrome oxide green pigments - anhydrous subcategory	Chromium (Total)	—	0.094	0.9[j]
	Lead	—	0.037	3.4[j]
K006 - hydrated subcategory	Chromium (Total)	—	5.2	0.9[j]
	Lead	—	—	3.4[j]
K007 - Wastewater treatment sludge from the production of iron blue pigments	Chromium (Total)	—	0.094	0.9[j]
	Lead	—	0.37	3.4[j]
	Cyanides (Total)	Reserved	—	0.74[j]
K008 - Oven residue from the production of chrome oxide green pigments	Chromium (Total)	—	0.094	0.9[j]
	Lead	—	0.37	3.4[j]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
K009 - Distillation bottoms from the production of acetaldehyde from ethylene	Chloroform	6.0[g]	—	0.10
K010 - Distillation side cuts from the production of acetaldehyde from ethylene	Chloroform	6.0[g]	—	0.10
K011 - Bottom stream from the wastewater stripper in the production of acrylonitrile[k]	Acetonitrile	1.8[g]	—	38
	Acrylonitrile	1.4[g]	—	0.06
	Acrylamide	23[g]	—	19
	Benzene	0.03[g]	—	0.02
	Cyanides (Total)	57	—	21
K013 - Bottom stream from the acetonitrile column in the production of acrylonitrile[k]	Acetonitrile	1.8[g]	—	38
	Acrylonitrile	1.4[g]	—	0.06
	Acrylamide	23[g]	—	19
	Benzene	0.03[g]	—	0.02
	Cyanides (Total)	57	—	21
K014 - Bottoms from the acetonitrile purification column in the production of acrylonitrile[k]	Acetonitrile	1.8[g]	—	38
	Acrylonitrile	1.4[g]	—	0.06
	Acrylamide	23[g]	—	19
	Benzene	0.03[g]	—	0.02
	Cyanides (Total)	57	—	21
K015 - Still bottoms from the distillation of benzyl chloride	Anthracene	3.4[g]	—	0.059
	Benzal Chloride	6.2[g]	—	0.28
	Sum of Benzo(b)fluoranthene and Benzo(k) fluoranthene	3.4	—	0.055
	Phenanthrene	3.4[g]	—	0.059
	Toluene	6.0[g]	—	0.08
	Chromium (Total)	—	1.7	0.32
	Nickel	—	0.2	0.44
K016 - Heavy ends or distillation residues from the production of carbon tetrachloride	Hexachlorobenzene	28[g]	—	0.055[g]
	Hexachlorobutadiene	5.6[g]	—	0.055[g]
	Hexachlorocyclopentadiene	5.6[g]	—	0.057[g]
	Hexachloroethane	28[g]	—	0.055[g]
	Tetrachloroethane	6.0[g]	—	0.056[g]
K017 - Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin	1,2-Dichloropropane	18[g]	—	0.85[g,j]
	1,2,3-Trichloropropane	28[g]	—	0.85[g,j]
	Bis(2-Chloroethyl)ether	7.2[g]	—	0.033[g,j]
K018 - Heavy ends from the fractionation column in ethyl chloride production	Chloroethane	6.0[g]	—	0.27[g]
	Chloromethane	—	—	0.19[g]
	1,1-Dichloroethane	6.0[g]	—	0.059[g]
	1,2-Dichloroethane	6.0[g]	—	0.21[g]
	Hexachlorobenzene	28[g]	—	0.055[g]
	Hexachlorobutadiene	5.6[g]	—	0.055[g]
	Hexachloroethane	28[g]	—	0.055
	Pentachloroethane	5.6[g]	—	—
	1,1,1-Trichloroethane	6.0[g]	—	0.054[g]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[c]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[c]
K019 - Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production	Chlorobenzene	6.0[g]	—	0.057[g]
	bis(2-Chloroethyl)ether	5.6[g]	—	0.033[g]
	Chloroform	6.0[g]	—	0.046[g]
	p-Dichlorobenzene	—	—	0.09[g]
	1,2-Dichloroethane	6.0[g]	—	0.21[g]
	Fluorene	—	—	0.059[g]
	Hexachloroethane	28[g]	—	0.055[g]
	Naphthalene	5.6[g]	—	0.059[g]
	Phenanthrene	5.6[g]	—	0.059[g]
	1,2,4,5-Tetrachlorobenzene	—	—	0.055[g]
	1,1,1-Trichloroethane	6.0[g]	—	0.54[g]
	Tetrachloroethene	6.0[g]	—	0.056[g]
	1,2,4-Trichlorobenzene	19[g]	—	0.055[g]
K020 - Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	1,2-Dichloroethane	6.0[g]	—	0.21[g]
	1,1,2,2-Tetrachloroethane	5.6[g]	—	0.057[g]
	Tetrachloroethene	6.0[g]	—	0.056[g]
K021 - Aqueous spent antimony catalyst from fluoromethane production	Chloroform	6.2[g]	—	0.046[g]
	Carbon tetrachloride	6.2[g]	—	0.057[g]
	Antimony	—	0.23[b]	0.60[g]
K022 - Distillation bottom tars from the production of phenol/acetone from cumene	Acetophenone	19[g]	—	0.010
	Phenol	12[g]	—	0.039
	Toluene	0.034[g]	—	0.080[g]
	Diphenylamine	—	—	0.52[g]
	Diphenylnitrosamine	—	—	0.40[g]
	Sum of diphenylamine and diphenylnitrosamine	13[g]	—	—
	Chromium (Total)	—	5.2	0.35
	Nickel	—	0.32	0.47
K023 - Distillation light ends from the production of phthalic anhydride from naphthalene	Phthalic anhydride (measured as phthalic acid)	28[g]	—	0.069[g]
K024 - distillation bottoms from the production of phthalic anhydride from naphthalene	Phthalic anhydride (measured as phthalic acid)	28[g]	—	0.069[g]
K025 - Distillation bottoms from the production of nitrobenzene by the nitration of benzene		INCIN	—	LLEXT fb SSTRP fb CARBN; or INCIN
K026 - Stripping still tails from the production of methyl ethyl pyridines		INCIN	—	INCIN
K027 - Centrifuge and distillation residues from toluene diisocyanate production		FSUBS; or INCIN	—	CARBN; or INCIN
K028 - Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	1,1-Dichloroethane	6.0[g]	—	0.059[g]
	trans-1,2-Dichloroethane	6.0[g]	—	0.054[g]
	Hexachlorobutadiene	5.6[g]	—	0.055[g]
	Hexachloroethane	28[g]	—	0.055[g]
	Pentachloroethane	5.6[g]	—	—
	1,1,1,2-Tetrachloroethane	5.6[g]	—	0.057[g]
	1,1,2,2-Tetrachloroethane	5.6[g]	—	0.057[g]
	Tetracholorethylene	6.0[g]	—	0.056[g]
	1,1,1-Tricholorethane	6.0[g]	—	0.054[g]
	1,1,2-Trichloroethane	6.0[g]	—	0.054[g]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
K029 - Waste from the product steam stripper in the production of 1,1,1-trichloroethane	Chloroform	6.0[g]	—	0.46
	1,2-Dichloroethane	6.0[g]	—	0.21
	1,1-Dichloroethylene	6.0[g]	—	0.025
	1,1,1-Trichloroethane	6.0[g]	—	0.054
	Vinyl chloride	6.0[g]	—	0.27
K030 - Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	o-Dichlorobenzene	—	—	0.088[g]
	p-Dichlorobenzene	—	—	0.09[g]
	Hexachlorobutadiene	5.6[g]	—	0.055[g]
	Hexachloroethane	28[g]	—	0.055[g]
	Hexachoropropene	19[g]	—	—
	Pentachlorobenzene	28[g]	—	—
	Pentachloroethane	5.6[g]	—	—
	1,2,4,5-Tetrachlorobenzene	14[g]	—	0.055[g]
	Tetrachloroethene	6.0[g]	—	0.056[g]
	1,2,4-Trichlorobenzene	19[g]	—	0.055[g]
K031 - By-products salts generated in the production of MSMA and cacodylic acid	Arsenic	—	5.6[b]	0.79
K032 - Wastewater treatment sludge from the production of chlordane	Chlordane	0.26[g]	—	0.0033[j]
	Heptachlor	0.066[g]	—	0.0012[j]
	Heptachlor epoxide	0.066[g]	—	0.016[j]
	Hexachlorocyclopentadiene	2.4[g]	—	0.057[j]
K033 - Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane	Hexachlorocyclopentadiene	2.4[g]	—	0.057[j]
K034 - Filter solids from the hexachloro-cyclopentadiene in the production of chlordane	Hexachlorocyclopentadiene	2.4[g]	—	0.057[j]
K035 - Wastewater treatment sludges generated in the production of creosote	Acenaphthene	3.4[g]	—	—
	Anthracene	3.4[g]	—	—
	Benz(a)anthracene	3.4[g]	—	0.059[j]
	Benzo(a)pyrene	3.4[g]	—	—
	Chrysene	3.4[g]	—	0.059[j]
	o-Cresol	—	—	0.11[j]
	Cresols (m- and p- isomers)	—	—	0.77[j]
	Dibenz(a,h)anthracene	3.4[g]	—	—
	Fluoranthene	3.4[g]	—	0.068[j]
	Fluorene	3.4[g]	—	—
	Ideno(1,2,3-c,d)pyrene	3.4[g]	—	—
	Naphthalene	3.4[g]	—	0.059[j]
	Phenanthrene	3.4[g]	—	0.059[j]
	Phenol	—	—	0.039
	Pyrene	8.2[g]	—	0.067[j]
K036 - Still bottoms from toluene reclamation distillation in the production of disulfoton	Disulfoton	0.1[g]	—	0.025[j]
K037 - Wastewater treatment sludge from the production of disulfoton	Disulfoton	0.1[g]	—	0.025[j]
	Toluene	28[g]	—	0.028[j]
K038 - Wastewater from the washing and stripping of phorate production	Phorate	0.1[g]	—	0.025

~~Table 3~~

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
K039 - Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate		FSUBS; or INCIN	—	CARBN; or INCIN
K040 - Wastewater treatment sludge from the production of phorate	Phorate	0.1[g]	—	0.025
K041 - Wastewater treatment sludge from the production of toxaphene	Toxaphene	2.6[g]	—	0.0095[j]
K042 - Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T	1,2,4,5-Tetrachlorobenzene	4.4[g]	—	0.055[j]
	o-Dichlorobenzene	4.4[g]	—	0.088[j]
	p-Dichlorobenzene	4.4[g]	—	0.090[j]
	Pentachlorobenzene	4.4[g]	—	0.055[j]
	1,2,4-Trichlorobenzene	4.4[g]	—	0.055[j]
K043 - 2,6-Dichlorophenol waste from the production of 2,4-D	2,4-Dichlorophenol	0.38[g]	—	0.044[g]
	2,6-Dichlorophenol	0.34[g]	—	0.044[g]
	Pentachlorophenol	1.9[g]	—	0.089[g]
	Tetrachloroethene	1.7[g]	—	0.056[g]
	Tetrachlorophenols (Total)	0.68[g]	—	—
	2,4,5-Trichlorophenol	8.2[g]	—	0.018[g]
	2,4,6-Trichlorophenol	7.6[g]	—	0.035[g]
	Hexachlorodibenzo-p-dioxins	0.001[g]	—	0.000063[g]
	Hexachlorodibenzofurans	0.001[g]	—	0.000063[g]
	Pentachlorodibenzo-p-dioxins	0.001[g]	—	0.000063[g]
	Pentachlorodibenzofurans	0.001[g]	—	0.000063[g]
	Tetrachlorodibenzo-p-dioxins	0.001[g]	—	0.000063[g]
	Tetrachlorodibenzofurans	0.001[g]	—	0.000063[g]
K044 - Wastewater treatment sludges from the manufacturing and processing of explosives		DEACT	—	DEACT
K045 - Spent carbon from the treatment of wastewater containing explosives		DEACT	—	DEACT
K046 - Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds	Lead	—	0.18	0.037
K047 - Pink/red water from TNT operations		DEACT	—	DEACT

~~Table 2~~

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
K048 - Dissolved air flotation (DAF) float from the petroleum refining industry	Benzene	14[g]	—	0.14[g]
	Benzo(a)pyrene	12[g]	—	0.061[g]
	Bis(2-ethylhexyl) phthalate	7.3[g]	—	0.28[g]
	Chrysene	15[g]	—	0.059[g]
	Di-n-butyl phthalate	3.6[g]	—	0.057[g]
	Ethylbenzene	14[g]	—	0.057[g]
	Fluorene	—	—	0.059[g]
	Naphthalene	42[g]	—	0.059[g]
	Phenanthrene	34[g]	—	0.059[g]
	Phenol	3.6[g]	—	0.039[g]
	Pyrene	36[g]	—	0.067[g]
	Toluene	14[g]	—	0.08[g]
	Xylene(s)	22[g]	—	0.32[g]
	Cyanides (Total)	1.8[g]	—	0.028[g]
	Chromium (Total)	—	1.7	0.20
	Lead	—	—	0.037
	Nickel	—	0.20	—
K049 - Slop oil emulsion solids from the petroleum refining industry	Anthracene	28[g]	—	0.059[g]
	Benzene	14[g]	—	0.14[g]
	Benzo(a)pyrene	12[g]	—	0.061[g]
	Bis(2-ethylhexyl) phthalate	7.3[g]	—	0.28[g]
	Carbon disulfide	—	—	0.014[g]
	Chrysene	15[g]	—	0.059[g]
	2,4-Dimethylphenol	—	—	0.036[g]
	Ethylbenzene	14[g]	—	0.057[g]
	Naphthalene	42[g]	—	0.059[g]
	Phenanthrene	34[g]	—	0.059[g]
	Phenol	3.6[g]	—	0.039[g]
	Pyrene	36[g]	—	0.067[g]
	Toluene	14[g]	—	0.08[g]
	Xylene(s)	22[g]	—	0.32[g]
	Cyanides (Total)	1.8[g]	—	0.028[g]
	Chromium (Total)	—	1.7	0.20
	Lead	—	—	0.037
	Nickel	—	0.020	—
K050 - Heat exchanger bundle cleaning sludge from the petroleum refining industry	Benzo(a)pyrene	12[g]	—	0.061[g]
	Phenol	3.6[g]	—	0.039[g]
	Cyanides (Total)	1.8[g]	—	0.028[g]
	Chromium (Total)	—	1.7	0.20
	Lead	—	—	0.037
	Nickel	—	0.20	—

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[c]
K051 - API separator sludge from the petroleum refining industry	Acenaphthene	—	—	0.059[g]
	Anthracene	28[g]	—	0.059[g]
	Benzene	14[g]	—	0.14[g]
	Benzo(a)anthracene	20[g]	—	0.059[g]
	Benzo(a)pyrene	12[g]	—	0.061[g]
	Bis(2-ethylhexyl) phthalate	7.3[g]	—	0.28[g]
	Chrysene	15[g]	—	0.059[g]
	Di-n-butyl phthalate	3.6[g]	—	0.057[g]
	Ethylbenzene	14[g]	—	0.057[g]
	Fluorene	—	—	0.059[g]
	Naphthalene	42[g]	—	0.059[g]
	Phenanthrene	34[g]	—	0.059[g]
	Phenol	3.6[g]	—	0.039[g]
	Pyrene	36[g]	—	0.067[g]
	Toluene	14[g]	—	0.08[g]
	Xylene(s)	22[g]	—	0.32[g]
	Cyanides (Total)	1.8[g]	—	0.028[g]
	Chromium (Total)	—	1.7	0.20
	Lead	—	—	0.037
	Nickel	—	0.20	—
K052 - Tank bottoms (leaded) from the petroleum refining industry	Benzene	14[g]	—	0.14[g]
	Benzo(a)pyrene	12[g]	—	0.061[g]
	o-Cresol	6.2[g]	—	0.11[g]
	p-Cresol	6.2[g]	—	0.77[g]
	2,4-Dimethylphenol	—	—	0.036[g]
	Ethylbenzene	14[g]	—	0.057[g]
	Naphthalene	42[g]	—	0.059[g]
	Phenanthrene	34[g]	—	0.059[g]
	Phenol	3.6[g]	—	0.039[g]
	Toluene	14[g]	—	0.08[g]
	Xylene(s)	22[g]	—	0.32[g]
K060 - Ammonia-still lime sludge from coking operations	Benzene	0.071[g]	—	0.17[g,j]
	Benzo(a)pyrene	3.6[g]	—	0.035[g,j]
	Naphthalene	3.4[g]	—	0.028[g,j]
	Phenol	3.4[g]	—	0.042[g,j]
	Cyanides (Total)	1.2[g]	—	1.9
K061 - Emission control dust/sludge from the primary production of steel in electric furnaces	Antimony	—	2.1	0.32
	Arsenic	—	0.055	0.44
	Barium	—	7.6	0.04
	Beryllium	—	0.014	1.6
	Cadmium	—	0.19	0.51
	Chromium (Total)	—	0.33	1.6
	Lead	—	0.37	0.51
	Mercury	—	0.009	0.030
	Nickel	—	5	0.057[i]
	Selenium	—	0.16	0.046[i]
	Silver	—	0.3	0.055[i]
	Thallium	—	0.078	0.056[i]
	Zinc	—	5.3	0.054[i]
K062 - Spent pickle liquor generated by steel finishing operations at facilities with-in the iron and steel industry (SIC codes 331 and 332)	Chromium (Total)	—	0.094	0.32
	Nickel	—	—	0.44
	Lead	—	0.37	0.04

~~Table 2~~

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
K069 - Emission control dust/sludge from secondary lead smelting - Calcium sulfate subcategory	Cadmium	—	0.14	1.6
	Lead	—	0.24	0.51
K069 - Noncalcium sulfate subcategory	Cadmium	RLEAD	—	1.6
	Lead	—	—	0.51
K071 - Brine purification muds from the mercury cell process in chlorine production, where separately pre-purified brine is used	Mercury	—	0.025	0.030
K073 - Chlorinated hydrocarbon wastes from the purification step of the diaphragm cell process using graphite anodes	Carbon tetrachloride	6.2[g]	—	0.057[j]
	Chloroform	6.2[g]	—	0.046[j]
	Hexachloroethane	30[g]	—	0.055[j]
	Tetrachloroethene	6.2[g]	—	0.056[j]
	1,1,1-Trichloroethane	6.2[g]	—	0.054[j]
K083 - Distillation bottoms from aniline production	Benzene	6.6[g]	—	0.14[j]
	Aniline	14[g]	—	0.81
	Sum of diphenylamine and diphenylnitrosamine	14[g]	—	—
	Diphenylamine	—	—	0.52[j]
	Diphenylnitrosamine	—	—	0.40[j]
	Nitrobenzene	14[g]	—	0.068[j]
	Phenol	5.6[g]	—	0.039
	Cyclohexanone	—	—	0.36
	Nickel	—	0.088	0.47
K084 - Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	Arsenic	—	5.6[b]	0.79
K085 - Distillation of fractionation column bottoms from the production of chlorobenzenes	Benzene	4.4[g]	—	0.14[j]
	Chlorobenzene	4.4[g]	—	0.057[j]
	o-Dichlorobenzene	4.4[g]	—	0.088[j]
	m-Dichlorobenzene	4.4[g]	—	0.036[j]
	p-Dichlorobenzene	4.4[g]	—	0.090[j]
	1,2,4-Trichlorobenzene	4.4[g]	—	0.055[j]
	1,2,4,5-Trichlorobenzene	4.4[g]	—	0.055[j]
	Pentachlorobenzene	4.4[g]	—	0.055[j]
	Hexachlorobenzene	4.4[g]	—	0.055[j]
	Arochlor 1016	0.92[g]	—	0.013[j]
	Arochlor 1221	0.92[g]	—	0.014[j]
	Arochlor 1232	0.92[g]	—	0.013[j]
	Arochlor 1242	0.92[g]	—	0.017[j]
	Arochlor 1248	0.92[g]	—	0.013[j]
	Arochlor 1254	1.8[g]	—	0.014[j]
	Arochlor 1260	1.8[g]	—	0.014[j]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[c]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
K086 - Solvent washes and sludges; caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead	Acetone	160[g]	—	0.28
	Acetophenone	9.7[g]	—	0.010
	Bis(2-ethylhexyl)phthalate	28[g]	—	0.28[j]
	n-Butyl alcohol	2.6[g]	—	5.6
	Butylbenzylphthalate	7.9[g]	—	0.017[j]
	Cyclohexanone	—	—	0.36
	1,2-Dichlorobenzene	6.2[g]	—	0.088
	Diethyl phthalate	28[g]	—	0.20[j]
	Dimethyl phthalate	28[g]	—	0.047[j]
	Di-n-butyl phthalate	28[g]	—	0.057[j]
	Di-n-octyl phthalate	28[g]	—	0.017[j]
	Ethyl acetate	33[g]	—	0.34[j]
	Ethylbenzene	6.0[g]	—	0.057[j]
	Methanol	—	—	5.6[j]
	Methyl ethyl ketone	36[g]	—	0.28
	Methyl isobutyl ketone	33[g]	—	0.14
	Methylene chloride	33[g]	—	0.089[j]
	Naphthalene	3.1[g]	—	0.059[j]
	Nitrobenzene	14[g]	—	0.068[j]
	Toluene	28[g]	—	0.080[j]
	1,1,1-Trichloroethane	5.6[g]	—	0.054[j]
	Trichloroethylene	5.6[g]	—	0.054[j]
	Xylene(s) (Total)	28[g]	—	0.32[j]
	Cyanides (Total)	1.5	—	1.9
	Chromium (Total)	—	0.094	0.32
	Lead	—	0.37	0.037
K087 - Decanter tank tar sludge from coking operations	Acenaphthalene	3.4[g]	—	0.059[g]
	Benzene	0.071[g]	—	0.14[g]
	Chrysene	3.4[g]	—	0.059[g]
	Fluoranthene	3.4[g]	—	0.068[g]
	Indeno (1,2,3-cd) pyrene	3.4[g]	—	0.0055[g]
	Naphthalene	3.4[g]	—	0.059[g]
	Phenanthrene	3.4[g]	—	0.059[g]
	Toluene	0.65[g]	—	0.08[g]
	Xylenes	0.070[g]	—	0.32[g]
	Lead	—	0.51	0.037
K093 - Distillation light ends from the production of phthalic anhydride from ortho-xylene	Phthalic anhydride (measured as phthalic acid)	28[g]	—	0.069[g]
K094 - Distillation bottoms from the production of phthalic anhydride from ortho-xylene	Phthalic anhydride (measured as phthalic acid)	28[g]	—	0.069[g]
K095 - Distillation bottoms from the production of 1,1,1-trichloroethane	1,1,1,2-Tetrachloroethane	5.6[g]	—	0.057
	1,1,2,2-Tetrachloroethane	5.6[g]	—	0.057
	Tetrachloroethene	6.0[g]	—	0.056
	1,1,2-Trichloroethane	6.0[g]	—	0.054
	Trichloroethylene	5.6[g]	—	0.054
	Hexachloroethane	28[g]	—	0.055
	Pentachloroethane	5.6[g]	—	0.055

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
K096 - Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane	1,1,1,2-Tetrachloroethane	5.6[g]	—	0.057
	1,1,2,2-Tetrachloroethane	5.6[g]	—	0.057
	Tetrachloroethene	6.0[g]	—	0.056
	1,1,2-Trichloroethane	6.0[g]	—	0.054
	Trichloroethene	5.6[g]	—	0.054
	1,3-Dichlorobenzene	5.6[g]	—	0.036
	Pentachloroethane	5.6[g]	—	0.055
	1,2,4-Trichlorobenzene	19[g]	—	0.055
K097 - Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane	Hexachlorocyclopentadiene	2.4[g]	—	0.057[j]
	Chlordane	0.26[g]	—	0.0033[j]
	Heptachlor	0.066[g]	—	0.0012[j]
	Heptachlor epoxide	0.066[g]	—	0.016[j]
K098 - Untreated process wastewater from the production of toxaphene	Toxaphene	2.6[g]	—	0.0095[j]
K099 - Untreated wastewater from the production of 2,4-dichlorophenoxyacetic acid (2,4-D)	2,4-Dichlorophenoxyacetic acid	1.0[g]	—	1.0[g]
	Hexachlorodibenzo-p-dioxins	0.001[g]	—	0.001[g]
	Hexachlorodibenzofurans	0.001[g]	—	0.001[g]
	Pentachlorodibenzo-p-dioxins	0.001[g]	—	0.001[g]
	Pentachlorodibenzofurans	0.001[g]	—	0.001[g]
	Tetrachlorodibenzo-p-dioxins	0.001[g]	—	0.001[g]
	Tetrachlorodibenzofurans	0.001[g]	—	0.001[g]
K100 - Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting	Cadmium	—	0.066	1.6
	Chromium (Total)	—	5.2	0.32
	Lead	—	0.51	0.51
K101 - Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	o-Nitroaniline	14[g]	—	0.27[g]
	Arsenic	—	5.6[g]	0.79
	Cadmium	—	—	0.24
	Lead	—	—	0.17
	Mercury	—	—	0.082
K102 - Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	o-Nitrophenol	13[g]	—	0.028[g]
	Arsenic	—	5.6[g]	0.79
	Cadmium	—	—	0.24
	Lead	—	—	0.17
	Mercury	—	—	0.082
K103 - Process residues from aniline extraction from the production of aniline	Aniline	5.6[g]	—	4.5[g]
	Benzene	6.0[g]	—	0.15[g]
	2,4-Dinitrophenol	5.6[g]	—	0.61[g]
	Nitrobenzene	5.6[g]	—	0.073[g]
	Phenol	5.6[g]	—	1.4[g]
K104 - Combined waste-water streams generated from nitrobenzene/aniline production	Aniline	5.6[g]	—	4.5[g]
	Benzene	6.0[g]	—	0.15[g]
	Cyanides (Total)	1.8[g]	—	2.7
	2,4-Dinitrophenol	5.6	—	0.61[g]
	Nitrobenzene	5.6[g]	—	0.073[g]
	Phenol	5.6[g]	—	1.4[g]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
K105 - Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	Benzene	4.4[g]	—	0.14
	Chlorobenzene	4.4[g]	—	0.057
	o-Dichlorobenzene	4.4[g]	—	0.088
	p-Dichlorobenzene	4.4[g]	—	0.090
	2,4,5-Trichlorophenol	4.4[g]	—	0.18
	2,4,6-Trichlorophenol	4.4[g]	—	0.035
	2-Chlorophenol	4.4[g]	—	0.044
	Phenol	4.4[g]	—	0.039
K106 - Wastewater treatment sludge from the mercury cell process in chlorine production - Low-mercury subcategory (<260 mg/kg)	Mercury	—	0.025[i] 0.20[j]	0.030
K106 - High-mercury subcategory (≥260 mg/kg)	Mercury	RMERC	—	0.030
K107 - Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from the carboxylic acid hydrazides	—	INCIN	—	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN
K108 - Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	—	INCIN	—	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN
K109 - Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid production	—	INCIN	—	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN
K110 - Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines	—	INCIN	—	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN
K111 - Product wash waters from the production of dinitrotoluene via nitration of toluene	2,4-Dinitrotoluene	140	—	0.32
	2,6-Dinitrotoluene	28	—	0.55
K112 - Reaction by-products from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene	—	INCIN	—	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN
K113 - Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene		FSUBS; or INCIN	—	CARBN, or INCIN
K114 - Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene		FSUBS; or INCIN	—	CARBN; or INCIN

~~Table 2~~

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K115 - Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	Nickel	FSUBS; or INCIN —	— 0.32	CARBN; or INCIN and 0.47
K116 - Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine		FSUBS; or INCIN	—	CARBN; or INCIN
K117 - Wastewater production from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethylene	Ethylene dibromide Methyl bromide Chloroform	15 15 5.6	— — —	0.028 0.11 0.046
K118 - Spent absorbant solids from purification of ethylene dibromide in the production of ethylene dibromide via bromation of ethylene	Ethylene dibromide Methyl bromide Chloroform	15 15 5.6	— — —	0.028 0.11 0.046
K123 - Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdi-thiocarbamic acid and its salts	—	INCIN; or CHOXD fb (BIODG or CARBN)	—	INCIN; or CHOXD fb (BIODG or CARBN)
K124 - Reactor vent scrubber water from the production of ethylenebisdi-thiocarbamic acid and its salts	—	INCIN; or CHOXD fb (BIODG or CARBN)	—	INCIN; or CHOXD fb (BIODG or CARBN)
K125 - Filtration, evaporation, and centrifucation solids from the production of ethylenebisdi-thiocarbamic acid and its salts	—	INCIN; or CHOXD fb (BIODG or CARBN)	—	INCIN; or CHOXD fb (BIODG or CARBN)
K126 - Baghouse dust and floor sweepings in milling and packaging of ethylenebisdi-thiocarbamic acid and its salts	—	INCIN	—	INCIN; or CHOXD fb (BIODG or CARBN)
K131 - Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide	Methyl bromide	15	—	0.11
K132 - Spent adsorbent and wastewater separator solids from the production of methyl bromide	Methyl bromide	15	—	0.11
K136 - Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethylene	Ethylene dibromide Methyl bromide Chloroform	15 15 5.6	— — —	0.028 0.11 0.046
P001 - Warfarin, when present at concentration greater than 0.3%		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN

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P002 - 1-Acetyl-2-thiourea		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P003 - Acrolein		FSUBS; or INCIN	—	—
P004 - Aldrin	Aldrin	0.066[d]	—	0.021[d]
P005 - Allyl alcohol		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P006 - Aluminum phosphide		CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; or INCIN
P007 - 5-Aminoethyl-3-isoxazolol		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P008 - 4-Aminopyridine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P009 - Ammonium picrate		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
P010 - Arsenic acid H_3AsO_4	Arsenic	—	5.6[b]	0.79
P011 - Arsenic Oxide As_2O_5	Arsenic	—	5.6[b]	0.79
P012 - Arsenic Oxide As_2O_3	Arsenic	—	5.6[b]	0.79
P013 - Barium cyanide	Barium Cyanide (Total) Cyanide (Amenable)	— 110 9.1	52 — —	— 1.9 0.10
P014 - Thiophenol (Benzenethiol)		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P015 - Beryllium dust		RMETL; or RTHRM	—	RMETL; or RTHRM
P016 - Bis-(chloromethyl)ether		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P017 - Bromoacetone		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P018 - Brucine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P020 - Dinoseb	2-sec-Butyl-4,6-dinitrophenol	2.5[e]	—	0.066

Table 2

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
P021 - Calcium cyanide	Cyanide (Total) Cyanide (Amenable)	110 9.1	— —	1.9 0.10
P022 - Carbon disulfide		INCIN	—	0.014
P023 - Chloroacetaldehyde		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P024 - p-Chloroaniline	p-Chloroaniline	16[g]	—	0.46
P026 - 1-(o-Chlorophenyl) thiourea		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P027 -3-Chloropropionitrile		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P028 - Benzyl chloride		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P029 - Copper cyanides	Cyanide (Total) Cyanide (Amenable)	110 9.1	— —	1.9 0.10
P030 - Soluble cyanide salts not elsewhere specified	Cyanide (Total) Cyanide (Amenable)	110 9.1	— —	1.9 0.10
P031 - Cyanogen		CHOXD; WETOX; or INCIN	—	CHOXD; WETOX; or INCIN
P033 - Cyanogen chloride		CHOXD; WETOX; or INCIN	—	CHOXD; WETOX; or INCIN
P034 - 2-Cyclohexyl- 4,6-dinitrophenol		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P036 - Dichlorophenylarsine	Arsenic	—	5.6[b]	0.79
P037 - Dieldrin	Dieldrin	0.13[g]	—	0.017[p]
P038 - Diethylarsine	Arsenic	—	5.6[b]	0.79
P039 - Disulfoton		0.10[g]	—	0.017
P040 - O,O-Diethyl-O-pyrazinyl phosphorothioate		FSUBS; or INCIN	—	CARBN; or INCIN
P041 - Diethyl-p-nitrophenyl phosphate		FSUBS; or INCIN	—	CARBN; or INCIN
P042 - Epinephrine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN

~~Table 2~~

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[c]
P043 - Diisopropyl fluorophosphate (DFP)		FSUBS; or INCIN	—	CARBN; or INCIN
P044 - Dimethoate		FSUBS; or INCIN	—	CARBN; or INCIN
P045 - Thiofanox		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P046 - Alpha, alpha-Dimethylphenethylamine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P047 - 4,6-Dinitrocresol	4,6-Dinitro-o-cresol	160[d]	—	0.28[d]
P047 - 4,6-Dinitrocresol salts		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P048 - 2,4- Dinitrophenol	2,4-Dinitrophenol	160[d]	—	0.12[d]
P049 - 2,4-Dithiobiuret		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P050 - Endosulfan	Endosulfan I Endosulfan II Endosulfan sulfate	0.066[e] 0.13[e] 0.13[e]	— — —	0.023[f] 0.029[f] 0.029[f]
P051 - Endrin	Endrin Endrin aldehyde	0.13[e] 0.13[e]	— —	0.0028[f] 0.025[f]
P054 - Aziridine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P056 - Fluorine	Fluoride	ADGAS fb NEUTR	—	35
P057 - Fluoroacetamide		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P058 - Fluoroacetic acid, sodium salt		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P059 - Heptachlor	Heptachlor Heptachlor epoxide	0.066[e] 0.066[e]	— —	0.0012[f] 0.016[f]
P060 - Isodrin	Isodrin	0.066[e]	—	0.021[f]
P062 - Hexaethyltetraphosphate		FSUBS; or INCIN	—	CARBN; or INCIN
P063 - Hydrogen cyanide	Cyanide (Total) ~~Cyanide (Amenable)~~	110 ~~9.1~~	—	1.9 ~~0.10~~

Table 2

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
P064 - Isocyanic acid, ethyl ester		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P065 - Mercury fulminate - High-mercury subcategory (≥ 260 mg/kg mercury)	Mercury	RMERC; or IMERC	—	0.030
P065 - Low-mercury subcategory (< 260 mg/kg mercury)	Mercury	RMERC; or IMERC	0.20[j] 0.025[l]	0.030
P066 - Methomyl		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P067 - 2-Methylaziridine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P068 - Methyl hydrazine		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
P069 - Methyllactonitrile		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P070 - Aldicarb		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P071 - Methyl parathion	Methyl parathion	0.1[g]	—	0.025
P072 - 1-Naphthyl-2-thiourea		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P073 - Nickel carbonyl	Nickel	—	0.32	0.32
P074 - Nickel cyanide	Cyanide (Total) Cyanide (Amenable) Nickel	110 9.1 —	— — 0.32	1.9 0.10 0.44
P075 - Nicotine and salts		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P076 - Nitric oxide		ADGAS	—	ADGAS
P077 - p-Nitroaniline	p-Nitroaniline	28[g]	—	0.028[g]
P078 - Nitrogen dioxide		ADGAS	—	ADGAS
P081 - Nitroglycerine		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
P082 - N-Nitrosodimethylamine	N-Nitrosodimethylamine	INCIN	—	0.40[g]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[c]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[b]
P084 - N-Nitrosomethylvinylamine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P085 - Octamethylpyrophosphoramide		FSUBS; or INCIN	—	CARBN; or INCIN
P087 - Osmium tetraoxide		RMETL; or RTHRM	—	RMETL; or RTHRM
P088 - Endothall		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P089 - Parathion	Parathion	0.1[g]	—	0.025
P092 - Phenylmercuric acetate - High-mercury subcategory (≥260 mg/kg mercury)	Mercury	RMERC; or IMERC	—	0.030
P092 - Low-mercury subcategory (<260 mg/kg mercury)	Mercury	RMERC; or IMERC	0.20[i] 0.025[i]	0.030
P093 - N-Phenylthiourea		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P094 - Phorate	Phorate	0.1[g]	—	0.025
P095 - Phosgene		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P096 - Phosphine		CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; or INCIN
P097 - Famphur	Famphur	0.1[g]	—	0.025
P098 - Potassium cyanide	Cyanide (Total) Cyanide (Amenable)	110 9.1	— —	1.9 0.10
P099 - Potassium silver cyanide	Silver Cyanide (Total) Cyanide (Amenable)	— 110 9.1	0.072 — —	0.29 1.9 0.10
P101 - Ethyl cyanide (Propanenitrile)	Ethyl cyanide (Propanenitrile)	360[j]	—	0.24[j]
P102 - Propargyl alcohol		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P103 - Selenourea	Selenium	—	5.7	1.0[j]
P104 - Silver cyanide	Cyanide (Total) Cyanide (Amenable) Silver	110 9.1 —	— — 0.072	1.9 0.10 0.29

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[b]
P105 - Sodium azide		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
P106 - Sodium cyanide	Cyanide (Total) Cyanide (Amenable)	110 9.1	— —	1.9 0.10
P107 - Strontium sulfide	(No standards given)	—	—	—
P108 - Strychnine and salts		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P109 - Tetraethyl-dithiopyrophosphate		FSUBS; or INCIN	—	CARBN; or INCIN
P110 - Tetraethyl lead	Lead	—	0.51	0.040
P111 - Tetraethylpyrophosphate		FSUBS; or INCIN	—	CARBN; or INCIN
P112 - Tetranitromethane		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
P113 - Thallic oxide	Thallium	RTHRM; or STABL	—	0.14[j]
P114 - Thallium (I) selenite	Selenium	—	5.7	1.0
P115 - Thallium (I) sulfate	Thallium	RTHRM; or STABL	—	0.14[j]
P116 - Thiosemicarbazide		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P118 - Trichloromethanethiol		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
P119 - Ammonium vanadate	Vanadium	STABL	—	28[j]
P120 - Vanadium pentoxide	Vanadium	STABL	—	28[j]
P121 - Zinc cyanide	Cyanide (Total) Cyanide (Amenable)	110 9.1	— —	1.9 0.10
P122 - Zinc phosphide, when present at concentrations > 10%		CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; or INCIN
P123 - Toxaphene	Toxaphene	1.3[g]	—	0.0095[j]
U001 - Acetaldehyde		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U002 - Acetone	Acetone	160[g]	—	0.28
U003 - Acetonitrile	Acetonitrile	INCIN	—	0.17
U004 - Acetophenone	Acetophenone	9.7[h]	—	0.010[g]
U005 - 2-Acetylaminofluorene	2-Acetylaminofluorene	140[g]	—	0.059[g]

Table 3

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
U006 - Acetyl chloride		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U007 - Acrylamide		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U008 - Acrylic acid		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U009 - Acrylonitrile	Acrylonitrile	84[g]	—	0.24[j]
U010 - Mitomycin C		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U011 - Amitrole		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U012 - Aniline	Aniline	14[g]	—	0.81
U014 - Auramine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U015 - Azaserine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U016 - Benz(c)acridine		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U017 - Benzal chloride	Benzal chloride	INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U018 - Benz(a)anthracene	Benz(a)anthracene	8.2[g]	—	0.059[j]
U019 - Benzene	Benzene	36[g]	—	0.14[j]
U020 - Benzenesulfonyl chloride		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U021 - Benzidine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U022 - Benzo(a)pyrene	Benzo(a)pyrene	8.2[g]	—	0.061[j]

Table 2

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
U023 - Benzotrichloride		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
U024 - Bis(2-chloroethoxy) methane	Bis(2-chloroethoxy) methane	7.2[g]	—	0.036
U025 - Dichloroethyl ether	Bis(2-chloroethyl) ether	7.2[g]	—	0.033
U026 - Chlornaphazine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U027 - Bis(2-chloroisopropyl) ether	Bis(2-chloroisopropyl) ether	7.2[g]	—	0.055[j]
U028 - Bis-(2-ethylhexyl) phthalate	Bis-(2-ethylhexyl) phthalate	28[g]	—	0.28[g]
U029 - Bromomethane (Methyl bromide)	Bromomethane (Methyl bromide)	15[g]	—	0.11[g]
U030 - 4-Bromophenyl phenyl ether	4-Bromophenyl phenyl ether	15[g]	—	0.055[g]
U031 - n-Butanol	n-Butyl alcohol	2.6[g]	—	5.6
U032 - Calcium chromate	Chromium (Total)	—	0.094	0.32
U033 - Carbonyl fluoride		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U034 - Trichloroacetaldehyde (Chloral)		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U035 - Chlorambucil		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U036 - Chlordane, alpha and gamma	Chlordane, alpha and gamma	0.13[g]	—	0.0033[j]
U037 - Chlorobenzene	Chlorobenzene	5.7[g]	—	0.057[g]
U038 - Chlorobenzilate	Chlorobenzilate	INCIN	—	0.10[j]
U039 - p-Chloro-m-cresol	p-Chloro-m-cresol	14[g]	—	0.018[j]
U041 - 1-Chloro-2,3-epoxypropane (Epichlorohydrin)		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U042 - 2-Chloroethyl vinyl ether	2-Chloroethyl vinyl ether	INCIN	—	0.057
U043 - Vinyl chloride	Vinyl chloride	33[g]	—	0.27[g]
U044 - Chloroform	Chloroform	5.6[g]	—	0.046[j]
U045 - Chloromethane (Methyl chloride)	Chloromethane	33[g]	—	0.19[j]
U046 - Chloromethyl methyl ether		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U047 - 2-Chloronaphthalene	2-Chloronaphthalene	5.6[g]	—	0.055[j]
U048 - o-Chlorophenol	2-Chlorophenol	5.7[g]	—	0.044[j]

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[c]
U049 - 4-Chloro-o-toluidine hydrochloride		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U050 - Chrysene	Chrysene	8.2[g]	—	0.059[j]
U051 - Creosote	Naphthalene	1.5[g]	—	0.031
	Pentachlorophenol	7.4[g]	—	0.18
	Phenanthrene	1.5[g]	—	0.031
	Pyrene	1.5[g]	—	0.028
	Toluene	28[g]	—	0.028
	Xylenes (Total)	33[g]	—	0.032
	Lead	—	0.51	0.037
U052 - Cresols	o-Cresol	5.6[g]	—	0.11[j]
	Cresols (m- and p-isomers)	3.2[g]	—	0.77[j]
U053 - Crotonaldehyde		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U055 - Cumene		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U056 - Cyclohexane		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U057 - Cyclohexanone	Cyclohexanone	FSUBS; or INCIN	—	0.36
U058 - Cyclophosphamide		FSUBS; or INCIN	—	CARBN; or INCIN
U059 - Daunomycin		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U060 - DDD	o,p'-DDD	0.087[g]	—	0.023
	p,p'-DDD	0.087[g]	—	0.023
U061 - DDT	o,p'-DDT	0.087[g]	—	0.0039[j]
	p,p'-DDT	0.087[g]	—	0.0039[j]
	o,p'-DDD	0.087[g]	—	0.023[j]
	p,p'-DDD	0.087[g]	—	0.023[j]
	o,p'-DDE	0.087[g]	—	0.031[j]
	p,p'-DDE	0.087[g]	—	0.031[j]
U062 - Diallate		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U063 - Dibenzo(a,h)anthracene	Dibenzo(a,h)anthracene	8.2[g]	—	0.055[j]
U064 - 1,2,7,8 Dibenzopyrene		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN

Table 2

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
U066 - 1,2-Dibromo-3-chloropropane	1,2-Dibromo-3-chloropropane	15[g]	—	0.11[j]
U067 - 1,2-Dibromoethane (Ethylene dibromide)	1,2-Dibromoethane	15[g]	—	0.028[j]
U068 - Dibromomethane	Dibromomethane	15[g]	—	0.11[j]
U069	Di-n-butyl phthalate	28[g]	—	0.057[g]
U070 - o-Dichlorobenzene	o-Dichlorobenzene	6.2[g]	—	0.088[j]
U071 - m-Dichlorobenzene	m-Dichlorobenzene	6.2	—	0.036
U072 - p-Dichlorobenzene	p-Dichlorobenzene	6.2[g]	—	0.090[j]
U073 - 3,3'-Dichlorobenzidine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U074 - 1,4-Dichloro-2-butene	cis-1,4-Dichloro-2-butene	INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
	trans-1,4-Dichloro-2-butene	INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U075 - Dichlorodifluoromethane	Dichlorodifluoromethane	7.2[g]	—	0.23[j]
U076 - 1,1-Dichloroethane	1,1-Dichloroethane	7.2[g]	—	0.059[j]
U077 - 1,2,-Dichloroethane	1,2-Dichloroethane	7.2[g]	—	0.21[j]
U078 - 1,1-Dichloroethylene	1,1-Dichloroethylene	33[g]	—	0.025[j]
U079 - 1,2-Dichloroethylene	trans-1,2-Dichloroethylene	33[g]	—	0.054[j]
U080 - Methylene chloride	Methylene chloride	33[g]	—	0.089[j]
U081 - 2,4-Dichlorophenol	2,4-Dichlorophenol	14[g]	—	0.044[j]
U082 - 2,6-Dichlorophenol	2,6-Dichlorophenol	14[g]	—	0.044[j]
U083 - 1,2-Dichloropropane	1,2-Dichloropropane	18[g]	—	0.85[j]
U084 - 1,3-Dichloropropene	cis-1,3-Dichloropropene	18[g]	—	0.036[j]
	trans-1,3-Dichloropropene	18[g]	—	0.036[j]
U085 - 2,2'-Bioxirane (1,2,:3,4- Diepoxybutane)	1,2:3,4-Diepoxybutane	FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U086 - N,N-Diethylhydrazine		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
U087 - O,O-Diethyl-S-methyldithiophosphate		FSUBS; or INCIN	—	CARBN; or INCIN
U088 - Diethyl phthalate	Diethyl phthalate	28[g]	—	0.2[g]
U089 - Diethylstilbestrol		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN

~~Table 3~~

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Constituent Concentrations in Wastes (CCW) mg/L[a]
U090 - Dihydrosafrole		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U091 - 3,3'-Dimethoxybenzidine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U092 - Dimethylamine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U093 - p-Dimethylaminoazobenzene	p-Dimethylaminoazobenzene	INCIN	—	0.13[j]
U094 - 7,12- Dimethylbenz(a)anthracene		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U095 - 3,3'- Dimethylbenzidine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U096 - alpha,alpha-Dimethylbenzyl-hydroperoxide		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
U097 - Dimethylcarbamoyl chloride		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U098 - 1,1- Diemthylhydrazine		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
U099 - 1,2- Dimethylhydrazine		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
U101 - 2,4-Dimethyl phenol	2,4-Dimethyl phenol	14[g]	—	0.036[j]
U102 - Dimethyl phthalate	Dimethyl phthalate	28[g]	—	0.047[g]
U103 - Dimethyl sulfate		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
U105 - 2,4-Dinitrotoluene	2,4-Dinitrotoluene	140[g]	—	0.32[j]
U106 - 2,6-Dinitrotoluene	2,6-Dinitrotoluene	28[g]	—	0.55[j]
U107 - Di-n-octyl phthalate	Di-n-octyl phthalate	28[g]	—	0.017[g]
U108 - 1,4-Dioxane	1,4-Dioxane	170[g]	—	0.12[j]
U109 - 1,2-Diphenylhydrazine		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN

Table 2

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
U110 - Dipropylamine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U111 - Di-n-propylnitrosoamine	Di-n-propylnitrosoamine	14[g]	—	0.40[j]
U112 - Ethyl acetate	Ethyl acetate	33[g]	—	0.34[j]
U113 - Ethyl acrylate		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U114 - Ethylenebisdithiocarbamic acid		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U115 - Ethylene oxide		CHOXD; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U116 - Ethylene thiourea		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U117 - Ethyl ether	Ethyl ether	160[g]	—	0.12[j]
U118 - Ethyl methacrylate	Ethyl methacrylate	160[g]	—	0.14[j]
U119 - Ethyl methane sulfonate		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U120 - Fluoranthene	Fluoranthene	8.2[g]	—	0.068[j]
U121 - Trichloromonofluoromethane	Trichloromonofluoromethane	33[g]	—	0.020[j]
U122 - Formaldehyde		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U123 - Formic acid		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U124 - Furan		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U125 - Furfural		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U126 - Glycidaldehyde		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN

~~Table 3~~

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
U127 - Hexachlorobenzene	Hexachlorobenzene	37[z]	—	0.055[y]
U128 - Hexachlorobutadiene	Hexachlorobutadiene	28[z]	—	0.055[y]
U129 - Lindane	alpha-BHC	0.066[z]	—	0.00014[y]
	beta-BHC	0.066[z]	—	0.00014[y]
	delta-BHC	0.066[z]	—	0.023[y]
	gamma-BHC (Lindane)	0.066[z]	—	0.0017[y]
U130 - Hexachlorocyclopentadiene	Hexachlorocyclopentadiene	3.6[z]	—	0.057[y]
U131 - Hexachloroethane	Hexachloroethane	28[z]	—	0.055[y]
U132 - Hexachlorophene		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U133 - Hydrazine		FSUBS CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
U134 - Hydrofluoric acid	Fluoride	ADGAS fb NEUTR; or NEUTR	—	35
U135 - Hydrogen sulfide		CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; or INCIN
U136 - Cacodylic acid	Arsenic	—	5.6[y]	0.79
U137 - Indeno(1,2,3-c,d)pyrene	Indeno(1,2,3-c,d)pyrene	8.2[z]	—	0.0055[y]
U138 - Iodomethane	Iodomethane	65[z]	—	0.19[y]
U140 - Isobutanol	Isobutyl alcohol	170[y]	—	5.6
U141 - Isosafrole	Isosafrole	2.6[z]	—	0.081
U142 - Kepone	Kepone	0.13[z]	—	0.0011
U143 - Lasiocarpine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U144 - Lead acetate	Lead	—	0.51	0.040
U145 - Lead phosphate	Lead	—	0.51	0.040
U146 - Lead subacetate	Lead	—	0.51	0.040
U147 - Maleic anhydride		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U148 - Maleic hydrazide		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U149 - Malononitrile		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN

~~Table 2~~

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
U150 - Melphalan		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U151 - Mercury (Low-mercury subcategory <260 mg/kg)	Mercury	—	0.20[j] 0.025[k]	0.030
U151 - Mercury (High-mercury subcategory ≥260 mg/kg)	Mercury	RMERC	—	0.030
U151 - Elemental mercury contaminated with radioactive materials		AMLGM	—	—
U152 - Methacrylonitrile	Methacrylonitrile	84[g]	—	0.24[j]
U153 - Methanethiol		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U154 - Methanol		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN; and 5.6
U155 - Methapyrilene	Methapyrilene	1.5[g]	—	0.081
U156 - Methyl chlorocarbonate		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U157 - 3-Methylcholanthrene	3-Methylcholanthrene	15[g]	—	0.0055[j]
U158 - 4,4'-Methylene-bis-(2 chloroaniline)	4,4'-Methylene-bis(2-chloroaniline)	35[g]	—	0.50[j]
U159 - Methyl ethyl ketone	Methyl ethyl ketone	36[g]	—	0.28
U160 - Methyl ethyl ketone peroxide		FSUBS; CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; CARBN; BIODG; or INCIN
U161 - Methyl isobutyl ketone	Methyl isobutyl ketone	33[g]	—	0.14
U162 - Methyl methacrylate	Methyl methacrylate	160[g]	—	0.14
U163 - N-Methyl-N'-nitro-N-nitrosoguanidine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U164 - Methylthiouracil		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U165 - Naphthalene	Naphthalene	3.1[g]	—	0.059[j]
U166 - 1,4-Naphthoquinone		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN

Table 2

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
U167 - 1-Naphthylamine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U168 - 2-Napthylamine	2-Napthylamine	INCIN	—	0.52[j]
U169 - Nitrobenzene	Nitrobenzene	14[g]	—	0.068[j]
U170 - p-Nitrophenol	4-Nitrophenol	29[g]	—	0.12[j]
U171 - 2-Nitropropane		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U172 - N-Nitroso-di-n-butylamine	N-Nitroso-di-n-butylamine	17[g]	—	0.40[j]
U173 - N-Nitrosodiethanolamine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U174 - N-Nitrosodiethylamine	N-Nitrosodiethylamine	28[g]	—	0.40[j]
U176 - N-Nitroso-N-ethylurea		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U177 - N-Nitroso-N-methylurea		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U178 - N-Nitroso-N-methylurethane		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U179 - N-Nitrosopiperidine	N-Nitrosopiperidine	35[g]	—	0.013[j]
U180 - N-Nitrosopyrrolidine	N-Nitrosopyrrolidine	35[g]	—	0.013[j]
U181 - 5-Nitro-o-toluidine	5-Nitro-o-toluidine	28[g]	—	0.32[j]
U182 - Paraldehyde		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U183 - Pentachlorobenzene	Pentachlorobenzene	37[g]	—	0.055[j]
U184 - Pentachloroethane		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U185 - Pentachloronitrobenzene	Pentachloronitrobenzene	4.8[g]	—	0.055[j]
U186 - 1,3-Pentadiene		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U187 - Phenacetin	Phenacetin	16[g]	—	0.081
U188 - Phenol	Phenol	6.2[g]	—	0.039

Table 2

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	**Regulated Constituent(s)**	**Constituent Concentrations in Wastes (CCW) mg/kg[a]**	**Constituent Concentrations Waste Extract (CCWE) mg/L[a]**	**Constituent Concentrations in Wastes (CCW) mg/L[a]**
U189 - Phosphorus sulfide		CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; or INCIN
U190 - Phthalic anhydride	Phthalic anhydride (measured as phthalic acid)	28[g]	—	0.069[g]
U191 - 2-Picoline		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U192 - Pronamide	Pronamide	1.5[g]	—	0.093
U193 - 1,3-Propane sultone		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U194 - 1-Propanamine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U196 - Pyridine	Pyridine	16[g]	—	0.014[j]
U197 - p-Benzoquinone		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U200 - Reserpine		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U201 - Resorcinol		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U202 - Saccharin and salts		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U203 - Safrole	Safrole	22[g]	—	0.081
U204 - Selenium dioxide	Selenium	—	5.7	1.0
U205 - Selenium sulfide	Selenium	—	5.7	1.0
U206 - Streptozotocin		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U207 - 1,2,4,5-Tetrachlorobenzene	1,2,4,5-Tetrachlorobenzene	19[g]	—	0.055[j]
U208 - 1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	42[g]	—	0.057
U209 - 1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	42[g]	—	0.057[j]
U210 - Tetrachloroethylene	Tetrachloroethylene	5.6[g]	—	0.056[j]
U211 - Carbon tetrachloride	Carbon tetrachloride	5.6[g]	—	0.057[j]

Table 3

Treatment Standards for Characteristic and Listed Wastes

Hazardous Waste Description	Regulated Constituent(s)	Nonwastewaters: Constituent Concentrations in Wastes (CCW) mg/kg[a]	Nonwastewaters: Constituent Concentrations Waste Extract (CCWE) mg/L[b]	Wastewater: Constituent Concentrations in Wastes (CCW) mg/L[a]
U213 - Tetrahydrofuran		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U214 - Thallium (I) acetate	Thallium	RTHRM; or STABL	—	0.14[j]
U215- Thallium (I) carbonate	Thallium	RTHRM; or STABL	—	0.14[j]
U216 - Thallium (I) chloride	Thallium	RTHRM; or STABL	—	0.14[j]
U217- Thallium (I) nitrate	Thallium	RTHRM; or STABL	—	0.14[j]
U218 - Thioacetamide		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U219 - Thiourea		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U220 - Toluene	Toluene	28[g]	—	0.080[j]
U221 - Toluenediamine		FSUBS; or INCIN	—	CARBN; or INCIN
U222 - o-Toluidine hydrochloride		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U223 - Toluene diisocyanate		FSUBS; or INCIN	—	CARBN; or INCIN
U225 - Bromoform	Tribromomethane (Bromoform)	15[g]	—	0.63[j]
U226 - 1,1,1-Trichloroethane	1,1,1-Trichloroethane	5.6[g]	—	0.054[j]
U227 - 1,1,2-Trichloroethane	1,1,2-Trichloroethane	5.6[g]	—	0.054[j]
U228 - Trichloroethylene	Trichloroethylene	5.6[g]	—	0.054[j]
U234 - Sym-Trinitrobenzene		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U235 - Tris(2,3-dibromopropyl) phosphate	Tris(2,3-dibromopropyl) phosphate	0.10[g]	—	0.025
U236 - Trypan blue		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U237 - Uracil mustard		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN

Table 2

Treatment Standards for Characteristic and Listed Wastes

		Nonwastewaters		Wastewater
Hazardous Waste Description	Regulated Constituent(s)	Constituent Concentrations in Wastes (CCW) mg/kg[a]	Constituent Concentrations Waste Extract (CCWE) mg/L[a]	Constituent Concentrations in Wastes (CCW) mg/L[a]
U238 - Ethyl carbamate		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U239 - Xylenes	Xylenes	28[g]	—	0.32[j]
U240 - 2,4-D	2,4-Dichlorophenoxyacetic acid	10[g]	—	0.72
U240 - 2,4-D, salts and esters		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U243 - Hexachloropropene	Hexachloropropene	28	—	0.035[j]
U244 - Thiram		INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U246 - Cyanogen bromide		CHOXD; WETOX; or INCIN	—	CHOXD; WETOX; or INCIN
U247 - Methoxychlor	Methoxychlor	0.18[g]	—	0.25[j]
U248 - Warfarin, when present at concentrations of 0.3% or less		FSUBS; or INCIN	—	(WETOX or CHOXD) fb CARBN; or INCIN
U249 - Zinc phosphide, when present at concentrations of 10% or less		CHOXD; CHRED; or INCIN	—	CHOXD; CHRED; or INCIN
U328 - o-toluidine	o-toluidine	INCIN; or Thermal Destruction	—	INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN
U353 - p-toluidine	p-toluidine	INCIN; or Thermal Destruction	—	INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN
U359 - 2-ethoxy-ethonal	2-ethoxy-ethanol	INCIN; or FSUBS	—	INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN

[a] All concentrations are maximums for any single grab sample, unless otherwise noted. Where methods are specified, five-letter method codes are used. These abbreviations are defined in Table 3.

[g] Extraction values given for nonwastewaters are based on results from EP toxicity test, not the TCLP; however, the TCLP can be used to demonstrate compliance with the treatment standard.

[j] Radioactive lead solids subject to the D008 standard include, but are not limited to, all forms of lead shielding, and other elemental forms of lead. These lead solids do not include treatment residues such as hydroxide sludges, other wastewater treatment residues, or incinerator ash that can undergo conventional pozzolanic stabilization, nor do they include organo-lead materials that can be incinerated and then stabilized as ash.

[d] The D008 lead acid battery standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere regulation under the land disposal prohibitions of LAC 33:V.Chapter 22 or exempted under other regulations.

[e] "Wastewater" contains either <1% by weight total organic carbon or <1% by weight total F001-F005 solvents listed in this table. "Nonwastewaters" are all other solvent wastes.

[f] Wastewater compositions are based on spent solvent concentration in TCLP extract, except for benzene, 1,1,2-trichloroethane and methylene chloride wastewater from the pharmaceutical industry, which are based on total composition, not TCLP.

[g] For organics in nonwastewaters where BDAT is incineration or fuel substitution, in accordance with LAC 33:V.Chapter 31 or LAC 33:V.Chapter 43, Subchapter N, and where the waste has been treated by that method, the treatment facility may certify compliance with the organic constituent standard if a good faith effort has been made to analytically demonstrate compliance with this standard and a detection limit within an order of magnitude of the organic constituent standard has been achieved.

[h] As analyzed using SW-846 Method 9010 or 9012; sample size: 10g; distillation time: one hour, 15 minutes.

[i] P024 nonwastewater organics must be incinerated and the incinerator residues must meet the concentration limits shown for the organics.

[j] Based on composite samples.

[k] The definition of "wastewater" for K011, K013, and K014 is <5% by weight TOC and <1% by weight TSS.

[l] Low-mercury subcategory - less than 260 mg/kg Hg (K106, U151, P065, and P092). For low-mercury subcategory, the nonwastewater standard of 0.025 mg/L applies to nonwastewaters that are not residues from mercury retorting or roasting. The 0.20 mg/L standard applies to nonwastewater residues from retorting or roasting.

[m] K115 wastes must comply with both method-of-treatment requirements and the numerical treatment standards proposed for nickel.

[n] This waste code exists in gaseous form and is not categorized as wastewater or nonwastewater forms.

Table 3
Technology Codes and Description of Technology-Based Standards

Technology Code	Description of Technology-Based Standard
ADGAS	Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid). Venting can be accomplished through physical release utilizing valves/piping; physical penetration of the container; and/or penetration through detonation.
AMLGM	Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.
BIODG	Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).
CARBN	Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, and/or organic constituents, operated such that a surrogate compound or indicator parameter has not undergone breakthrough (e.g. Total Organic Carbon can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.
CHOXD	Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations of reagents: (1) hypochlorite (e.g., bleach), (2) chlorine, (3) chlorine dioxide, (4) ozone or UV (ultraviolet) light assisted ozone, (5) peroxides, (6) persulfates, (7) perchlorates, (8) permanganates, and/or (9) other oxidizing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.
CHRED	Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents: (1) sulfur dioxide; (2) sodium, potassium, or alkali salts of sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; and/or (5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Halogens can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.
DEACT	Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, and/or reactivity.
FSUBS	Fuel substitution in units operated in accordance with applicable technical operating requirements.
HLVIT	Vitrification of high-level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the Nuclear Regulatory Commission.
IMERC	Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of LAC 33:V.Chapter 31 and LAC 33:V.4513 through 4521. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories).
INCIN	Incineration in units operated in accordance with the technical operating requirements of LAC 33:V.Chapter 31 and LAC 33:V.4513 through 4521.
LLEXT	Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard.

MACRO	Macroencapsulation with surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to LAC 33:V.109.
NEUTR	Neutralization with the following reagents (or waste reagents) or combinations of reagents: (1) acids, (2) bases, or (3) water (including wastewaters) resulting in a pH greater than 2 but less than 12.5 as measured in the aqueous residuals.
NLDBR	No land disposal based on recycling.
PRECP	Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination: (1) lime (i.e., containing oxides and/or hydroxides of calcium and/or magnesium), (2) caustic (i.e., sodium and/or potassium hydroxides), (3) soda ash (i.e., sodium carbonate), (4) sodium sulfide, (5) ferric sulfate or ferric chloride, (6) alum, or (7) sodium sulfate. Additional flocculating, coagulation, or similar reagents/processes that enhance sludge dewatering characteristics are not precluded from use.
RBERY	Thermal recovery of beryllium.
RCGAS	Recovery/reuse of compressed gases including techniques such as reprocessing of the gases for reuse/resale, filtering/adsorption of impurities, remixing for direct reuse or resale, and use of the gas as a fuel source.
RCORR	Recovery of acids or bases utilizing one or more of the following recovery technologies: (1) distillation (i.e., thermal concentration), (2) ion exchange, (3) resin or solid adsorption, (4) reverse osmosis, and/or (5) incineration for the recovery of acid. Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RLEAD	Thermal recovery of lead in secondary lead smelters.
RMERC	Retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit (or facility) must be subject to one or more of the following: (1) a National Emissions Standard for Hazardous Air Pollutants (NESHAP) for mercury, (2) a Best Available Control Technology (BACT) or a Lowest Achievable Emission Rate (LAER) standard for mercury imposed pursuant to a Prevention of Significant Deterioration (PSD) permit, or (3) a state permit that establishes emission limitations (within meaning of Section 302 of the Clean Air Act) for mercury. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories).
RMETL	Recovery of metals or inorganics utilizing one or more of the following direct physical/removal technologies: (1) ion exchange, (2) resin or solid (i.e., zeolites) adsorption, (3) reverse osmosis, (4) chelation/solvent extraction, (5) freeze crystallization, (6) ultrafiltration, and/or (7) simple precipitation (i.e., crystallization). Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RORGS	Recovery of organics utilizing one or more of the following technologies: (1) distillation, (2) thin film evaporation, (3) steam stripping, (4) carbon adsorption, (5) critical fluid extraction, (6) liquid-liquid extraction, (7) precipitation/crystallization (including freeze crystallization), or (8) chemical phase separation techniques (i.e., addition of acids, bases, demulsifiers, or similar chemicals). Note: this does not preclude the use of other physical phase separation techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RTHRM	Thermal recovery of metals or inorganics from nonwastewaters in units defined in LAC 33:V.109 under the definition of "industrial furnaces."
RZINC	Resmelting for the purpose of recovery of zinc in high-temperature metal recovery units.
STABL	Stabilization with the following reagents (or waste reagents) or combinations of reagents: (1) Portland cement, or (2) lime/pozzolans (e.g., fly ash and cement kiln dust)—this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set/cure time and/or compressive strength, or to overall reduce the leachability of the metals or inorganics.
SSTRP	Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as temperature and pressure ranges, have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit such as the number of separation stages and the internal column design. This results in a condensed extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse, and an extracted wastewater that must undergo further treatment as specified in the standard.
WETOX	Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).
WTRRX	Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic/ignitable levels of gases released during the reaction.

Note 1: When a combination of these technologies (i.e., a treatment train) is specified as a single treatment standard, the order of application is specified in Table 2 by indicating the five-letter technology code that must be applied first, then the designation "fb" (an abbreviation for "followed by"), then the five-letter technology code for the technology that must be applied next, and so on.

Note 2: When two or more technologies (or treatment trains) are specified as alternative treatment standards, the five-letter technology codes (or the treatment trains) are separated by a semicolon (;) with the last technology preceded by the word "or." This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

Table 4

Best Demonstrated Available Technology Land Disposal Prohibitions References

"Best Demonstrated Available Technology (BDAT) Background Document" August 8, 1988.

EPA for the Following Wastes	Document Number
F001-F005	EPA/530-SW-88-031R
F006	EPA/530-SW-88-031L
K001	EPA/530-SW-88-031O
K015	EPA/530-SW-88-031A
K016, K018-K020, K030	EPA/530-SW-031B
K022	EPA/530-SW-88-031Q
K024	EPA/530-SW-88-031H
K037	EPA/530-SW-88-031I
K046	EPA/530-SW-88-031J
K048-K052	EPA/530-SW-88-031C
K061	EPA/530-SW-88-031D
K062	EPA/530-SW-88-031E
K071	EPA/530-SW-88-031F
K086	EPA/530-SW-88-031N
K087	EPA/530-SW-88-031M
K101, K102	EPA/530-SW-88-031K
K103, K104	EPA/530-SW-88-031G

"Guidance Document for Applicable and Demonstrated Technologies for First Third Waste Codes," EPA/530-SW-88-031P, August 8, 1988.

"Alternative Waste Management Technology Cost Estimates for the First Third Land Disposal Restrictions," August 1988.

"Background Document for First Third Wastes to Support 40 CFR 268 Land Disposal Restrictions Final Rule, First Third Waste Volumes, Characteristics, and Required and Available Treatment Capacity," EPA/530-SW-88-049, August 8, 1988.

"Comment Response Background Document for the First Third Proposed Land Disposal Restriction Rule," August 8, 1988.

"Response to Capacity Related Comments Submitted on the First Third Proposed Land Disposal Restrictions Rule," August 8, 1988.

"Response to BDAT Related Comments Submitted on the First Third Proposed Land Disposal Restrictions Rule," Vol. I-III, August 8, 1988.

Table 5

The following HOCs must be included in the calculation to determine the concentration of HOCs in a hazardous waste for purposes of the LAC 33:V.2213 land disposal prohibitions:

Volatiles	Semivolatiles
Bromodichloromethane	Bis(2-chloroethoxy)methane
Bromomethane	Bis(2-chloroethyl)ether
Carbon Tetrachloride	Bis(2-chloroisopropyl)ether
Chlorobenzene	p-Chloroaniline
2-Chloro-1,3-butadiene	Chlorobenzilate
Chlorodibromomethane	p-Chloro-m-cresol
Chloroethane	2-Chloronapthalene
2-Chloroethyl vinyl ether	2-Chlorophenol
Chloroform	3-Chloropropionitrile
Chloromethane	m-Dichlorobenzene
3-Chloropropene	o-Dichlorobenzene
1,2-Dibromo-3-chloropropane	p-Dichlorobenzene
1,2-Dibromomethane	3,3'-Dichlorobenzidine
Dibromomethane	2,4-Dichlorophenol
Trans-1,4-Dichloro-2-butene	2,6-Dichlorophenol
Dichlorodifluoromethane	Hexachlorobenzene
1,1-Dichloroethane	Hexachlorobutadiene
1,2-Dichloroethane	Hexachlorocyicopentadiene
1,2-Dichloroethylene	Hexachloroethane
Trans-1,2-Dichloroethane	Hexachloroprophene
1,2-Dichlopropane	Hexachloropropene
Trans-1,3-Dichloropropene	4,4'-Methylenebis(2-chloroaniline)
cis-1,3-Dichloropropene	Pentachlorobenzene
Iodomethane	Pentachloroethane
Methylene chloride	Pentachloronitrobenzene
1,1,1,2-Tetrachloroethane	Pentachlorophenol
1,1,2,2-Tetrachloroethane	Pronamide
Tetrachloroethene	1,2,4,5-Tetrachlorobenzene
Tribromomethane	2,3,4,6-Tetrachlorophenol
1,1,1-Trichloroethane	1,2,4,-Trichlorobenzene
1,1,2-Trichloroethane	2,4,5-Trichlorophenol
Trichloroethene	2,4,6-Trichlorophenol
Trichloromonofluoromethane	Tris(2,3-dibromopropyl)phosphate

Table 5

1,2,3-Trichloropropane	
Vinyl chloride	

Organochlorine Pesticides	Phenoxyacetic Acid Herbicides
Aldrin	2,4-Dichlorophenoxyacetic acid
alpha-BHC	Silvex
beta-BHC	2,4,5-T
delta -BHC	PCBs
gamma-BHC	Aroclor 1016
Chlordane	Aroclor 1221
DDD	Aroclor 1232
DDE	Aroclor 1242
DDT	Aroclor 1248
Dieldrin	Aroclor 1254
Endosulfan I	Aroclor 1260
Endosulfan II	PCBs not otherwise specified
Endrin	
Endrin aldehyde	Dioxins and Furans
Heptachlor	Hexachlorodibenzo-p-dioxins
Heptachlor epoxide	Hexachlorodibenzofurans
Isodrin	Pentachlorodibenzo-p-dioxins
Kepone	Tetrachlorodibenzo-p-dioxins
Methoxychlor	Tetrachlorodibenzofuran
Toxaphene	2,3,7,8-Tetrachlorodibenzo-p-dioxins

Table 6

Organic Lab Packs

Hazardous wastes with the following EPA Hazardous Waste Code Numbers may be placed in an "organic" or "Table 6 Lab Pack":

P001, P002, P003, P004, P005, P007, P008, P009, P014, P016, P017,P018, P020, P021, P022, P023, P024, P026, P027, P028, P030, P031, P033, P034, P037, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P057, P058, P059, P060, P062, P063, P064, P066, P067, P068, P069, P070, P071, P072, P075, P077, P081, P082, P084, P085, P088, P089, P093, P094, P095, P097, P098, P101, P102, P105, P106, P108, P109, P111, P112, P116, P118, P123

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115,

~~U116, U117, U118, U119, U120, U121, U122, U123, U124,~~ U125, U126, U127, U128, U129, U130, U131, U132, U133, U135, U137, U138, U140, U141, U142, U143, U147, U148, U149, U150, U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U206, U207, U208, U209, U210, U211, U213, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249

F001, F002, F003, F004, F005, F010, F020, F021, F022, F023, F025, F026, F027, F028

K009, K010, K011, K013, K014, K016, K017, K018, K019, K020, K023, K024, K025, K026, K027, K029, K030, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K047, K060, K073, K085, K093, K094, K095, K096, K097, K098, K099, K103, K104, K105, K113, K114, K116

D001, D012, D013, D014, D015, D016, D017

Table 7

Organometallic Lab Packs

Hazardous wastes with the following EPA Hazardous Waste Code Numbers may be placed in an "organometallic" or "Table 7 Lab Pack":

P001, P002, P003, P004, P005, P006, F007, P008, P009, P013, P014, P015, P016, P017, P018, P020, P021, P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P056, P057, P058, P059, P060, P062, P063, P064, P065, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P077, P081, P082, P084, F085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P106, P108, P109, P110, P111, P112, P113, P114, P115, P116, P118, P119, P120, P121, P122, P123

~~U001, U002, U003, U004, U005, U006, U007, U008,~~ U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U136, U137, U138, U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U071, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249

F001, F002, F003, F004, F005, F006, F010, F020, F021, F022, F023, F024, F025, F026, F027, F028, F039

K001, K002, K008, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, K060, K061, K069, K071, K073, K083, K084, K085, K086, K087, K093, K094, K095, K096, K097, K098, K099, K101, K102, K103, K104, K105, K113, K114, K115, K116

D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D012, D013, D014, D015, D016, D017

~~Table 8~~

Alternative Treatment Standards for Hazardous Debris[1]

Technology Description	Performance and/or Design and Operating Standard	Contaminent Restrictions[2]
A. Extraction Technologies		
1. Physical Extraction		
a. abrasive blasting: Removal of contaminated debris surface layers using water and/or air pressure to propel a solid media (e.g., steel shot, aluminum oxide grit, plastic beads).	Glass, Metal, Plastic, Rubber: treatment to a clean debris surface.[3] Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: removal of at least 0.6 cm of the surface layer; treatment to a clean debris surface.[3]	All Debris: none
b. scarification, grinding, and planing: process utilizing striking piston heads, saws, or rotating grinding wheels such that contaminated debris surface layers are removed.	Same as above	Same as above
c. spalling: drilling or chipping holes at appropriate locations and depths in the contaminated debris surface and applying a tool which exerts a force on the sides of those holes such that the surface layers are removed. The surface layer removed remains hazardous debris subject to the debris treatment standards.	Same as above	Same as above
d. vibratory finishing: process utilizing scrubbing media, flushing fluid, and oscillating energy such that hazardous contaminants or contaminated debris surface layers are removed.[4]	Same as above	Same as above
e. high-pressure steam and water sprays: application of water or steam sprays of sufficient temperature, pressure, residence time, agitation, surfactants, and detergents to remove hazardous contaminants from the debris surfaces or to remove contaminated debris surface layers.	Same as above	Same as above
2. Chemical Extraction		

Table 8

Alternative Treatment Standards for Hazardous Debris[1]

Technology Description	Performance and/or Design and Operating Standard	Contaminent Restrictions[2]
a. water washing and spraying: application of water sprays or water baths of sufficient temperature, pressure, residence time, agitation, surfactants, acids, bases, and detergents to remove hazardous contaminants from the debris surfaces and surface pares or to remove contaminated debris surface layers.	All debris: treatment to a clean debris surface[3]. Brick, pavement, Cloth, Concrete, Paper, Rock, Wood: debris must be no more than 1.2 cm (½ in.) in one dimension (i.e. thickness limit[5]) except that this thickness limit may be waived under an "Equivalent Technology" approval under LAC 33:V.2228.B[8]; debris surfaces must be in contact with water solution for at least 15 minutes.	Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: contaminant must be soluble to at least 5 percent by weight in water solution or in emulsion; if debris is contaminated with a dioxin-listed waste[6] an "Equivalent Technology" approval under LAC 33:V.2228.B[8] must be obtained.
b. liquid phase solvent extraction: removal of hazardous contaminants from debris surfaces and surface pores by applying nonaqueous liquid or liquid solution which causes the hazardous contaminants on contaminated debris to enter the liquid phase and be flushed away from the debris along with the liquid or liquid solution while using appropriate agitation, temperature, and residence time[4].	Same as above	Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: same as above, except that contaminant must be soluble to at least 5 percent by weight in the solvent.
c. vapor phase solvent extraction: application of organic vapor using sufficient agitation, temperature, and residence time to cause hazardous contaminants on contaminated debris surfaces and surface pores to enter the vapor phase and be flushed away with the organic vapor.[4]	Same as above, except that brick, cloth, concrete, paper, pavement, rock, and wood surfaces must be in contact with the organic vapor for at least 60 minutes.	Same as above
3. Thermal Extraction:		
a. high temperature metals recovery: application of sufficient heat, residence time, mixing, fluxing agents, and/or carbon in smelting, melting, or refining furnace to separate metals from debris.	For refining furnaces, treated debris must be separated from treatment residues using simple physical or mechanical means[9], and, prior to further treatment, such residuals must meet the waste-specific treatment standards for organic compounds in waste contaminating the debris.	Debris contaminated with a dioxin-listed waste[5]: obtain an "Equivalent Technology" approval under LAC 33:V.2228.B[8].

~~Table 8~~

Alternative Treatment Standards for Hazardous Debris[1]

Technology Description	Performance and/or Design and Operating Standard	Contaminent Restrictions[2]
b. thermal desorption: heating in an enclosed chamber under either oxidizing or nonoxidizing atmospheres at sufficient temperature and residence time to vaporize hazardous contaminants from contaminated surfaces and surface pores and to remove the contaminants from the heating chamber in a gaseous exhaust gas.[7]	All debris: obtain an "Equivalent Technology" approval under LAC 33:V.2228.B[8]; treated debris must be separated from treatment residues using simple physical or mechanical means[9], and, prior to further treatment, such residue must meet the waste-specific treatment standards for organic compounds in waste contaminating the debris. Brick, Cloth, Concrete, Paper, Pavement, Rock,Wood: debris must be no more than 10 cm (4 in.) in one dimension (i.e. thickness limit[5]), except that this thickness limit may be waived under an "Equivalent Technology" approval under LAC 33:V.2228.B[8]	All debris: metals other than mercury.
B. Destruction Technologies:		
1. Biological Destruction (Biodegradation): Removal of hazardous contaminants from debris surfaces and surface pores in an aqueous solution and biodegration of organic or nonmetallic inorganic compounds (i.e. inorganics that contain phosphorus, nitrogen, or sulfur) in units operated under either aerobic or anaerobic conditions.	All debris: obtain an "Equivalent Technology" approval under LAC 33:V.2228.B[8]; treated debris must be separated from treatment residues using simple physical or mechanical means[9], and, prior to further treatment, such residue must meet the waste-specific treatment standards for organic compounds in waste contaminating the debris. Brick, Cloth, Concrete, Paper, Rock, Wood: debris must be no more than 1.2 cm (½ in.) in one dimension (i.e. thickness limit[5]), except that this thickness limit may be waived under an "Equivalent Technology" approval under LAC 33:V.2228.B[8].	All debris: metals contaminants.
2. Chemical Destruction		

Table 8

Alternative Treatment Standards for Hazardous Debris[1]

Technology Description	Performance and/or Design and Operating Standard	Contaminent Restrictions[2]
a. chemical oxidation: chemical or electolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combination reagents-(1) hypochlorite (i.e. bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or UV (ultraviolet light) assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permanganates; and/or (9) other oxidizing reagents of equivalent efficiency[4]. Chemical oxidation specifically includes what is referred to as alkaline chlorination.	Same as above	All debris: metals contaminants.
b. chemical reduction: chemical reaction utilizing the following reagents (or waste reagents) or combination of reagents: (1) sulfur dioxide; (2)sodium, potassium, or alkali salts of sulfites, bisulfites, and metabisulfites, and polyethylene glycols (e.g. NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; and/or (5) other reducing agents of equivalent efficiency[4].	Same as above	Same as above
3. Thermal Destruction: Treatment in an incinerator operating in accordance with LAC 33:V.Chapter 31 or Chapter 43.Subchapter N; a boiler or industrial furnace operating in accordance with LAC 33:V.Chapter 30, or other thermal treatment unit operated in accordance with LAC 33:V.Chapter 32, or Chapter 43.Subchapter O, but excluding for purposes of these debris treatment standards Thermal Desorption units.	Treated debris must be separated from treatment residuals using simple physical or mechanical means[9] and, prior to further treatment, such residue must meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.	Brick, Concrete, glass, Pavement, Rock: metals other than mercury, except that there are no metal restrictions for vitrification. Debris contaminated with a dioxin-listed waste[5]: obtain an "Equivalent Technology" approval under LAC 33:V.2228.B[8], except that this requirement does not apply to vitrification.
C. Immobilization Technologies:		
1. Macroencapsulation: Application of surface-coating materials such as polymeric organics (e.g. resins and plastics) or use a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media.	Encapsulating material must completely encapsulate debris and must be resistant to degradation by the debris and its contaminants and materials into which it may come into contact after placement (leachate, other waste, microbes).	None

Table 8

Alternative Treatment Standards for Hazardous Debris[1]

Technology Description	Performance and/or Design and Operating Standard	Contaminent Restrictions[2]
2. Microencapsulation: Stabilization of the debris with the following reagents (or waste reagents) such that the leachabilty of the hazardous contaminents is reduced: (1) Portland cement; and/or (2) lime/ pozzolons (e.g. fly ash and cement kiln dust). Reagents (e.g. iron salts, silicates, and clays) may be added to enhance the set/cure time and/or compressive strength or to reduce the leachability of the hazardous constituents[5].	Leachability of the hazardous contaminants must be reduced.	None
3. Sealing: Application of an appropriate material which adheres tightly to the debris surface to avoid exposure of the surface to potential leaching media. When necessary to effectively seal the surface, sealing entails pretreatment of the debris surface to remove foreign matter and to clean and roughen the surface. Sealing materials include epoxy, silicone, and urethane compounds, but paint may not be used as a sealant.	Sealing must avoid exposure of the debris surface to potential leaching media and sealant must be resistant to degradation by the debris and its contaminants and materials into which it may come into contact after placement (leachate, other waste, microbes).	None

ENDNOTE: [1]Hazardous debris must be treated by either these standards or the waste-specific treatment standards for the waste contaminating the debris. The treatment standards must be met for each type of debris contained in a mixture of debris types, unless the debris is converted into treatment residue as a result of the treatment process. Debris treatment residuals are subject to the waste-specific treatment standards for the waste contaminating the debris.

ENDNOTE: [2]Contaminant restriction means that the technology is not BDAT for that contaminant. If debris containing a restricted contaminant is treated by the technology, the contaminant must be subsequently treated by the technology for which it is not restricted in order to be land disposed (and excluding from subtitle C regulation).

ENDNOTE: [3]Clean debris surface means the surface, when viewed without magnification, shall be free of all visible contaminated soil and hazardous waste except that residual staining from soil and waste consisting of light shadows, slight streaks, or minor discolorations and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits shall be limited to no more than 5 percent of each square inch of surface area.

ENDNOTE: [4]Acids, solvents, and chemical reagents may react with some debris and contaminants to form hazardous compounds. For example, acid washing of cyanide-contaminated debris could result in the formation of hydrogen cyanide. Some acids may also react violently with some debris and contaminants, depending on the concentration of the acid and the type of debris and contaminants. Debris treaters should refer to the safety precautions specified in the Material Safety Data Sheets for various acids to avoid applying an incompatible acid to a particular debris/contaminant combination. For example, concentrated sulfuric acid may react violently with certain organic compounds, such as acrylonitrile.

ENDNOTE: [5]If reducing the particle size of debris to meet the treatment standards results in material that no longer meets the 60-mm minimum particle size limit for debris, such material is subject to the waste-specific treatment standards for the waste contaminating the material, unless the debris has been cleaned and separated from contaminated soil and waste

prior to size reduction. At a minimum, simple physical or mechanical means must be used to provide such cleaning and separation of nondebris materials to ensure that the debris surface is free of caked soil, waste, or nondebris materials.

ENDNOTE: [6]Dioxin-listed wastes are EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027.

ENDNOTE: [7]Thermal desorption is distinguished from thermal destruction in that the primary purpose of thermal desorption is to volatilize contaminates and to remove them from the treatment chamber for subsequent destruction or other treatment.

ENDNOTE: [8]The demonstration "Equivalent Technology" under LAC 33:V.2228.B must document that the technology treat appropriate contaminants to the level equivalent to that required by the performance and design and operating standards for other technologies in this table such that residual levels of hazardous contaminants will not pose a hazard to human health and the environment absent management controls.

ENDNOTE: [9]Any soil, waste, and other nondebris material that remains on the debris surface (or remains mixed with the debris) after treatment is considered a treatment residual that must be separated from the debris using, at a minimum, simple physical or mechanical means. Examples of simple physical or mechanical means are vibratory or trommel screening or water washing. The debris surface need not be cleaned to a "clean debris surface" as defined in endnote 3 when separating treated debris from residue; rather, the surface must be free of caked soil, waste, or other nondebris material. Treatment residuals are subject to the waste-specific treatment standards for the waste contaminating the debris.

Table 9
Alternative Treatment Standard

Waste code	See Also	Regulated Hazardous Constituent	CAS No. for Regulated Hazardous Constituent	Nonwastewaters Concentration (mg/l) TCLP
F006	LAC 33:V. Chapter 22. Table 2	Antimony	7440-36-0	2.1
		Arsenic	7440-38-2	0.055
		Barium	7440-39-3	7.6
		Beryllium	7440-41-7	0.014
		Cadmium	7440-43-9	0.19
		Chromium (total)	7440-47-32	0.33
		Cyanide (mg/kg) (total)	57-12-5	1.8
		Lead	7439-92-1	0.37
		Mercury	7439-97-6	0.009
		Nickel	7440-02-0	5.0
		Selenium	7782-49-2	0.16
		Silver	7440-22-4	0.30
		Thallium		0.078
		Zinc	7440-66-6	5.3
K062	LAC 33:V. Chapter 22. Table 2	Antimony	7440-36-0	2.1
		Arsenic	7440-38-2	0.055
		Barium	7440-39-3	7.6
		Beryllium	7440-41-7	0.014
		Cadmium	7440-43-9	0.19
		Chromium (total)	7440-47-32	0.33
		Lead	7439-92-1	0.37
		Mercury	7439-97-6	0.009
		Nickel	7440-02-0	5.0
		Selenium	7782-49-2	0.16
		Silver	7440-22-4	0.30
		Thallium		0.078
		Zinc	7440-66-6	5.3

Chapter 23. Waste Piles

§2301. Applicability

A. The regulations in this Subpart apply to owners and operators of facilities that store or treat hazardous waste in piles, except as specified in LAC 33:V.105.D.

B. The regulations in this Subpart do not apply to owners or operators of waste piles that are closed with wastes left in place. Such waste piles are subject to regulations as specified in LAC 33:V.Chapter 25 (Landfills).

C. The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated is in compliance with LAC 33:V.Chapter 33 (Groundwater Protection) provided that:

1. the waste pile is designed as specified in LAC 33:V.2303.A and is inspected as required by LAC 33:V.2307 on a quarterly basis (or less often with the approval of the administrative authority);

2. liquids or materials containing free liquids are not placed in the pile;

3. the pile is protected from surface water run-off by the structure or in some other manner;

4. the pile, where necessary, is designed and operated to ntrol dispersal of the waste by wind or by means other than tting; and

5. the pile will not generate leachate through decomposition or other reactions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2303. Design and Operating Requirements

A. A waste pile (except for the portion of the waste pile in operation prior to date of issuance of the hazardous waste permit) must have:

1. a synthetic liner that is designed, constructed, and installed to prevent any migration of wastes out of the pile into the adjacent subsurface soil, or groundwater or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or, groundwater or surface water) during the active life of the facility. The liner must be:

a. constructed of materials that have appropriate chemical properties and sufficient strength and thickness to event failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operations;

b. placed upon a foundation or base capable of providing support to the liner and resistant to pressure gradients above and below the liner in order to prevent failure of the liner due to settlement, compression, or uplift; and*

c. installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

2. a leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The administrative authority will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 centimeters (one foot). The leachate collection and removal system must be constructed of materials that are:

a. chemically resistant to the waste managed in the pile and the leachate expected to be generated; and*

b. of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and any equipment used at the pile; and

c. designed and operated to function without clogging through the scheduled closure of the waste pile.

B. The owner or operator may be exempted from the requirements of LAC 33:V.2303.A if the administrative authority finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the administrative authority will consider:

1. the nature and quantity of the wastes;

2. the proposed alternate design and operation;

3. the hydrogeologic setting of the facility, including attenuating capacity and thickness of the liners and soils present between the pile, and groundwater or surface water; and

4. all other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

C. The owner or operator of each new waste pile unit on which construction commenced after January 29, 1992, each lateral expansion of a waste pile unit on which construction commenced after July 29, 1992, and each replacement of an existing waste pile unit that was to commence reuse after July 29, 1992 must have installed two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in LAC 33:V.109.Existing Facilities.

1. The liner system must include:

a. a top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous

constituents into such liner during the active life and post-closure care period; and

b. a composite bottom liner consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10^{-7} cm/sec. The administrative authority may require additional liner design requirements based on the location of the waste pile in relation to drinking water aquifers.

2. The liners must comply with LAC 33:V.2303.A.1.a-c.

3. The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The administrative authority will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 1 foot (30 cm). The leachate collection and removal system must comply with LAC 33:V.2303.C.4.c-d.

4. The leachate collection and removal system between the liners (and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems) is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner which are likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this Section are satisfied by installation of a system that is, at a minimum:

a. constructed with a bottom slope of 2 percent or more;

b. constructed of granular drainage materials with a hydraulic conductivity of 1 x 10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x 10^{-5} m^2/sec or more;

c. constructed of materials that are chemically resistant to the waste managed in the waste pile and the leachate expected to be generated and that are of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;

d. designed and operated to minimize clogging during the active life and post-closure care period; and

e. constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed from the sump.

5. The owner or operator shall collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

6. The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of groundwater.

D. The administrative authority may approve alternative design or operating practices to those specified in LAC 33:V.2303.C if the owner or operator demonstrates to the administrative authority that such design and operating practices, together with location characteristics:

1. will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal systems specified in LAC 33:V.2303.C; and

2. will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

E. LAC 33:V.2303.C does not apply to monofills that are granted a waiver by the administrative authority in accordance with LAC 33:V.2903.L.

F. The owner or operator of any replacement waste pile unit is exempt from LAC 33:V.2303.C if:

1. the existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

2. there is no reason to believe that the liner is not functioning as designed.

G. The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 24-hour, 25-year storm.

H. The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

I. Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

J. If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal. Wetting of the waste pile for control of particulate matter is not

allowed unless the waste pile is equipped with a leachate collection system equivalent to LAC 33:V.2303.A.2.

~~c. The owner or operator of a double-lined waste pile is~~ subject to regulation under LAC 33:V.Chapter 33 and the following conditions:

1. The pile must be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of LAC 33:V.2303.A.1.

2. A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquids into the space between the liners.

3. The pile must have a leachate collection and removal system above the top liner that is designed, constructed, maintained, and operated in accordance with LAC 33:V.2303.A.2.

4. If liquid leaks into the leak detection system, the owner or operator must:

a. notify the administrative authority of the leak in writing within seven days after detecting the leak; and

b. within a period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of the liquids through the liner, and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the leak has been stopped.

L. The administrative authority will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 21:267 (March 1995).

§2304. Action Leakage Rate

A. The administrative authority shall approve an action leakage rate for waste pile units subject to LAC 33:V.2303.C or D. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

B. To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under LAC 33:V.2309.C to an average daily flow rate (gallons per acre per day) for each sump. Unless the administrative authority approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§2305. Exemptions

There are no exemptions from the groundwater protection requirements in LAC 33:V.Chapter 33 except as provided in LAC 33:V.3301.C.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 20:1000 (September 1994).

§2306. Response Actions

A. The owner or operator of waste pile units subject to LAC 33:V.2303.C or D must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in LAC 33:V.2306.B.

B. If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

1. notify the administrative authority in writing of the exceedence within seven days of the determination;

2. submit a preliminary written assessment to the administrative authority within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

3. determine to the extent practicable the location, size, and cause of any leak;

4. determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

5. determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

6. within 30 days after the notification that the action leakage rate has been exceeded, submit to the administrative authority the results of the analyses specified in LAC 33:V.2306.B.3-5, of actions taken, and of remedial actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the administrative authority a report summarizing the results of any remedial actions taken and actions planned.

C. To make the leak and/or remediation determinations in LAC 33:V.2306.B.3-5, the owner or operator must:

1. assess the sources of liquids and amounts of liquids by source;

2. conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the sources of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

3. assess the seriousness of any leaks in terms of potential for escaping into the environment; or

4. document why such assessments are not needed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§2307. Inspection of Synthetic Liners

A. The facility must provide the department with 30 days advance notice of the initial liner installation to allow the administrative authority the opportunity to inspect the liner and its installation.

B. The liner must be inspected on a regular basis by removing the waste pile. The facility must notify the department at least 30 days prior to the inspection to allow the administrative authority the opportunity to inspect the liner. If deterioration, a crack, or other condition is identified that is causing or could cause a leak, the owner or operator must:

1. notify the administrative authority of the condition in writing within seven days after detecting the condition; and

2. repair or replace the liner and foundation or base and obtain a certification from an independent qualified engineer that, to the best of his knowledge and opinion, the liner and foundation or base have been repaired and leakage will not occur; or

3. if a detection monitoring program pursuant to LAC 33:V.3317 has already been established in the permit (to be complied with only if a leak occurs), comply with that program and any other applicable requirements of LAC 33:V.Chapter 33 within the period of time specified in the permit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2309. Monitoring and Inspection

A. During construction or installation, liners (except in the case of existing portions of piles exempt from LAC 33:V.2303.A), and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

1. synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

2. soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

B. While a waste pile is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

1. deterioration, malfunctions, or improper operation of run-on and run-off control systems;

2. proper functioning of wind dispersal control systems, where present; and

3. the presence of leachate in and proper functioning of leachate collection and removal systems, where present. Leachate must be disposed of properly;

4. the presence of liquids in leak detection system.

C. An owner or operator required to have a leak detection system under LAC 33:V.2303.C must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 18:1256 (November 1992), LR 21:266 (March 1995).

§2311. Special Requirements for Ignitable or Reactive Waste

A. Ignitable or reactive waste must not be placed in a waste pile unless ~~the waste and the pile satisfy all applicable requirements of LAC 33:V.Chapter 22, and~~:

1. The waste is treated, rendered, or mixed before or immediately after placement in the pile so that:

a. the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under the definition of ignitability or reactivity in LAC 33:V.4903; and

b. the general requirements for ignitable, reactive, or incompatible wastes as specified in LAC 33:V.1517.B are met; or

2. The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:1057 (December 1990).

§2313. Special Requirements for Incompatible Wastes

A. Incompatible wastes, or incompatible wastes and materials must not be placed in the same pile, unless LAC 33:V.1517.B or 4321 for interim status facilities is complied with.

B. A pile of hazardous waste that is incompatible with any waste or other stored nearby in containers, other piles, open tanks, or surface impoundments must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device.

C. Hazardous waste must not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with LAC 33:V.1517.B or 4321 for interim status facilities.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2315. Closure and Post-closure Care

A. At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless LAC 33:V.109.Hazardous Waste.6 applies.

B. If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in LAC 33:V.2315.A, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills as specified in LAC 33:V.2521.

C. The owner or operator of a waste pile that does not comply with the liner requirements of LAC 33:V.2303.A.1 and is not exempt under LAC 33:V.2301.C and 2303.B must:

1. include in the closure plan for the pile under LAC 33:V.3511 a plan for complying with LAC 33:V.2315.A and a contingent plan for complying with LAC 33:V.2315.B in case all contaminated subsoils cannot be practicably removed at closure; and

2. prepare a contingent post-closure plan under LAC 33:V.3523 for complying with LAC 33:V.2315.B in case all contaminated subsoils cannot be practicably removed at closure.

D. The cost estimates calculated under LAC 33:V.3705 and 3709 for closure and post-closure care of a pile subject to this Paragraph must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under LAC 33:V.2315.A.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§2317. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027

A. Hazardous wastes F020, F021, F022, F023, F026, and F027 must not be placed in waste piles that are not enclosed (as defined in LAC 33:V.2301.C) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the administrative authority pursuant to the standards set out in this Subsection, and in accord with all other applicable requirements of LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37. The factors to be considered are:

1. the volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. the attenuative properties of underlying and surrounding soils or other materials;

3. the mobilizing properties of other materials co-disposed with these wastes; and

4. the effectiveness of additional treatment, design, or monitoring techniques.

B. The administrative authority may determine that additional design, operating, and monitoring requirements are necessary for piles managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to groundwater, surface water, or air so as to protect human health and the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 20:1000 (September 1994).

Chapter 25. Landfills

§2501. Applicability

The regulations in this Chapter apply to owners and operators of facilities that dispose of hazardous waste in landfills, except as specified in LAC 33:V.105.D.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§2503. Design and Operating Requirements

A. Any landfill that is not covered by LAC 33:V.2503.K or 4512.A must have a liner system for all portions of the landfill (except for existing portions of such landfill). The liner system must have:

1. a liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil, or groundwater or surface water throughout the active life (including the closure period) of the landfill. The liner, at a minimum, must consist of a synthetic liner laid on top of a permanent barrier at the bottom and along the sides of the landfill. The liner must be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The liner must be installed to cover all surrounding earth likely to be in contact with the waste or leachate. The liner must be:

a. constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

b. placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift;

c. be resistant to the action of the elements, contents placement (including equipment used to place contents), and chemical action of the contents by means protecting the integrity of the barrier; and

d. the permanent barrier shall be at least three feet of recompacted clay with a permeability of 1×10^{-7} cm/sec or less and so designed and operated as to prevent endangering any fresh-water aquifer by the migration of contaminants from the facility, or equivalent system acceptable to administrative authority; and

2. a leachate collection and removal system immediately above the synthetic liner that is designed, constructed, maintained and operated to collect and remove leachate from the landfill. The administrative authority will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 centimeters (one foot). The leachate collection and removal system must be designed and operated to function without clogging through the scheduled closure of the landfill and constructed of materials that are:

a. chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

b. of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and any equipment used at the landfill.

B. Unless the permittee demonstrates to the administrative authority that the first permeable zone in which groundwater monitoring would occur is not a potable water aquifer, a leachate detection system shall be provided. A permanent barrier of at least three feet of recompacted clay with a permeability of 1×10^{-7} cm/sec or less shall be installed below the leachate detection system, which is located immediately under the liner system as required by LAC 33:V.2503.A unless an equivalent system is acceptable to the administrative authority.

C. The owner or operator of any replacement landfill unit is exempt from LAC 33:V.2503.L if:

1. the existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

2. there is no reason to believe that the liner is not functioning as designed.

D. The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from a 24-hour, 25-year storm.

E. The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

F. Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be

emptied or otherwise managed expeditiously after storms to maintain the design capacity of the system. Collected material st be disposed of properly.

G. If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal. Wetting of the landfill for control of particulate matter is not allowed unless the landfill is equipped with a leachate collection system equivalent to LAC 33:V.2503.A.2.

H. The administrative authority will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

I. If noxious gases are generated, (or have the potential to be generated), the administrative authority may specifically require a gas collection and control system.

J. Accumulated rainfall and groundwater must be removed from the active portions of landfills in a timely manner.

K. Materials That May Be Landfilled

1. Materials that may be landfilled using clay encapsulation in compliance with the permit, any order of the assistant secretary, and state or federal regulations, if they meet the following criteria:

a. the material does not contain free liquid, except for laboratory packs;

b. the content of the metals listed in LAC 33:V.4903.D as amended does not exceed 50 percent;

c. the free cyanide content does not exceed 500 ppm;

d. the phenol concentration does not exceed 5 percent;

e. the PCB content does not exceed 50 ppm;

f. any leachate that would be produced can be handled by the facility with existing technology;

g. halogenated solvents content does not exceed 5 percent, i.e., waste streams numbers F001, F002, K016, K019, K029, K030, K085, K095, K096, P028, U025, U037, U044, U048, U070, U071, U072, U076, U077, U078, U079, U080, U083, U084, U131, U184, U207, U208, U209, U210, U226, U227, and U228;

h. nonhalogenated solvents content does not exceed 10 percent, i.e, waste streams numbers F003, F004, F005, F009, K025, U019, U056, U159, U220, and U239;

i. the material is not a confined gas;

j. it is not an infectious waste as defined in LAC 33:V.109;

k. it is not an ignitable waste as defined in LAC 33:V.4903.A;

l. it is not a corrosive waste as defined by the pH limits in LAC 33:V.4903.B;

m. it is not a reactive waste as defined in LAC 33:V.4903.C;

n. it is not a radioactive waste as defined by the regulations of the Nuclear Division; and

~~o. it is not a listed hazardous waste as defined in LAC 33:V.Chapter 49 and it is not banned from land disposal as set forth in LAC 33:V.Chapter 22.~~

2. Permittees may request approval for landfilling of wastes which do not meet the criteria on a case-by-case basis. Such a request must include specific data on how such waste does not meet the criteria, documentation on why high technology destruction/detoxification is not practicable, and provide risk assessment information as to why such landfilling will not endanger public health or the environment.

3. The administrative authority may authorize changes, up to double the specified value, on the following materials listed in LAC 33:V.2503.J.1: metals, free cyanide, phenol, halogenated solvents, and nonhalogenated solvents.

L. The owner or operator of each new landfill unit on which construction commenced after January 29, 1992, each lateral expansion of a landfill unit on which construction commenced after July 29, 1992, and each replacement of an existing landfill unit that was to commence reuse after July 29, 1992, must have installed two or more liners and a leachate collection and removal system above and between such liners. "Construction commences" is as defined in LAC 33:V.109.Existing Facilities.

1. The liner system must include:

a. a top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and

b. a composite bottom liner consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10^{-7} cm/sec. The administrative authority may require additional liner design requirements based on the location of the landfill in relation to drinking water aquifers.

2. The liners must comply with LAC 33:V.2503.A.1.a-d.

3. The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post-closure care period. The administrative authority will specify design and operating conditions in the permit to ensure that the leachate depth over

the liner does not exceed 1 foot (30 cm). The leachate collection and removal system must comply with LAC 33:V.2503.L.4.c-d.

4. The leachate collection and removal system between the liners (and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems) is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner which are likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this Section are satisfied by installation of a system that is, at a minimum:

a. constructed with a bottom slope of 2 percent or more;

b. constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more;

c. constructed of materials that are chemically resistant to the waste managed in the landfill and the leachate expected to be generated and are of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the landfill;

d. designed and operated to minimize clogging during the active life and post-closure care period; and

e. constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

5. The owner or operator shall collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.

6. The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of groundwater.

M. The administrative authority may approve alternative design or operating practices to those specified in LAC 33:V.2503.L if the owner or operator demonstrates to the administrative authority that such design and operating practices, together with location characteristics:

1. will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal systems specified in LAC 33:V.2503.L; and

2. will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

N. The double liner requirements set forth in LAC 33:V.2503.L may be waived by the administrative authority for any monofill under the following circumstances:

1. The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the Toxicity Characteristic in LAC 33:V.4903.E (Hazardous Waste Numbers D004 through D017 only); and

2. The monofill meets the criteria of either LAC 33:V.2503.M.2.a or b below:

a. The monofill:

i. has at least one liner for which there is no evidence that such liner is leaking;

ii. is located more than one-quarter mile from an underground source of drinking water (as that term is defined in LAC 33:V.109); and

iii. is in compliance with generally applicable groundwater monitoring requirements for facilities with permits.

b. The owner or operator demonstrates that the monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into groundwater or surface water at any future time.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:220 (March 1990), LR 17:368 (April 1991), LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 21:267 (March 1995).

§2504. Action Leakage Rate

A. The administrative authority shall approve an action leakage rate for landfill units subject to LAC 33:V.2503.L or M. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and

clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

J. To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under LAC 33:V.2507.D to an average daily flow rate (gallons per acre per day) for each sump. Unless the administrative authority approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period and monthly during the post-closure care period when monthly monitoring is required under LAC 33:V.2507.D.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§2505. Exemption

There are no exemptions from the groundwater protection requirements in LAC 33:V.Chapter 33.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2507. Monitoring and Inspection

A. The facility must provide the department with 30 days advanced notice of the times of installation to allow the administrative authority the opportunity to inspect the liner and installation.

B. During construction or installation, liners (except in the case of existing portions of landfills exempt from LAC 33:V.2503.A) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

1. synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

2. soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

C. While a landfill is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

[Comment: The permit application must include a detailed inspection plan.]

1. deterioration, malfunctions, or improper operation of run-on and run-off control systems;

2. the presence of liquids in leak detection systems;

3. proper functioning of wind dispersal control systems, where present; and

4. the presence of leachate in and proper functioning of leachate collection and removal systems, where present.

D. An owner or operator required to have a leak detection system under LAC 33:V.2503.L or M must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

1. After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi-annually. If, at any time during the post-closure care period, the pump operating level is exceeded at units on quarterly or semi-annual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

2. "Pump operating level" is a liquid level proposed by the owner or operator and approved by the administrative authority based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

§2508. Response Actions

A. The owner or operator of landfill units subject to LAC 33:V.2503.L or M must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in LAC 33:V.2508.B.

B. If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

1. notify the administrative authority in writing of the exceedence within seven days of the determination;

2. submit a preliminary written assessment to the administrative authority within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

3. determine to the extent practicable the location, size, and cause of any leak;

4. determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

5. determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

6. within 30 days after the notification that the action leakage rate has been exceeded, submit to the administrative authority the results of the analyses specified in LAC 33:V.2508.B.3-5, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the administrative authority a report summarizing the results of any remedial actions taken and remedial actions planned.

C. To make the leak and/or remediation determinations in LAC 33:V.2508.B.3-5, the owner or operator must:

1. assess the sources of liquids and amounts of liquids by source;

2. conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the sources of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

3. assess the seriousness of any leaks in terms of potential for escaping into the environment; or

4. document why such assessments are not needed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§2509. Surveying and Recordkeeping

The owner or operator of a landfill must maintain the following items in the operating record:

A. on a map, the exact location and dimensions, including depth of each cell with respect to permanently surveyed benchmarks; and

B. the contents of each cell and the approximate location of each hazardous waste type within each cell.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2511. Special Requirements for Ignitable or Reactive Waste

A. Except as provided in LAC 33:V.2511.B and 2519, ignitable or reactive waste must not be placed in a landfill, unless ~~the waste and landfill meet all applicable requirements of LAC 33:V.Chapter 22, and~~ the waste is treated, rendered, or mixed before or immediately after placement in a landfill so that:

1. the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste in LAC 33:V.4903.B or D; and

2. LAC 33:V.1517 is complied with ~~or LAC 33:V.4321 for interim status facilities.~~

B. Except for prohibited wastes subject to treatment standards in LAC 33:V.Chapter 22, ignitable wastes in containers may be landfilled without meeting the requirements of LAC 33:V.2511.A, provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes:

1. must be disposed of in non-leaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; and

2. must be covered daily with soil or other non-combustible material to minimize the potential for ignition of the wastes; and

3. must not be disposed of in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:1057 (December 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994).

§2513. Special Requirements for Incompatible Wastes

Incompatible wastes, or incompatible wastes and materials, must not be placed in the same landfill cell, unless LAC 33:V.1517 is complied with or LAC 33:V.4321 for interim status facilities.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§2515. Special Requirements for Bulk and Containerized Liquids

A. Bulk or noncontainerized liquid waste or waste containing free liquids may be placed in a landfill prior to May 8, 1985 only if:

1. the landfill has a liner and leachate collection and removal system that meet the requirements of LAC 33:V.2503.A; or

2. before disposal, the liquid waste or waste containing free liquids is treated or stabilized, chemically or physically (i.e., by mixing with a sorbent solid), so that free liquids are no longer present.

B. Effective May 8, 1985, the placement of bulk or noncontainerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

C. Containers holding free liquids must not be placed in a landfill unless:

1. all free-standing liquids:

a. have been removed by decanting, or other methods;

b. have been mixed with sorbent or solidified so that the free-standing liquid is no longer present; or

c. have been otherwise eliminated; or

2. the container is very small such as an ampule; or

3. the container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

4. the container is a lab pack as defined in LAC 33:V.109 and is disposed of in accordance with LAC 33:V.2519.

D. To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846).

E. Effective November 8, 1985, the placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the administrative authority, or the administrative authority determines, that:

1. the only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste; and

2. placement in such owner's or operator's landfill will not present a risk of contamination of any underground source of drinking water or groundwater (as these terms are defined in LAC 33:V.109).

F. Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are: materials listed or described in LAC 33:V.2515.F; materials that pass one of the tests in LAC 33:V.2515.F.2; or materials that are determined by the administrative authority to be nonbiodegradable through the petition process in LAC 33:V.105.

1. Nonbiodegradable Sorbents

a. inorganic minerals, other inorganic materials, and elemental carbon, such as aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites; calcium carbonate (organic free limestone); oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth; perlite (volcanic glass); expanded volcanic rock; volcanic ash; cement kiln dust; fly ash; rice hull ash; activated charcoal/activated carbon; or

b. high molecular weight synthetic polymers, such as polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstyrene and tertiary butyl copolymers. This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

c. mixtures of these nonbiodegradable materials.

2. Tests for Nonbiodegradable Sorbents

a. the sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a)-Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or

b. the sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b)-Standard Practice for Determining Resistance of Plastics to Bacteria.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§2517. Special Requirements for Containers

Unless they are very small, such as an ampule, containers must be either:

A. at least 90 percent full when placed in the landfill; or

B. emptied and crushed flat, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2519. Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs)

Lab packs may be placed in a landfill if the following requirements are met:

A. hazardous waste must be packaged in non-leaking inside containers. The inside containers must be designed and

constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the Louisiana Department of Public Safety (LDPS) hazardous materials/hazardous waste regulations LAC 33:V.Subpart 2.Chapter 101 if those regulations specify a particular inside container for the waste;

B. the inside containers must be overpacked in an open head LDPS specification metal shipping container LAC 33:V.Subpart 2.Chapter 101 of no more than 416-liter (110-gallon) capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material to completely sorb all of the liquid contents of the inside containers. The metal outer container must be full after packing with inside containers and sorbent material;

C. the sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers in accordance with LAC 33:V.1517;

D. incompatible wastes, as defined in LAC 33:V.109, must not be placed in the same outside container;

E. reactive wastes, other than cyanide- or sulfide-bearing waste, as defined in LAC 33:V.109, must be treated or rendered non-reactive prior to packaging in accordance with LAC 33:V.2519.A, B, C, D and F. Cyanide- and sulfide-bearing reactive waste may be packed in accordance with LAC 33:V.2519.A, B, C, D and F without first being treated or rendered non-reactive; and

~~F. such disposal is in compliance with the requirements of~~ LAC 33:V.Chapter 22. Persons who incinerate lab packs according to the requirements in LAC 33:V.2227.C.1 may use fiber drums in place of metal outer containers. Such fiber drums must meet the LDPS specifications in LAC 33:V.Subpart 2.Chapter 101, and be overpacked according to ~~the requirements in Subsection B of this Section.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, in LR 10:200 (March 1984), amended LR 16:1057 (December 1990), LR 21:266 (March 1995).

§2521. Closure and Post-closure Care

A. At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:

1. provide long-term minimization of migration of liquids through the closed landfill;

2. function with minimum maintenance;

3. promote drainage and minimize erosion or abrasion of the cover;

4. accommodate settling and subsidence so that the cover's integrity is maintained; and

5. have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

B. After final closure, the owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period (specified in the permit under LAC 33:V.3521.A.1). The owner or operator must:

1. maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

~~2. maintain and monitor the leak detection system in~~ accordance with LAC 33:V.2503.L.4.d, ~~2503.L.5~~, and 2507.D, where such a ~~system is present~~ between double liner systems and ~~comply~~ with all other applicable leak detection ~~system requirements of LAC 33:V.Chapter 43;~~

3. continue to operate the leachate collection and removal system until leachate is no longer detected;

4. maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.Chapter 33;

5. prevent run-on and run-off from eroding or otherwise damaging the final cover; and

6. protect and maintain surveyed benchmarks used in complying with LAC 33:V.Chapter 33.

C. During the post-closure care period, if liquid leaks into a leak detection system installed under LAC 33:V.3305, the owner or operator must notify the administrative authority of the leak in writing within seven days after detecting the leak.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§2523. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027

A. Hazardous Wastes F020, F021, F022, F023, F026, and F027 must not be placed in a landfill unless the owner or operator operates the landfill in accordance with a management plan for these wastes which is approved by the administrative authority pursuant to the standards set out in this Subsection, and in accordance with all other applicable requirements of LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37. The factors to be considered are:

1. the volume, physical and chemical characteristics of wastes, including their potential to migrate through the soil or volatilize or escape into the atmosphere;

2. the attenuative properties of underlying and surrounding soils or other materials;

3. the mobilizing properties of other materials codisposed with these wastes; and

4. the effectiveness of additional treatment, design or monitoring requirements.

B. The administrative authority may determine that additional design, operating and monitoring requirements are necessary for landfills containing hazardous wastes to groundwater, surface water, or air so as to protect human health and the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 20:1000 (September 1994).

Chapter 26. Corrective Action Management Units and Temporary Units

§601. Corrective Action Management Units (CAMU)

A. For the purpose of implementing remedies under LAC 33:V.3322 or RCRA Section 3008(h), the administrative authority may designate an area at a facility as a corrective action management unit as defined in LAC 33:V.109, in accordance with the requirements of this Section. One or more CAMUs may be designated at a facility.

1. Placement of remediation wastes into or within a CAMU does not constitute land disposal of hazardous wastes.

2. Consolidation or placement of remediation wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

B. Designation of a Regulated Unit as a CAMU or Incorporation of Regulated Units into a CAMU

1. The administrative authority may designate a regulated unit (as defined in LAC 33:V.3301.A) as a CAMU or may incorporate a regulated unit into a CAMU, if:

a. the regulated unit is closed or closing, meaning it has begun the closure process under LAC 33:V.3513 or 4383; and

b. inclusion of the regulated unit will enhance implementation of effective, protective, and reliable remedial actions for the facility.

2. The LAC 33:V.Chapters 33, 35, 37, and the unit-specific requirements of Chapter 43 will continue to apply to that same portion of the CAMU after incorporation into the CAMU.

C. The administrative authority shall designate a CAMU in accordance with the following:

1. the CAMU shall facilitate the implementation of reliable, effective, protective, and cost-effective remedies;

2. waste management activities associated with the CAMU shall not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;

3. the CAMU shall include uncontaminated areas of the facility only if including such areas for the purpose of managing remediation waste is more protective than management of such wastes at contaminated areas of the facility;

4. areas within the CAMU where wastes remain in place after closure of the CAMU shall be managed and contained so as to minimize future releases to the extent practicable;

5. the CAMU shall expedite the timing of remedial activity implementation when appropriate and practicable;

6. the CAMU shall enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

7. the CAMU shall, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

D. The owner/operator shall provide sufficient information to enable the administrative authority to designate a CAMU in accordance with the criteria in LAC 33:V.2601.

E. The administrative authority shall specify in the permit or order requirements for CAMUs to include the following:

1. the areal configuration of the CAMU;

2. requirements for remediation waste management to include the specification of applicable design, operation, and closure requirements;

3. requirements for groundwater monitoring that are sufficient to:

a. continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in groundwater from sources located within the CAMU; and

b. detect and subsequently characterize releases of hazardous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU;

4. Closure and Post-closure Requirements

a. closure of corrective action management units shall:

i. minimize the need for further maintenance; and

ii. control, minimize, or eliminate to the extent necessary to protect human health and the environment for areas where wastes remain in place, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere;

b. requirements for closure of CAMUs shall include the following, as appropriate and as deemed necessary by the administrative authority for a given CAMU:

i. excavation, removal, treatment,or containment of wastes;

ii. capping of areas where wastes will remain after closure of the CAMU; and

iii. removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU;

c. in establishing specific closure requirements for CAMUs under LAC 33:V.2601.E, the administrative authority shall consider the following factors:

i. CAMU characteristics;

ii. volume of wastes which remain in place after closure;

iii. potential for releases from the CAMU;

iv. physical and chemical characteristics of the waste;

v. hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases; and

vi. potential for exposure of humans and environmental receptors if releases were to occur from the CAMU;

d. post-closure requirements as necessary to protect human health and the environment, to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities shall be performed to ensure the integrity of any cap, final cover, or other containment system.

F. The administrative authority shall document the rationale for designating CAMUs and shall make such documentation available to the public.

G. Incorporation of a CAMU into an existing permit must be approved by the administrative authority according to the procedures for department-initiated permit modifications under LAC 33:V.323 or according to the permit modification procedures of LAC 33:V.321.

H. The designation of a CAMU does not change the administrative authority's existing authority to address cleanup levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§2603. Temporary Units (TU)

A. For temporary tanks and container storage areas used for treatment or storage of hazardous remediation wastes during remedial activities required under LAC 33:V.3322 or RCRA section 3008(h), the administrative authority may determine that a design, operating, or closure standard applicable to such units may be replaced by alternative requirements which are protective of human health and the environment.

B. Any temporary unit to which alternative requirements are applied in accordance with LAC 33:V.2603.A shall be:

1. located within the facility boundary; and

2. used only for treatment or storage of remediation wastes.

C. In establishing standards to be applied to a temporary unit, the administrative authority shall consider the following factors:

1. length of time such unit will be in operation;

2. type of unit;

3. volumes of wastes to be managed;

4. physical and chemical characteristics of the wastes to be managed in the unit;

5. potential for releases from the unit;

6. hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and

7. potential for exposure of humans and environmental receptors if releases were to occur from the unit.

D. The administrative authority shall specify in the permit or order the length of time which a temporary unit will be allowed to operate to be no longer than a period of one year. The administrative authority shall also specify the design, operating, and closure requirements for the unit.

E. The administrative authority may extend the operational period of a temporary unit once for no longer than a period of one year beyond that time originally specified in the permit or order, if the administrative authority determines that:

1. continued operation of the unit will not pose a threat to human health and the environment; and

2. continued operation of the unit is necessary to ensure timely and efficient implementation of remedial actions at the facility.

F. Incorporation of a temporary unit or a time-extension for a temporary unit into an existing permit shall be:

~~1. approved in accordance with the procedures for artment-initiated permit modifications under LAC V.327; or~~

2. requested by the owner/operator as a Class II modification according to the procedures under LAC 33:V.321.

G. The administrative authority shall document the rationale for designating a temporary unit and for granting time extensions for temporary units and shall make such documentation available to the public.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

Chapter 27. Land Treatment

§2701. Applicability

The regulations in this Chapter apply to owners and operators of facilities that treat or dispose of hazardous waste in land treatment units, except as LAC 33:V.105.D provides otherwise.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2703. Design and Operating Requirements

A. The owner or operator must design, construct, operate and maintain the unit to maximize the degradation, transformation, and immobilization of hazardous constituents in the treatment zone. The owner or operator must design, construct, operate, and maintain the unit in accordance with all design and operating conditions that were used in the treatment demonstration under LAC 33:V.2707. At a minimum, the administrative authority will specify the following in the facility permit:

1. the rate and method of waste application to the treatment zone;

2. measures to control soil pH;

3. measures to enhance microbial or chemical reactions (e.g., fertilization, tilling); and

4. measures to control the moisture content of the treatment zone.

B. The owner or operator must design, construct, operate, and maintain the treatment zone to minimize run-off of hazardous constituents during the active life of the land treatment unit.

C. The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a 24-hour, 25-year storm.

D. The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

E. Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain the design capacity of the system. Collected material must be disposed of properly.

F. If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator must manage the unit to control wind dispersal.

G. The owner or operator must inspect the unit weekly and after storms to detect evidence of:

1. deterioration, malfunctions, or improper operation of run-on and run-off control systems; and

2. improper functioning of wind dispersal control measures.

H. The administrative authority will specify in the facility permit how the owner or operator will design, construct, operate and maintain the land treatment unit in compliance with this Section.

~~I. Landfarms shall be isolated from contact with public,~~ private, irrigation, or livestock water supplies, both surface and underground. A permit application shall address the technical requirements of LAC 33:V.Chapters 15, 27,33, 35, and 37.

J. Requirements

1. Soils shall be fine-grained with high clay or organic content (e.g., CL, OL, MH, CH, and OH under the Unified Soil Classification System).

2. Soils shall maintain a high cation exchange capacity to absorb metallic elements in the waste by natural (pH range of the soil) or artificial means (additives).

3. Landfarms shall be located in a hydrologic section where the historic high water table is at a safe depth below the zone of incorporation, or the water table at the site shall be controlled to a safe depth below this zone (see LAC 33:V.2705.C.2).

4. Topography shall provide for drainage to prevent ponding.

5. Land slope shall be controlled to prevent erosion.

6. Run-off shall be collected and contained and disposed of by irrigation through reapplication to the treatment zone during drought periods, evaporation, or treatment. Any discharge into the off-site environment shall be governed by a NPDES permit.

7. Groundwater monitoring systems shall be installed that ~~meet with the approval of the administrative authority.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:684 (August 1990).

§2705. Treatment Program

A. An owner or operator subject to this Chapter must establish a land treatment program that is designed to ensure that hazardous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The treatment program must include:

1. the wastes that are capable of being treated at the unit based on a demonstration under LAC 33:V.2707;

2. design measures and operating practices necessary to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with LAC 33:V.2703.A; and

3. unsaturated zone monitoring provisions meeting the requirements of LAC 33:V.2711.

B. The administrative authority will specify in the facility permit the hazardous constituents that must be degraded, transformed, or immobilized under this Subpart. Hazardous constituents are constituents identified in Table 1 of LAC 33:V.Chapter 31 that are reasonably expected to be in or derived from waste placed in or on the treatment zone.

[Comment: The permit application must list the hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to LAC 33:V.1519.]

C. The administrative authority will specify the vertical and horizontal dimensions of the treatment zone in the facility permit. The treatment zone is the portion of the unsaturated zone below and including the land surface in which the owner or operator intends to maintain the conditions necessary for effective degradation, transformation, or immobilization of hazardous constituents. The maximum depth of the treatment zone must be:

1. no more than 1.5 meters (five feet) from the initial soil surface; and

2. more than one meter (three feet) above the seasonal high water table.

D. The administrative authority will specify in the facility permit the elements of the treatment program.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2707. Treatment Demonstration

A. For each waste that will be applied to the treatment zone, the owner or operator must demonstrate, prior to application of the waste, that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

B. In making this demonstration, the owner or operator may use field tests, laboratory analyses, available data, or in the case of existing units, operating data. If the owner or operator intends to conduct field tests or laboratory analyses in order to make the demonstration required under LAC 33:V.2707.A, he must obtain a treatment or disposal permit as specified in LAC 33:V.305.D. The administrative authority will specify in this permit the testing, analytical, design, and operating requirements (including the duration of the tests and analyses, and in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure and clean-up activities) necessary to meet the requirements in LAC 33:V.2707.C.

C. Any field test or laboratory analysis conducted in order to make a demonstration under LAC 33:V.2707.A must:

1. accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:

a. the characteristics of the waste (including the presence of constituents in Table 1 of LAC 33:V.Chapter 31);

b. the climate in the area;

c. the topography of the surrounding area;

d. the characteristics of the soil in the treatment zone (including depth); and

e. the operating practices to be used at the unit.

2. be likely to show that hazardous constituents in the waste to be tested will be completely degraded, transformed, or immobilized in the treatment zone of the proposed land treatment unit; and

3. be conducted in a manner that protects human health and the environment considering:

a. the characteristics of the waste to be tested;

b. the operating and monitoring measures taken during the course of the test;

c. the duration of the test;

d. the volume of waste used in the test;

e. in the case of field tests, the potential for migration of hazardous constituents to groundwater or surface water.

D. Permits for Land Treatment Demonstrations Using Field Tests or Laboratory Analyses

1. For the purpose of allowing an owner or operator to meet the treatment demonstration requirements of LAC 33:V.2707, the administrative authority may issue a treatment demonstration permit. The permit must contain only those requirements necessary to meet the standards in LAC 33:V.2707.C. The permit may be issued either as a treatment or disposal permit covering only the field test or laboratory analyses, or as a two-phase facility permit covering the field tests or laboratory analyses and design, construction, operation and maintenance of the land treatment unit.

a. The administrative authority may issue a two-phase facility permit if he finds that, based on information submitted in Part II of the application, substantial, although incomplete or inconclusive, information already exists upon which to base the issuance of a facility permit.

b. If the administrative authority finds that not enough information exists upon which he can establish permit conditions to attempt to provide for compliance with all of the requirements of this Chapter, he must issue a treatment demonstration permit covering only the field test or laboratory analyses.

2. If the administrative authority finds that a phased permit may be issued, he will establish, as requirements in the first phase of the facility permit, conditions for conducting the field tests or laboratory analyses. These permit conditions will include design and operating parameters (including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, post-demonstration clean-up activities, and any other conditions which the administrative authority finds may be necessary under LAC 33:V.2707.C. The administrative authority will include conditions in the second phase of the facility permit to attempt to meet all requirements of this Chapter pertaining to unit design, construction, operation and maintenance. The administrative authority will establish these conditions in the second phase of the permit based upon the substantial but incomplete or inconclusive information contained in the Part II application.

a. The first phase of the permit will be effective as provided in LAC 33:V.705.B.

b. The second phase of the permit will be effective as provided in LAC 33:V.2707.D.4.

3. When the owner or operator who has been issued a two-phase permit has completed the treatment demonstration, he must submit to the administrative authority a certification, signed by a person authorized to sign a permit application or report under LAC 33:V.507 and 509, that the field tests or laboratory analyses have been carried out in accordance with the conditions specified in phase one of the permit for conducting such tests or analyses. The owner or operator must also submit all data collected during the field tests or laboratory analyses within 90 days of completion of those tests or analyses unless the administrative authority approves a later date.

4. If the administrative authority determines that the results of the field tests or laboratory analyses meet the requirements of LAC 33:V.2707, he or she will modify the second phase of the permit to incorporate any requirements necessary for operation of the facility in compliance with this Chapter, based upon the results of the field tests or laboratory analyses.

a. This permit modification may proceed under LAC 33:V.321.C, or otherwise will proceed as a modification under LAC 33:V.323.B.2.c. If such modifications are necessary, the second phase of the permit will become effective only after those modifications have been made.

b. If no modifications of the second phase of the permit are necessary, the administrative authority will give notice of his or her final decision to the permit applicant and to each person who submitted written comments on the phased permit or who requested notice of the final decision on the second phase of the permit. The second phase of the permit then will become effective as specified in LAC 33:V.705.B.

c. If modifications under LAC 33:V.323.B are necessary, the second phase of the permit will become effective only after those modifications have been made.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:614 (July 1990).

§2709. Food-Chain Crops

No produce or food-chain crops may be allowed to grow on a landfarm. Additionally, grasses and other cover plants may not be used for grazing or hay production for domestic livestock.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste Division, Hazardous Waste Division, LR 10:200 (March 1984).

§2711. Unsaturated Zone Monitoring

An owner or operator subject to this Chapter must establish an unsaturated zone monitoring program to discharge the following responsibilities.

A. The owner or operator must monitor the soil and soil-pore liquid to determine whether hazardous constituents migrate out of the treatment zone.

1. The administrative authority will specify the hazardous constituents to be monitored in the facility permit. The hazardous constituents to be monitored are those specified under LAC 33:V.2705.B.

2. The administrative authority may require monitoring for principal hazardous constituents (PHCs) in lieu of the constituents specified under LAC 33:V.2705.B. PHCs are

hazardous constituents contained in the wastes to be applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The administrative authority will establish PHCs if he finds, based on waste analyses, treatment demonstrations, or other data, that effective degradation, transformation, or immobilization of the PHCs will assure treatment at at least equivalent levels for the other hazardous constituents in the wastes.

B. The owner or operator must install an unsaturated zone monitoring system that includes soil monitoring using soil cores and soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system must consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:

[Comment: The permit application must also address the following: (1) Sampling equipment, procedures, and frequency; (2) Procedures for selecting sampling locations; (3) Analytical procedures; (4) Chain of custody control; (5) Procedures for establishing background values; (6) Statistical methods for interpreting results; (7) The justification for any hazardous constituents recommended for selection as principal hazardous constituents in accordance with the criteria for such selection in LAC 33:V.2711.A; and (8) A list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to LAC 33:V.1519.]

1. represent background soil-pore liquid quality and the chemical makeup of soil that has not been affected by leakage from the treatment zone; and

2. indicate the quality of soil-pore liquid and the chemical makeup of the soil below the treatment zone.

C. The owner or operator must establish a background value for each hazardous constituent to be monitored under LAC 33:V.2711.A. The permit will specify the background values for each constituent or specify the procedures to be used to calculate the background values.

1. Background soil values may be based on a one-time sampling at a background plot having characteristics similar to those of the treatment zone.

2. Background soil-pore liquid values must be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.

3. The owner or operator must express all background values in a form necessary for the determination of statistically significant increases under LAC 33:V.2711.F.

4. In taking samples for the determination of all background values, the owner or operator must use an unsaturated zone monitoring system that complies with LAC 33:V.2711.B.1.

D. The owner or operator must conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The administrative authority will specify the frequency and timing of soil and soil-pore liquid monitoring in the facility permit after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator must express the results of soil and soil-pore liquid monitoring in a form necessary for the determination of statistically significant increases under LAC 33:V.2711.F.

E. The owner or operator must use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical makeup of the soil below the treatment zone. At a minimum, the owner or operator must implement procedures and techniques for:

1. sample collection;

2. sample preservation and shipment;

3. analytical procedures; and

4. chain of custody control.

F. The owner or operator must determine whether there is a statistically significant change over background values for any hazardous constituent to be monitored under LAC 33:V.2711.A below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring under LAC 33:V.2711.D.

1. In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent, as determined under LAC 33:V.2711.D, to the background value for that constituent according to the statistical procedure specified in the facility permit under this Subsection.

2. The owner or operator must determine whether there has been a statistically significant increase below the treatment zone within a reasonable time period after completion of sampling. The administrative authority will specify that time period in the facility permit after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.

3. The owner or operator must determine whether there is a statistically significant increase below the treatment zone using a statistical procedure that provides reasonable confidence that migration from the treatment zone will be identified. The administrative authority will specify a statistical procedure in the facility permit that he finds:

a. is appropriate for the distribution of the data used to establish background values; and

b. provides a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.

G. If the owner or operator determines, pursuant to LAC 33:V.2711.F, that there is a statistically significant increase of hazardous constituents below the treatment zone, he must:

1. notify the administrative authority of this finding in writing within seven days. The notification must indicate what constituents have shown statistically significant increases;

2. within 90 days, submit to the administrative authority an application for a permit modification to modify the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone.

H. If the owner or operator determines, pursuant to LAC 33:V.2711.F, that there is a statistically significant increase of hazardous constituents below the treatment zone, he may demonstrate that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. While the owner or operator may make a demonstration under this Subsection in addition to, or in lieu of, submitting a permit modification application under LAC 33:V.2711.G.2, he is not relieved of the requirement to submit a permit modification application within the time specified in LAC 33:V.2711.G.2 unless the demonstration made under this Subsection successfully shows that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. In making a demonstration under this Subsection, the owner or operator must:

1. notify the administrative authority in writing within seven days of determining a statistically significant increase below the treatment zone that he intends to make a determination under this Subsection;

2. within 90 days, submit a report to the administrative authority demonstrating that a source other than the regulated units caused the increase or that the increase resulted from error in sampling, analysis, or evaluation;

3. within 90 days, submit to the administrative authority an application for a permit modification to make any appropriate changes to the unsaturated zone monitoring program at the facility; and

4. continue to monitor in accordance with the unsaturated zone monitoring program established under this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2713. Recordkeeping

The owner or operator must include hazardous waste application dates, application rates, quantities and locations of each hazardous waste placed in the facility in the operating record required under LAC 33:V.1529.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2715. Special Requirements for Ignitable or Reactive Waste

The owner or operator must not apply ignitable or reactive waste to the treatment zone unless ~~the waste and the treatment zone meet all applicable requirements of LAC 33:V.Chapter 22, and~~:

A. The waste is immediately incorporated into the soil so that:

1. the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under LAC 33:V.4903.B or D; and

2. LAC 33:V.1517 or 4321 for interim status facilities is complied with; or

B. The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:1057 (December 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994).

§2717. Special Requirements for Incompatible Wastes

The owner or operator must not place incompatible wastes, or incompatible wastes and materials in or on the same treatment zone, unless LAC 33:V.1517 or LAC 33:V.4321 for interim status facilities is complied with.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2719. Closure and Post-closure Care

A. During the closure period, the owner or operator must:

1. continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of hazardous constituents within the treatment zone as required under LAC 33:V.2703.A, except to the extent such measures are inconsistent with LAC 33:V.2719.A.8;

2. continue all operations in the treatment zone to minimize run-off of hazardous constituents as required under LAC 33:V.2703.B;

3. maintain the run-on control system required under LAC 33:V.2703.C;

4. maintain the run-off management system required under LAC 33:V.2703.D;

5. control wind dispersal of particulate matter if required under LAC 33:V.2703.F;

6. continue to comply with any prohibitions or conditions concerning growth of food-chain crops under LAC 33:V.2709;

7. continue unsaturated zone monitoring in compliance with LAC 33:V.2711, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone; and

8. establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.

B. For the purpose of complying with LAC 33:V.3517, when closure is completed, the owner or operator may submit to the administrative authority certification by an independent qualified soil scientist, in lieu of an independent registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

C. During the post-closure care period, the owner or operator must:

1. continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;

2. maintain a vegetative cover over closed portions of the facility;

3. maintain the run-on control system required under LAC 33:V.2703.C.;

4. maintain the run-off management system required under LAC 33:V.2703.D;

5. control wind dispersal of particulate matter if required under LAC 33:V.2703.F;

6. continue to comply with any prohibitions or conditions concerning growth of food-chain crops under LAC 33:V.2709; and

7. continue unsaturated zone monitoring in compliance with LAC 33:V.2711, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone.

D. The owner or operator is not subject to regulation under LAC 33:V.2719.A.8 and 2719.C if the administrative authority finds that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in LAC 33:V.2719.D.3. The owner or operator may submit such a demonstration to the administrative authority at any time during the closure or post-closure care periods. For the purposes of this Paragraph:

1. The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the facility permit under LAC 33:V.2705.B.

a. Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone.

b. The owner or operator must express background values and values for hazardous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under LAC 33:V.2719.D.3.

2. In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical makeup of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively.

3. In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that the constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that:

a. is appropriate for the distribution of the data used to establish background values; and

b. provides a reasonable balance between the probability of falsely identifying a hazardous constituent presence in the treatment zone and the probability of failing to identify a real presence in the treatment zone.

4. The owner or operator is not subject to regulation under LAC 33:V.Chapter 33 if the administrative authority finds that the owner or operator satisfies LAC 33:V.2719.D and if unsaturated zone monitoring under LAC 33:V.2711 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 14:790 (November 1988).

§2723. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026 and F027

A. Hazardous Wastes F020, F021, F022, F023, F026, and F027 must not be placed in a land treatment unit unless the owner or operator operates the facility in accordance with a management plan for these wastes that is approved by the administrative authority pursuant to the standards set out in this Subsection, and in accordance with all other applicable requirements of the LAC 33:V.Chapters 9, 15, 17, 19, 21,

23, 25, 27, 28, 29, 31, 32, 33, 35, and 37. The factors to be considered are:

1. the volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. the attenuative properties of underlying and surrounding soils or other materials;

3. the mobilizing properties of other materials codisposed with these wastes; and

4. the effectiveness of additional treatment, design, or monitoring techniques.

B. The administrative authority may determine that additional design, operating, and monitoring requirements are necessary for land treatment facilities managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to groundwater, surface water, or air so as to protect human health and the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 20:1000 (September 1994).

Chapter 28. Drip Pads

§2801. Applicability

A. The requirements of this Chapter apply to owners or operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water run-on to an associated collection system. Existing drip pads are those constructed before December 6, 1990 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads.

B. The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor run-on is generated is not subject to regulation under LAC 33:V.2805.E or F, as appropriate.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992).

§2803. Assessment of Existing Drip Pad Integrity

A. For each existing drip pad as defined in LAC 33:V.2801, the owner or operator must evaluate the drip pad and determine that it meets all of the requirements of this Chapter, except the requirements for liners and leak detection systems of LAC 33:V.2805.B. No later than the effective date of this rule, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and re-certified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of LAC 33:V.2805 are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of LAC 33:V.2805, except the standards for liners and leak detection systems, specified in LAC 33:V.2805.B, and must document the age of the drip pad to the extent possible, to document compliance with LAC 33:V.2803.B.

B. The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of LAC 33:V.2805.B and submit the plan to the administrative authority no later than two years before the date that all repairs, upgrades, and modifications will be complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of LAC 33:V.2805 and must document the age of the drip pad to the extent possible. The plan must be reviewed and certified by an independent qualified, registered professional engineer. All upgrades, repairs, and modifications must be completed in accordance with the following:

1. For existing drip pads of known and documentable age, all upgrades, repairs, and modifications must be completed within two years of the effective date of this rule, or when the drip pad has reached 15 years of age, whichever comes later.

2. For existing drip pads for which the age cannot be documented, within eight years of the effective date of this rule, but if the age of the facility is greater than seven years, all upgrades, repairs and modifications must be completed by the time the facility reaches 15 years of age or by two years after the effective date of this rule, whichever comes later.

3. If the owner or operator believes that the drip pad will continue to meet all of the requirements of LAC 33:V.2805 after the date upon which all upgrades, repairs and modifications must be completed as established under LAC 33:V.2803.B.1 and 2, the owner or operator may petition the administrative authority for an extension of the deadline as specified in LAC 33:V.2803.B.1 and 2. The administrative authority will grant the petition for extension based on a finding that the drip pad meets all of the requirements of LAC 33:V.2805 except those for liners and leak detection systems specified in LAC 33:V.2805.B and that it will continue to be protective of human health and the environment.

C. Upon completion of all upgrades, repairs, and modifications, the owner or operator must submit to the administrative authority the as-built drawings for the drip pad together with a certification by an independent, qualified registered professional engineer attesting that the drip pad conforms to the drawings.

D. If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of LAC 33:V.2805.M or close the drip pad in accordance with LAC 33:V.2809.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992).

§2805. Design and Operating Requirements

A. Drip pads must:

1. be constructed of non-earthen materials, excluding wood and non-structurally supported asphalt;

2. be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;

3. have a curb or berm around the perimeter;

4. be impermeable, e.g., concrete pads must be sealed, coated, or covered with an impermeable material such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system; and

5. be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

Note: The administrative authority will generally consider applicable standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) or the American Society of Testing Materials (ASTM) in judging the structural integrity requirement of this Subsection.

B. A new drip pad or an existing drip pad, after the deadline established in LAC 33:V.2803.B must have:

1. a synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must be:

a. constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

b. placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

c. installed to cover all surrounding earth that could come in contact with the waste or leakage; and

2. a leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system must be:

a. constructed of materials that are:

i. chemically resistant to the waste managed in the drip pad and the leakage that might be generated;

ii. of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad;

b. designed and operated to function without clogging through the scheduled closure of the drip pad; and

c. designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

C. Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

Note: See LAC 33:V.2805.M for remedial action required if deterioration or leakage is detected.

D. The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.

E. Unless protected by a structure, as described in LAC 33:V.2801.B, the owner or operator must design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-off that might enter the system.

F. Unless protected by a structure or cover, as described in LAC 33:V.2801.B, the owner or operator must design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

G. The drip pad must be evaluated to determine that it meets the requirements of LAC 33:V.2805.A-F and the owner or operator must obtain a statement from an independent, qualified registered professional engineer certifying that the drip pad design meets the requirements of this Section.

H. Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

I. The drip pad surface must be cleaned thoroughly at least once every seven days such that accumulated residues of hazardous waste or other materials are removed, using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.

J. Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

K. After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with this requirement.

L. Collection and holding units associated with run-on and run-off control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

M. Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

1. Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must:

a. enter a record of the discovery in the facility operating log;

b. immediately remove the portion of the drip pad affected by the condition from service;

c. determine what steps must be taken to repair the drip pad and clean up any leakage from below the drip pad, and establish a schedule for accomplishing the repairs; and

d. within 24 hours after discovery of the condition, notify the administrative authority of the condition and, within 10 working days, provide written notice to the administrative authority with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

2. The administrative authority will review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete, and notify the owner or operator of the determination and the underlying rationale in writing.

3. Upon completing all repairs and clean up, the owner or operator must notify the administrative authority in writing and provide a certification, signed by an independent qualified, registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with LAC 33:V.2805.M.1.d.

N. Should a permit be necessary, the administrative authority will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

O. The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§2807. Inspections

A. During construction or installation, liners and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of LAC 33:V.2805 by an independent qualified, registered professional engineer. The certification must be maintained at the facility as part of the facility operating record. After installation, liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

B. While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

1. deterioration, malfunctions or improper operation of run-on and run-off control systems;

2. the presence of leakage in and proper functioning of leak detection system;

3. deterioration or cracking of the drip pad surface.

Note: See LAC 33:V.2805.M for remedial action required if deterioration or leakage is detected.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992)

~~§2809. Closure~~

~~A. At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.~~

~~B. If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in LAC 33:V.2809.A, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with closure and post-closure care requirements that apply to landfills (LAC 33:V.2521). For permitted units, the requirement to have a permit continues throughout the post-closure period. In addition, for the purpose of closure, post-closure, and financial responsibility, such a drip pad is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in LAC 33:V.Chapters 35 and 37.~~

~~C. The owner or operator of an existing drip pad, as defined in LAC 33:V.2801, that does not comply with the liner requirements of LAC 33:V.2805.B.1 must:~~

~~1. include in the closure plan for the drip pad under LAC 33:V.3511 both a plan for complying with LAC 33:V.2809.A and a contingent plan for complying with LAC 33:V.2809.B in case not all contaminated subsoils can be practicably removed at closure; and~~

~~2. prepare a contingent post-closure plan under LAC 33:V.3523 for complying with LAC 33:V.2809.B in case not all contaminated subsoils can be practicably removed at closure.~~

~~D. The cost estimates calculated under LAC 33:V.3511 and 3709 for closure and post-closure care of a drip pad subject to this Paragraph must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under LAC 33:V.2809.A.~~

~~AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.~~

~~HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992).~~

~~§2811. Design and Installation of New Drip Pads~~

~~Owners and operators of drip pads must ensure that the pads are designed, installed and operated in accordance with all of the applicable requirements of LAC 33:V.2805, 2807, and 2809.~~

~~AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.~~

~~HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).~~

Chapter 29. Surface Impoundments

§2901. Applicability

The regulations in this Subpart apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of hazardous waste except as LAC 33:V.105.D provides otherwise.

[Comment: All surface impoundments used to store hazardous waste, including short-term storage (90 days or less), must have a TSD permit.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2903. Design and Operating Requirements

[Comment: The permit applicant must submit detailed plans and specifications accompanied by an engineering report that must collectively include the information itemized and address the following in addition to the design and operating requirements: (1) a description of the proposed maintenance and repair procedures; (2) a description of the operating procedures that will ensure compliance with this Section; and (3) a certification by a qualified engineer which states that the facilities comply with the applicable design requirements in this Section. The owner or operator of a new facility must submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications.]

A. Any surface impoundment that is not covered by LAC 33:V.2903.I must have a liner for all portions of the impoundment (except for the portion of the surface impoundment in operation prior to date of issuance of the hazardous waste permit) and must have a liner designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the impoundment. The liner, at a minimum, must consist of a synthetic liner laid on top of a permanent barrier at the bottom and along the sides of the surface impoundment that will cover all surrounding earth likely to be in contact with the waste or leachate. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with LAC 33:V.2911.A. For impoundments that will be closed in accordance with LAC 33:V.2911.C.1, the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner must be:

1. constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

2. placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift;

3. the permanent barrier shall be three feet of clay with a permeability of 1×10^{-7} cm/sec or less and so designed and operated as to prevent endangering any freshwater aquifer by the migration of contaminants from the facility, or an equivalent system acceptable to the administrative authority; and

4. the synthetic liner shall be resistant to action of elements and the planned contents of the impoundment or the basin for a period of time not less than the estimated life of the operation;

[Comment: The permit application must include a bond warranty or other demonstration satisfactory to the administrative authority for liners for which historical performance data is not available.]

5. the synthetic liner must be installed to cover all surrounding earth likely to be in contact with the waste or leachate.

B. The owner or operator will be exempted from the requirements of LAC 33:V.2903.A if the administrative authority finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see LAC 33:V.3307) into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the administrative authority will consider:

1. the nature and quantity of the wastes;

2. the proposed alternate design and operation;

3. the hydrogeologic setting of the facility, including the attenuating capacity and thickness of the liners and soils present between the impoundment and groundwater or surface water; and

4. all other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

C. The owner or operator of any replacement surface impoundment unit is exempt from LAC 33:V.2903.J if:

1. the existing unit was constructed in compliance with the design standards of sections 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

2. there is no reason to believe that the liner is not functioning as designed.

D. A surface impoundment must be designed, constructed, maintained and operated to prevent overtopping resulting from normal or abnormal operations, overfilling, wind and wave action, rainfall, run-on, malfunctions of level controllers, alarms and other equipment, and human error.

E. The surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

F. The administrative authority will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

G. Surface run-off within the site utilized shall be impounded on the site and treated as necessary to comply with NPDES discharge permit requirements.

H. Surface run-off outside the site (limits of hazardous waste facilities or, when part of an industrial complex, the limits of company property used for company operations) shall be diverted and prevented from entry into the site.

~~I. The owner or operator of a double lined surface~~ impoundment is subject to regulation under LAC 33:V.Chapter 33 and the following conditions:

1. the impoundment (including its underlying liners) must be located entirely above the seasonal high water table;

2. the impoundment must be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of LAC 33:V.2903;

3. a leak detection system must be designed, constructed, maintained and operated between the liners to detect any migration of liquids into the space between the liners;

4. if liquid leaks into the leak detection system, the owner or operator must:

a. notify the administrative authority of the leak in writing within seven days after detecting the leak; and

b. within a period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the leak has been stopped.

5. the administrative authority will specify in the permit all design and operating practices that are necessary to ensure ~~that the requirements of this Section are satisfied.~~

J. The owner or operator of each new surface impoundment unit on which construction commenced after January 29, 1992,

each lateral expansion of a surface impoundment unit on which construction commenced after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must have installed two or more liners and a leachate collection and removal system between such liners. "Construction Commences" is as defined in LAC 33:V.109 under "Existing Facilities."

1. The liner system must include:

a. a top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and

b. a composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10^{-7}cm/sec. The administrative authority may require additional liner design requirements based on the location of the surface impoundment in relation to drinking water aquifers.

2. The liners must comply with LAC 33:V.2903.A.1-5.

3. The leachate collection and removal system between the liners (and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems) is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner which are likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in this Section are satisfied by installation of a system that is, at a minimum:

a. Constructed with a bottom slope of 2 percent or more;

b. constructed of granular drainage materials with a hydraulic conductivity of 1 x 10^{-1} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x 10^{-4} m^2/sec or more;

c. constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated and are of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;

d. designed and operated to minimize clogging during the active life and post-closure care period; and

e. constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed from the sump.

4. The owner or operator shall collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.

5. The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of groundwater.

K. The administrative authority may approve alternative design or operating practices to those specified in LAC 33:V.2903.J if the owner or operator demonstrates to the administrative authority that such design and operating practices, together with location characteristics:

1. will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal system specified in LAC 33:V.2903.J; and

2. will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

L. The double liner requirements set forth in LAC 33:V.2903.J may be waived by the administrative authority if the monofill fulfills the requirements of LAC 33:V.2903.K.1 and 2.

1. The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the extraction procedure toxicity characteristics in LAC 33:V.4903.E.

2. The monofill meets the requirements of either Subsection K.2.a or b of this Section.

a. The monofill meets the following criteria:

i. the monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this Subsection, the term "liner" means a liner designed, constructed, installed and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, groundwater, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of LAC 33:V.2903.I on the basis of a liner designed, constructed, installed and operated to prevent hazardous waste from passing beyond the liner, at the closure

of such impoundment, the owner or operator must remove or ontaminate all waste residues, all contaminated liner erial, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to, groundwater monitoring and corrective action;

ii. the monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in LAC 33:V.109); and

iii. the monofill is in compliance with generally applicable groundwater monitoring requirements for facilities with permits.

b. The owner or operator demonstrates that the monofill is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into groundwater or surface water at any future time.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:220 (March 1990), LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 21:267 (March 1995).

904. Action Leakage Rate

A. The administrative authority shall approve an action leakage rate for surface impoundment units subject to LAC 33:V.2903.J or K. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

B. To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under LAC 33:V.2907.E to an average daily flow rate (gallons per acre per day) for each sump. Unless the administrative authority approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period and, if the unit is closed in accordance with LAC 33:V.2911.B, monthly during the post-closure care period when monthly monitoring is required under LAC 33:V.2907.E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§2905. Exemption

There are no exemptions from the groundwater protection requirements in LAC 33:V.Chapter 33.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 20:1000 (September 1994).

§2906. Response Actions

A. The owner or operator of surface impoundment units subject to LAC 33:V.2903.J or K must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in LAC 33:V.2906.B.

B. If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

1. notify the administrative authority in writing of the exceedence within seven days of the determination;

2. submit a preliminary written assessment to the administrative authority within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

3. determine to the extent practicable the location, size, and cause of any leak;

4. determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

5. determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

6. within 30 days after the notification that the action leakage rate has been exceeded, submit to the administrative authority the results of the analyses specified in LAC 33:V.2906.B.3-5, the results of actions taken, and remedial actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the administrative authority a report summarizing the results of any remedial actions taken and actions planned.

C. To make the leak and/or remediation determinations in LAC 33:V.2906.B.3-5, the owner or operator must:

1. assess the sources of liquids and amounts of liquids by source; and

2. conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the sources of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

3. assess the seriousness of any leaks in terms of potential for escaping into the environment; or

4. document why such assessments are not needed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§2907. Monitoring and Inspection

A. The facility must provide the department with 30 days advance notice of the initial liner installation to allow the administrative authority the opportunity to inspect the liner and its installation.

B. During construction and installation, liners (except in the case of existing portions of surface impoundments exempt from LAC 33:V.2903.A) and cover systems (such as membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

1. synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures or blisters; and

2. soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

C. While a surface impoundment is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

1. deterioration, malfunctions, or improper operation of overtopping control systems;

2. sudden drops in the level of the impoundment's contents;

3. the presence of liquids in leak detection systems; and

4. severe erosion or other signs of deterioration in dikes or other containment devices.

D. Prior to the issuance of a permit, and after any extended period of time (at least six months) during which the impoundment was not in service, the owner or operator must obtain a certification from a qualified engineer that the impoundment's dike, including that portion of any dike which provides freeboard, has structural integrity. The certification must establish, in particular, that the dike:

1. will withstand the stress of the pressure exerted by the types and amounts of wastes to be placed in the impoundment; and

2. will not fail due to scouring or piping, without dependence on any liner system included in the surface impoundment construction.

E. An owner or operator required to have a leak detection system under LAC 33:V.2903.I or J must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

1. After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi-annually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semi-annual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

2. "Pump operating level" is a liquid level proposed by the owner or operator and approved by the administrative authority based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 20:1109 (October 1994).

§2909. Emergency Repairs; Contingency Plans

A. A surface impoundment must be removed from service in accordance with LAC 33:V.2909.B when:

1. the level of liquids in the impoundment suddenly drops and the drop is not known to be caused by changes in the flows into or out of the impoundment; or

2. the dike leaks.

B. When a surface impoundment must be removed from service as required by Subsection A of this Section, the owner or operator must:

1. immediately shut off the flow or stop the addition of wastes into the impoundment;

2. immediately contain any surface leakage which has occurred or is occurring;

3. immediately stop the leak;

4. take any other necessary steps to stop or prevent tastrophic failure;

5. if a leak cannot be stopped by any other means, empty the impoundment; and

6. notify the administrative authority of the problem by phone in 24 hours and in writing within seven days after detecting the problem.

C. As part of the contingency plan required in LAC 33:V.1513, the owner or operator must specify a procedure for complying with the requirements of LAC 33:V.2909.B.

D. No surface impoundment that has been removed from service in accordance with the requirements of this Section may be restored to service unless the portion of the impoundment which was failing is repaired and the following steps are taken.

1. If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity must be recertified in accordance with LAC 33:V.2907.D.

2. If the impoundment was removed from service as the result of a sudden drop in the liquid level, then:

a. for any existing portion of the impoundment, a liner must be installed in compliance with LAC 33:V.2903.A; and

b. for any other portion of the impoundment, the repaired liner system must be certified by a qualified engineer as meeting the design specifications approved in the permit.

E. A surface impoundment that has been removed from service in accordance with the requirements of this Section and that is not being repaired must be closed in accordance with the provisions of LAC 33:V.2911.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§2911. Closure and Post-closure Care

A. At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless LAC 33:V.109.Hazardous Waste.6 applies, or

B. If some waste residues or contaminated materials are left in place at final closure, the owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 and 3527; including maintenance and monitoring throughout the post-closure care period (specified in the permit under LAC 33:V.3521). The owner or operator must:

1. maintain the integrity and effectiveness of the final cover including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

2. maintain and monitor the leak detection system in accordance with LAC 33:V.2903 and 2907.E and comply with all other applicable leak detection system requirements of this Chapter;

3. maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.Chapter 33; and

4. prevent run-on and run-off from eroding or otherwise damaging the final cover.

C. Manage the closure to:

1. eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and residues;

2. stabilize remaining wastes to a bearing capacity sufficient to support final cover; and

3. cover the surface impoundment with a final cover designed and constructed to:

a. provide long-term minimization of the migration of liquids through the closed impoundment;

b. function with minimum maintenance;

c. promote drainage and minimize erosion or abrasion of the final cover;

d. accommodate settling and subsidence so that the cover's integrity is maintained; and

e. have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

D. Special Closure

1. If an owner or operator plans to close a surface impoundment in accordance with Subsection A of this Section, and the impoundment does not comply with the liner requirements of LAC 33:V.2903.A and is not exempt from them in accordance with LAC 33:V.2903.B, then:

a. the closure plan for the impoundment under LAC 33:V.3511 must include both a plan for complying with LAC 33:V.2911.A and a contingent plan for complying with LAC 33:V.2911.B in case all contaminated subsoils cannot be practicably removed at closure; and

b. the owner or operator must prepare a contingent post-closure plan under LAC 33:V.3523 complying with LAC 33:V.2911.B in case all contaminated subsoils cannot be practicably removed at closure.

2. The cost estimates calculated under LAC 33:V.3705 and 3709 for closure and post-closure care of an impoundment subject to this Subpart must include the cost of complying with the contingent post-closure plan, but are not required to include the cost of expected closure under LAC 33:V.2911.A.

E. During the post-closure care period, if liquids leak into a leak detection system the owner or operator must notify the administrative authority of the leak in writing within seven days after detecting the leak.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

§2913. Special Requirements for Ignitable or Reactive Waste

Ignitable or reactive waste must not be placed in a surface impoundment, unless ~~the waste and impoundment satisfy all applicable requirements of LAC 33:V.Chapter 22, and~~:

A. the waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that:

1. the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under the definition of ignitability or reactivity in LAC 33:V.4903.B or D; and

2. LAC 33:V.1517 is complied with; ~~or for interim status facilities;~~

~~B. the waste is managed in such a way that it is protected~~ from any material or conditions which ~~may cause~~ it to ignite or react; or

~~C. the surface impoundment is used solely for emergencies.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:1057 (December 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994).

§2915. Special Requirements for Incompatible Wastes

Incompatible wastes, or incompatible wastes and materials, must not be placed in the same surface impoundment, unless LAC 33:V.1517 is complied with or LAC 33:V.4321 for interim status facilities.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§2917. Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, F027

A. Hazardous wastes F020, F021, F022, F023, F026 and F027 must not be placed in a surface impoundment unless the owner or operator operates the surface impoundment in accordance with a management plan for these wastes that is approved by the administrative authority pursuant to the standards set out in this Subsection, and in accordance with all other applicable requirements of LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37. The factors to be considered are:

1. the volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2. the attenuative properties of underlying and surrounding soils or other materials;

3. the mobilizing properties of other materials co-disposed with these wastes; and

4. the effectiveness of additional treatment, design or monitoring techniques.

B. The administrative authority may determine that additional design, operating, and monitoring requirements are necessary for surface impoundments managing hazardous wastes F020, F021, F022, F023, F026, and F027 in order to reduce the possibility of migration of these wastes to groundwater, surface water, or air so as to protect human health and the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste Division, LR 16:220 (March 1990), amended LR 20:1000 (September 1994).

~~Chapter 30. Hazardous Waste Burned~~ in Boilers and Industrial Furnaces

§3001. Applicability

A. The regulations of this Chapter apply to hazardous waste burned for energy or material recovery in a boiler or industrial furnace (as defined in LAC 33:V.109) irrespective of the purpose of burning or processing, except as provided by LAC 33:V.3001.B-D and F. In this Chapter, the term "burn" means burning for energy recovery or destruction, or processing for materials recovery or as an ingredient. The emissions standards of LAC 33:V.3009-3015 apply to facilities operating under interim status or under a RCRA operating permit as specified in LAC 33:V.3005 and 3007.

B. The following hazardous wastes and facilities are not subject to regulation under this Chapter:

1. used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in LAC 33:V.4903. Such used oil is subject to regulation under LAC 33:V.Chapter 40;

2. gas recovered from hazardous or solid waste landfills when such gas is burned for energy recovery;

3. hazardous wastes that are exempt from regulation under LAC 33:V.105.D and 4105.B, and hazardous wastes ~~that are subject to the special requirements for conditionally~~

exempt small quantity generators under LAC 33:V.Chapter [illegible] and

4. coke ovens, if the only hazardous waste burned is EPA Hazardous Waste No. K087, decanter tank tar sludge from coking operations.

C. Owners or operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces, but not including cement kilns, aggregate kilns, or halogen acid furnaces burning hazardous waste) that process hazardous waste solely for metal recovery are conditionally exempt from regulation under this Section, except for LAC 33:V.3003 and 3005.

1. To be exempt from LAC 33:V.3005-3023, an owner or operator of a metal recovery furnace must comply with the following requirements (except that an owner or operator of a lead or a nickel-chromium recovery furnace or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing must comply with the requirements of LAC 33:V.3001.C.3):

a. provide a one-time written notice to the administrative authority indicating the following:

i. the owner or operator claims exemption under this Paragraph;

ii. the hazardous waste is burned solely for metal recovery consistent with the provisions of LAC 33:V.3001.C.2;

iii. the hazardous waste contains recoverable levels of metals; and

iv. the owner or operator will comply with the sampling and analysis and recordkeeping requirements of this Paragraph;

b. sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this section under procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator shall use the best available method; and

c. maintain at the facility for at least three years records to document compliance with the provisions of this Paragraph including limits on levels of toxic organic constituents and Btu value of the waste, and levels of recoverable metals in the hazardous waste compared to normal nonhazardous waste feedstocks.

2. A hazardous waste meeting either of the following criteria is not processed solely for metal recovery:

a. the hazardous waste has a total concentration of organic compounds listed in LAC 33:V.4901.G.Table 6 exceeding 500 ppm by weight, as-fired and so is considered to be burned for destruction. The concentration of organic compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the records required by LAC 33:V.3001.C.1.c; or

b. the hazardous waste has a heating value of 5,000 Btu/lb or more as-fired and so is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the records required by LAC 33:V.3001.C.1.c.

3. To be exempt from LAC 33:V.3005-3023, an owner or operator of a lead or nickel-chromium recovery furnace or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing must provide a one-time written notice to the administrative authority identifying each hazardous waste burned, specifying whether the owner or operator claims an exemption for each waste under LAC 33:V.3001 or 3001.C.1. The owner or operator must comply with the requirements of LAC 33:V.3001.C.1 for those wastes claimed to be exempt under that section and must comply with the requirements below for those wastes claimed to be exempt under this Section.

a. The hazardous wastes listed in LAC 33:V.Chapter 30.Appendices XI and XII and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of LAC 33:V.3001.C.1, provided that:

i. a waste listed in LAC 33:V.Chapter 30.Appendix XI must contain recoverable levels of lead, a waste listed in LAC 33:V.Chapter 30.Appendix L must contain recoverable levels of nickel or chromium, and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal;

ii. the waste does not exhibit the Toxicity Characteristic of LAC 33:V.4903.E for an organic constituent;

iii. the waste is not a hazardous waste listed in LAC 33:V.4901 because it is listed for an organic constituent as identified in LAC 33:V.4901.G.Table 6; and

iv. the owner or operator certifies in the one-time notice that hazardous waste is burned under the provisions of LAC 33:V.3001.C.3 and that sampling and analysis will be conducted or other information will be obtained as necessary to ensure continued compliance with these requirements. Sampling and analysis shall be conducted according to LAC 33:V.3001.C.1.b; records to document compliance with LAC 33:V.3001.C.3 shall be kept for at least three years.

b. the administrative authority may decide on a case-by-case basis that the toxic organic constituents in a material

listed in LAC 33:V.Chapter 30.Appendix K or L that contains a total concentration of more than 500 ppm toxic organic compounds listed in LAC 33:V.3105.Table 1 may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of this Chapter. In that situation, after adequate notice and opportunity for comment, the metal recovery furnace will become subject to the requirements of this Chapter when burning that material. In making the hazard determination, the administrative authority will consider the following factors:

i. the concentration and toxicity of organic constituents in the material;

ii. the level of destruction of toxic organic constituents provided by the furnace; and

iii. whether the acceptable ambient levels established in LAC 33:V.Chapter 30.Appendix D or E may be exceeded for any toxic organic compound that may be emitted based on dispersion modeling to predict the maximum annual average off-site ground level concentration.

D. The standards for direct transfer operations under LAC 33:V.3023 apply only to facilities subject to the permit standards of LAC 33:V.3005 or the interim status standards of LAC 33:V.3007.

E. The management standards for residues under LAC 33:V.3025 apply to any boiler or industrial furnace burning hazardous waste.

F. Owners or operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces, but not including cement kilns, aggregate kilns, or halogen acid furnaces burning hazardous waste) that process hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, palladium, iridium, osmium, rhodium, or ruthenium or any combination of these are conditionally exempt from regulation under this Section, except for LAC 33:V.3025.

1. To be exempt from LAC 33:V.3005-3023, an owner or operator must:

a. provide a one-time written notice to the administrative authority indicating the following:

i. the owner or operator claims exemption under this Paragraph;

ii. the hazardous waste is burned solely for legitimate metal recovery; and

iii. the owner or operator will comply with the sampling, analysis, and recordkeeping requirements of this Paragraph;

b. sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this Section and to document that the waste is burned for recovery of economically significant amounts of precious metal under procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846; and

c. maintain at the facility for at least three years records to document that all hazardous wastes burned are for recovery of economically significant amounts of precious metal.

[Note: Parts of this Section were previously promulgated in LAC 33:V:4142 which have been repealed.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3003. Management Prior to Burning

A. Standards for Generators. Generators of hazardous waste burned in a boiler or industrial furnace are subject to LAC 33:V.Chapter 11.

B. Standards for Transporters. Transporters of hazardous waste burned in a boiler or industrial furnace are subject to LAC 33:V.Chapter 13.

C. Standards for Owners and Operators of Storage Facilities

1. Owners or operators of facilities that store hazardous waste burned in a boiler or industrial furnace are subject to the applicable provision of LAC 33:V.Chapters 1, 3, 5, 9, 15, 19, 21, 23, 25, 29, 33, 35, 37 and 43, except as provided by LAC 33:V.3003.C.2 and LAC 33:V.3003.E. These standards apply to storage by the commercial burner as well as to storage facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the commercial burner.

2. Owners or operators of facilities that burn, in an on-site boiler or industrial furnace exempt from regulation under the small quantity burner provisions of LAC 33:V.3017, hazardous waste that they generate are exempt from regulation under LAC 33:V.Chapters 1, 3, 5, 9, 15, 19, 21, 23, 25, 29, 33, 35, 37, and 43 with respect to the storage of mixtures of hazardous waste and the primary fuel to the boiler or industrial furnace in tanks that feed the fuel mixture directly to the burner. Storage of hazardous waste prior to mixing with the primary fuel is subject to regulation as prescribed in LAC 33:V.3003.C.1 and LAC 33:V.3003.E.

[Note: Parts of this Section were previously promulgated in LAC 33:V:4142 which have been repealed.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3005. Permit Standards for Burners

A. Applicability

1. General. Owners or operators of boilers and industrial furnaces burning hazardous waste and not operating under interim status must comply with the requirements of this Section and LAC 33:V.535 and 537, except as provided by LAC 33:V.3017.

2. Owners or operators of boilers and industrial furnaces that burn hazardous waste are subject to the following provisions:

a. general, LAC 33:V.105.G;

b. general facility standards, LAC 33:V.303.A, 1503.A.3, 1503.B.3, 1507, 1509, 1515, 1517, 1519, 1527.E, and 1531.A;

c. preparedness and prevention, LAC 33:V.1511;

d. contingency plan and emergency procedures, LAC 33:V.1513;

e. manifest system, recordkeeping, and reporting, LAC 33:V.905, 907, 909, and 1527;

f. corrective action, LAC 33:V.3301.A, B, and D;

g. closure and post-closure, LAC 33:V.3507, 3511, 3513, 3515, and 3517.A;

h. financial requirements, LAC 33:V.3703, 3705, 3707, 3714, 3717 and 3719; and

i. air emission standards for equipment leaks, LAC 33:V.Chapter 43.Subchapter R.

B. Hazardous Waste Analysis

1. The owner or operator must provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in LAC 33:V.Chapter 31, Table 1, that may reasonably be expected to be in the waste. Such constituents must be identified and quantified at levels detectable by analytical procedures prescribed by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, as described in LAC 33:V.Chapter 49.Appendix, (referenced in LAC 33:V.1519.B). Alternative methods that meet or exceed the method performance capabilities of SW-846 methods may be used. If SW-846 does not prescribe a method for a particular determination, the owner or operator shall use the best available method. The LAC 33:V.Chapter 31, Table 1 constituents excluded from this analysis must be identified and the basis for this exclusion explained. This analysis will be used to provide all information required by this Section and LAC 33:V.535 and 537 and to enable the permit writer to prescribe such permit conditions as are necessary to protect human health and the environment. Such analysis must be included as a portion of Part II of the permit application, or, for facilities operating under the interim status standards of LAC 33:V.3007, as a portion of the trial burn plan that may be submitted before Part II of the application under the provisions of LAC 33:V.537.D, as well as any other analysis required by the permit authority in preparing the permit. Owners or operators of boilers and industrial furnaces not operating under the interim status standards of LAC 33:V.3007 must provide the information required by LAC 33:V.535 and 537 to the greatest extent possible.

2. Throughout normal operation, the owner or operator must conduct sufficient sampling and analyses to ensure that the hazardous waste, other fuels, and industrial furnace feedstocks fired into the boiler or industrial furnace are within the physical and chemical composition limits specified in the permit.

C. Emissions Standards. Owners and operators must comply with emissions standards provided by LAC 33:V.3009-3015.

D. Permits

1. The owner or operator of a boiler or industrial furnace may burn only hazardous wastes specified in the facility permit and only under the operating conditions specified for those hazardous wastes under LAC 33:V.3005.E, except in approved trial burns under the conditions specified in LAC 33:V.535.

2. Hazardous wastes not specified in the permit may not be burned until operating conditions have been specified under a new permit or permit modification, as applicable. Operating requirements for new wastes may be based on either trial burn results or alternative data included with Part II of a permit application under LAC 33:V.535.

3. Boilers and industrial furnaces operating under the interim status standards of LAC 33:V.3007 are permitted under procedures specified in LAC 33:V.535.

4. The administrative authority shall establish appropriate conditions in permits for new boilers and industrial furnaces (those boilers and industrial furnaces not operating under the interim status standards of LAC 33:V.3007) for each of the applicable requirements of this Paragraph, including but not limited to allowable hazardous waste firing rates and operating conditions necessary to meet the requirements of LAC 33:V.3007, sufficient to comply with the following standards:

a. For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the device to a point of operational readiness to conduct a trial burn, not to exceed a duration of 720 hours operating time when burning hazardous waste, the administrative authority will specify the operating requirements most likely to ensure compliance with the standards of LAC 33:V.3005.E, based on the engineering judgment of the administrative authority. If the applicant is seeking a waiver from a trial burn to demonstrate conformance with a particular emission standard, the operating requirements during this initial period of operation shall include those specified by the applicable provisions of LAC 33:V.3009-

3015. The administrative authority may extend the duration of this period for up to 720 additional hours when the applicant demonstrates good cause for the extension.

b. For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the emission standards of LAC 33:V.3009-3015 and must be in accordance with the approved trial burn plan.

c. For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow the owner or operator to analyze samples, compute data, and submit the trial burn results, and for the administrative authority to modify the facility permit to reflect the trial burn results, the administrative authority will specify the operating requirements most likely to ensure compliance with the emission standards of LAC 33:V.3009-3015, based on engineering judgment.

d. For the remaining duration of the permit, the operating requirements must be those demonstrated in a trial burn or by alternative data specified in LAC 33:V.535 as sufficient to ensure compliance with the emission standards of LAC 33:V.3009-3015.

E. Operating Requirements

1. General. Boilers or industrial furnaces burning hazardous waste must be operated in accordance with the operating requirements specified in the permit at all times where there is hazardous waste in the unit.

2. Specific requirements to ensure compliance with the organic emissions standards are as follows:

a. Carbon Monoxide and Hydrocarbon Standard. The permit must incorporate the stack gas carbon monoxide (CO) limit and, as appropriate, a hydrocarbon (HC) limit as specified in LAC 33:V.3009.B-F. The permit limits will be specified as follows:

i. when complying with the CO standard of LAC 33:V.3009.B.1, the permit limit is 100 ppmv;

ii. when complying with the alternative CO standard under LAC 33:V.3009.C, the permit limit for CO is based on the trial burn and is established as the average over all valid runs of the highest hourly rolling average CO level of each run, and the permit limit for HC is 20 ppmv (as defined in LAC 33:V.3009.C.1), except as provided in LAC 33:V.3009.F;

iii. when complying with the alternative HC limit for industrial furnaces under LAC 33:V.3009.F, the permit limit for HC and CO is the baseline level when hazardous waste is not burned as specified by that Subsection.

b. DRE Standard. Operating conditions demonstrated in a trial burn or by alternate data as specified in LAC 33:V.535 to be sufficient to comply with the DRE performance standard of LAC 33:V.3009.A or as those special operating requirements provided by LAC 33:V.3009.A.4 for the waiver of the DRE trial burn, will be specified on a case-by-case basis for each hazardous waste burned. When the DRE trial burn is not waived under LAC 33:V.3009.A.4, each set of operating requirements will specify the composition of the hazardous waste (including acceptable variations in the physical or chemical properties of the hazardous waste which will not affect compliance with the DRE performance standard) to which the operating requirements apply. For each such hazardous waste, the permit will specify acceptable operating limits, including the following conditions, as appropriate:

i. feed rate of hazardous waste and other fuels measured and specified as prescribed in LAC 33:V.3005.E;

ii. minimum and maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in LAC 33:V.3005.E.6;

iii. appropriate controls of the hazardous waste firing system;

iv. allowable variation in boiler and industrial furnace system design or operating procedures;

v. minimum combustion gas temperature measured at a location indicative of combustion chamber temperature, measured and specified as prescribed in LAC 33:V.3005.E.6;

vi. an appropriate indicator of combustion gas velocity, measured and specified as prescribed in LAC 33:V.3005.E.6, unless documentation is provided under LAC 33:V.537 demonstrating adequate combustion gas residence time; and

vii. such other operating requirements as are necessary to ensure that the DRE performance standard of LAC 33:V.3009.A is met.

c. Start-Up and Shutdown. During start-up and shutdown of the boiler or industrial furnace, hazardous waste (except waste fed solely as an ingredient under the Tier I, or adjusted Tier I, feed rate screening limits for metals and chloride/chlorine, and except low risk waste exempt from the trial burn requirements under LAC 33:V.3009.A.5, 3011, 3013, and 3015) must not be fed into the device unless the device is operating within the conditions of operation specified in the permit.

3. Specific operating requirements to ensure conformance with the metals standards are as follows:

a. For conformance with the Tier I (or adjusted Tier I) metals feed rate screening limits provided by LAC 33:V.3013.B or E, the permit will specify the following operating requirements:

i. total feed rate of hazardous waste, measured and specified as prescribed in LAC 33:V.3005.E.6;

ii. total feed rate of each metal level in hazardous waste, other fuels, and industrial furnace feedstocks measured and specified under provisions of LAC 33:V.3005.E.6; and

iii. sampling and metals analysis program for the hazardous waste, other fuels, and industrial furnace feedstocks.

b. For conformance with the Tier II metals emission rate screening limits under LAC 33:V.3013.C and the Tier III metals controls under LAC 33:V.3013.D, the permit will specify the following operating requirements:

i. maximum emission rate for each metal specified as the average emission rate during the trial burn;

ii. feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in LAC 33:V.3005.E.6;

iii. feed rate of each metal in the following feedstreams, measured and specified as prescribed in LAC 33:V.3005.E.6:

(a). total feedstreams;

(b). total hazardous waste feed; and

(c). total pumpable hazardous waste feed;

iv. total feed rate of chlorine and chloride in total feedstreams measured and specified as prescribed in LAC 33:V.3005.E.6;

v. maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in LAC 33:V.3005.E.6;

vi. maximum flue gas temperature at the inlet to the particulate matter air pollution control system measured and specified as prescribed in LAC 33:V.3005.E.6;

vii. maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in LAC 33:V.3005.E.6;

viii. appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

ix. allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

x. such other operating requirements as are necessary to ensure that the metals standards under LAC 33:V.3013.C or D are met;

c. For conformance with an alternative implementation approach approved by the administrative authority under LAC 33:V.3013.F, the permit will specify the following operating requirements:

i. maximum emission rate for each metal specified as the average emission rate during the trial burn;

ii. feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in LAC 33:V.3005.E.6.a;

iii. feed rate of each metal in the following feedstreams, measured and specified as prescribed in LAC 33:V.3005.E.6.a:

(a). total hazardous waste feed; and

(b). total pumpable hazardous waste feed;

iv. total feed rate of chlorine and chloride in total feedstreams measured and specified as prescribed in LAC 33:V.3005.E.6;

v. maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in LAC 33:V.3005.E.6;

vi. maximum flue gas temperature at the inlet to the particulate matter air pollution control system measured and specified as prescribed in LAC 33:V.3005.E.6;

vii. maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in LAC 33:V.3005.E.6;

viii. appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

ix. allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

x. such other operating requirements as are necessary to ensure that the metals standards under LAC 33:V.3013.C or D are met.

4. Specific operating requirements to ensure conformance with the hydrogen chloride and chlorine gas standards provided by LAC 33:V.3015 are as follows:

a. For conformance with the Tier I total chloride and chlorine feed rate screening limits of LAC 33:V.3015 the permit will specify the following requirements:

i. feed rate of total hazardous waste measured and specified as prescribed in LAC 33:V.3005.E.6;

ii. feed rate of total chloride and chlorine in hazardous waste, other fuels, and industrial furnace feedstocks measured and specified as prescribed in LAC 33:V.3005.E.6; and

iii. a sampling and analysis program for total chloride and chlorine for the hazardous waste, other fuels, and industrial furnace feedstocks.

b. For conformance with the Tier II HCl and Cl_2 emission rate screening limits provided by LAC 33:V.3015 and the Tier III HCl and Cl_2 controls under LAC 33:V.3105.C, the permit will specify the following operating requirements:

i. maximum emission rate for HCl and for Cl_2 specified as the average emission rate during the trial burn;

ii. feed rate of total hazardous waste measured and specified as prescribed in LAC 33:V.3005.E.6;

iii. total feed rate of chlorine and chloride in total feedstreams, measured and specified as prescribed in LAC 33:V.3005.E.6;

iv. maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in LAC 33:V.3005.E.6;

v. appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

vi. allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

vii. such other operating requirements as are necessary to ensure that the HCl and Cl_2 standards under LAC 33:V.3013.B or C are met.

5. Requirements to ensure conformance with the particulate standard are as follows:

a. Except as provided in LAC 33:V.3305.E.5.b or c or in LAC 33:III.Chapter 51, the permit shall specify the following operating requirements to ensure conformance with the particulate standard specified in LAC 33:V.3011:

i. total ash feed rate to the device from hazardous waste, other fuels, and industrial furnace feedstocks, measured and specified as prescribed in LAC 33:V.3005.E.6;

ii. maximum device production rate when producing normal product expressed in appropriate units, and measured and specified as prescribed in LAC 33:V.3005.E.6;

iii. appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system;

iv. allowable variation in boiler and industrial furnace system design including any air pollution control system or operating procedures; and

v. such other operating requirements as are necessary to ensure that the particulate standard in LAC 33:V.3023.B is met;

b. Permit conditions to ensure conformance with the particulate matter standard shall not be provided for facilities exempt from the particulate matter standard under LAC 33:V.3011.B;

c. For cement kilns and light-weight aggregate kilns, permit conditions to ensure compliance with the particulate standard shall not limit the ash content of hazardous waste or other feed materials.

6. Measuring parameters and establishing limits based on trial burn data are as follows:

a. General Requirements. As specified in LAC 33:V.3005.E.2-5, each operating parameter shall be measured, and permit limits on the parameter shall be established, according to either of the following procedures:

i. Instantaneous Limits. A parameter may be measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the permit limit specified as the time-weighted average during all valid runs of the trial burn; or

ii. Hourly Rolling Average

(a). The limit for a parameter may be established and continuously monitored on an hourly rolling average basis. A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds. An hourly rolling average is the arithmetic means of the 60 most recent one-minute average values recorded by the continuous monitoring system.

(b). The permit limit for the parameter shall be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average value for each run.

b. Rolling Average Limits for Carcinogenic Metals and Lead. Feed rate limits for the carcinogenic metals (i.e., arsenic, beryllium, cadmium and chromium) and lead may be established either on an hourly rolling average basis as prescribed by LAC 33:V.3005.E.6.a or on (up to) a 24-hour rolling average basis. If the owner or operator elects to use an average period from 2 to 24 hours:

i. the feed rate of each metal shall be limited at any time to 10 times the feed rate that would be allowed on an hourly rolling average basis;

ii. the continuous monitor shall meet the following specifications:

(a). a continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds;

(b). the rolling average for the selected averaging period is defined as the arithmetic mean of one-hour block averages for the averaging period. A one-hour block average is the arithmetic mean of the one-minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour; and

iii. the permit limit for the feed rate of each metal shall be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average feed rate for each run.

c. Feed Rate Limits for Metals, Total Chloride and Chlorine, and Ash. Feed rate limits for metals, total chlorine

and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, ride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of LAC 33:V.3005.E.6.a and b.

d. Conduct of Trial Burn Testing

i. If compliance with all applicable emissions standards of LAC 33:V.3009-3015 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.

ii. Prior to obtaining test data for purposes of demonstrating compliance with the emissions standards of LAC 33:V.3009-3015 or establishing limits on operating parameters under this section, the facility must operate under trial burn conditions for a sufficient period to reach steady-state operations. The administrative authority may determine, however, that industrial furnaces that recycle collected particulate matter back into the furnace and that comply with an alternative implementation approach for metals under LAC 33:V.3013.F need not reach steady state conditions with respect to the flow of metals in the system prior to beginning mpliance testing for metal emissions.

iii. Trial burn data on the level of an operating parameter for which a limit must be established in the permit must be obtained during emissions sampling for the pollutant(s) (i.e., metals, PM, HCl/Cl_2, organic compounds) for which the parameter must be established as specified by LAC 33:V.3005.

7. General requirements are as follows:

a. Fugitive Emissions. Fugitive emissions from the combustion zone that occur when hazardous waste is being burned must be controlled by:

i. keeping the combustion zone totally sealed against fugitive emissions;

ii. maintaining a combustion zone pressure lower than atmospheric pressure; or

iii. using an alternate means of control demonstrated (with Part II of the permit application) to provide control of fugitive emissions equivalent to that provided by maintaining a combustion zone pressure lower than atmospheric pressure.

b. Automatic Waste Feed Cutoff. A boiler or industrial furnace must be operated with a functioning system that automatically cuts off the hazardous waste feed when operating conditions deviate from those established under this Subsection. The administrative authority may limit the number of cutoffs per an operating period on a case-by-case basis. In addition:

i. the permit limit for (the indicator of) minimum combustion chamber temperature must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber;

ii. exhaust gases must be ducted to the air pollution control system operated in accordance with the permit requirements while hazardous waste or hazardous waste residues remain in the combustion chamber; and

iii. operating parameters for which permit limits are established must continue to be monitored during the cutoff, and the hazardous waste feed shall not be restarted until the levels of those parameters comply with the permit limits. For parameters that may be monitored on an instantaneous basis, the administrative authority will establish a minimum period of time after a waste feed cutoff during which the parameter must not exceed the permit limit before the hazardous waste feed may be restarted.

c. Changes. A boiler or industrial furnace must cease burning hazardous waste when changes in combustion properties, or feed rates of the hazardous waste, other fuels, or industrial furnace feedstocks, or changes in the boiler or industrial furnace design or operating conditions deviate from the limits designated in its permit.

F. Monitoring and Inspections

1. The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:

a. if required by the permit, feed rates and composition of hazardous waste, other fuels, and industrial furnace feedstocks, and feed rates of ash, metals, and total chloride and chlorine must be monitored and recorded;

b. if required by the permit, carbon monoxide (CO), total hydrocarbons, and oxygen must be monitored and recorded continuously at a common point in the boiler or industrial furnace downstream of the combustion zone and before the stack gases are released to the atmosphere as specified in LAC 33:V.3005.E.2.b. The administrative authority may approve an alternative monitoring scheme for monitoring total hydrocarbons. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with *Guidelines for Continuous Monitoring of Carbon Monoxide at Hazardous Waste Incinerators, Appendix D*, PES, January 1987;

c. upon the request of the administrative authority, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feedstocks as appropriate) residues and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the standards of LAC 33:V.3009-3015.

2. All monitors shall record data in units corresponding to the permit limit unless otherwise specified in the permit.

3. The boiler or industrial furnace and associated equipment (pumps, valves, pipes, fuel storage tanks when they

contain hazardous waste, etc.) must be thoroughly inspected visually, at least daily when hazardous waste is burned, for leaks, spills, fugitive emissions, and signs of tampering.

4. The emergency hazardous waste feed cutoff system and associated alarms must be tested at least weekly when hazardous waste is burned to verify operability, unless the applicant demonstrates to the administrative authority that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. Support for such demonstration shall be included in the operating record. At a minimum, operational testing must be conducted at least monthly.

5. These monitoring and inspection data must be recorded, and the records must be placed in the operating log required by LAC 33:V.1529.

G. Direct Transfer to the Burner. If hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit, the owner and operator must comply with LAC 33:V.3023.

H. Recordkeeping. The owner or operator must keep in the operating record of the facility all information and data required by LAC 33:V.3005 until closure of the facility.

I. Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the site of the boiler or industrial furnace.

[Note: Parts of this Section were previously promulgated in LAC 33:V.4142 which has been repealed.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3007. Interim Status Standards for Burners

A. Applicability

1. General

a. The purpose of this Section is to establish minimum interim standards for owners or operators of facilities that burn hazardous waste in "existing" boilers or industrial furnaces. The standards provided in this Section define the acceptable management of hazardous waste during the period of interim status. The standards of this Section apply to owners and operators of facilities that are in operation or under construction on the effective date of this Section until either a permit is issued under LAC 33:V.3009-3015 or until the closure responsibilities identified in this Section are fulfilled.

b. Existing or in existence means a boiler or industrial furnace that, on or before August 21, 1991, is either in operation burning or processing hazardous waste or for which construction (including the ancillary facilities to burn to process the hazardous waste) has commenced. A facility has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction; and either:

i. a continuous on-site, physical construction program has begun; or

ii. the owner or operator has entered into contractual obligations—which cannot be canceled or modified without substantial loss—for physical construction of the facility to be completed within a reasonable time.

c. If a boiler or industrial furnace is located at a facility that already has a permit or interim status, then the facility must comply with the applicable regulations dealing with permit modifications in LAC 33:V.4303 or changes in interim status in LAC 33:V.321.C.

2. Exemptions. The requirements of this Section do not apply to hazardous waste exempt under LAC 33:V.3001.B.

3. Prohibition on Burning Dioxin-containing Wastes. The following hazardous waste listed for dioxin and hazardous waste derived from any of these wastes may not be burned in a boiler or industrial furnace operating under the interim status standards of this Section: EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027.

4. Applicability of LAC 33:V.105.G and Chapter 43. Owners or operators of boilers and industrial furnaces that burn hazardous waste and are operating under interim status are subject to the following provisions of LAC 33:V.Chapter 43, except as provided otherwise by this Section:

a. LAC 33:V.105.G;

b. LAC 33:V.Chapter 43.Subchapter A (General Facility Standards);

c. LAC 33:V.Chapter 43.Subchapter B (Preparedness and Prevention);

d. LAC 33:V.Chapter 43.Subchapter C (Contingency Plan and Emergency Procedures);

e. LAC 33:V.Chapter 43.Subchapter D (Manifest System, Recordkeeping, and Reporting), except that LAC 33:V.4353, 4355 and 4363 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources;

f. LAC 33:V.Chapter 43.Subchapter F (Closure and Post-closure);

g. LAC 33:V.Chapter 43.Subchapter G (Financial Requirements);

h. LAC 33:V.Chapter 43.Subchapter R (Air Emission Standards for Equipment Leaks).

5. Special Requirements for Furnaces. The following controls apply during interim status to industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see LAC 33:V.3007.A.5.b)

at any location other than the hot end where products are normally discharged or where fuels are normally fired:

a. Controls

i. the hazardous waste shall be fed at a location where combustion gas temperatures are at least 1800°F;

ii. the owner or operator must determine that adequate oxygen is present in combustion gases to combust organic constituents in the waste and retain documentation of such determination in the facility record;

iii. for cement kiln systems, the hazardous waste shall be fed into the kiln; and

iv. the hydrocarbon controls of LAC 33:V.3007.C.5 or 3009.C apply upon certification of compliance under LAC 33:V.3007.C irrespective of the CO level achieved during the compliance test.

b. Burning Hazardous Waste Solely as an Ingredient. A hazardous waste is burned for a purpose other than solely as an ingredient if it meets either of these criteria:

i. the hazardous waste has a total concentration of nonmetal compounds listed in LAC 33:V.4901.G.Table 6 exceeding 500 ppm by weight, as-fired, and, so, is considered to be burned for destruction. The concentration of nonmetal compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys nonmetal constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the facility record; or

ii. the hazardous waste has a heating value of 5,000 Btu/lb or more, as-fired, and, so, is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly blended must be retained in the facility record.

6. Restrictions on Burning Hazardous Waste That is Not a Fuel. Prior to certification of compliance under LAC 33:V.3007.C, owners and operators shall not feed hazardous waste that has a heating value less than 5,000 Btu/lb, as-generated, (except that the heating value of a waste as-generated may be increased to above the 5,000 Btu/lb limit by bona fide treatment; however, blending to augment heating value to meet the 5,000 Btu/lb limit is prohibited and records must be kept to document that impermissible blending has not occurred) in a boiler or industrial furnace, except that:

a. hazardous waste may be burned solely as an ingredient; or

b. hazardous waste may be burned for purposes of compliance testing (or testing prior to compliance testing) for a total period of time not to exceed 720 hours; or

c. such waste may be burned if the administrative authority has documentation to show that, prior to August 21, 1991:

i. the boiler or industrial furnace is operating under the interim status standards for incinerators provided by LAC 33:V.Chapter 43.Subchapter N or the interim status standards for thermal treatment units provided by LAC 33:V.Chapter 43.Subchapter O;

ii. the boiler or industrial furnace met the interim status eligibility requirements under LAC 33:V.4301 for LAC 33:V.Chapter 43.Subchapters N or O; and

iii. hazardous waste with a heating value less than 5,000 Btu/lb was burned prior to that date; or

d. such waste may be burned in a halogen acid furnace if the waste is burned as an excluded ingredient under LAC 33:V.109.Solid Waste.5 prior to February 21, 1991 and documentation is kept on file supporting this claim.

7. Direct Transfer to the Burner. If hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit, the owner and operator must comply with LAC 33:V.3023.

B. Certification of Precompliance

1. General. The owner or operator must provide complete and accurate information specified in LAC 33:V.3007.B.2 to the administrative authority on or before August 21, 1991, and must establish limits for the operating parameters specified in LAC 33:V.3007.B.3. Such information is termed a "certification of precompliance" and constitutes a certification that the owner or operator has determined that, when the facility is operated within the limits specified in LAC 33:V.3007.B.3, the owner or operator believes that, using best engineering judgment, emissions of particulate matter, metals, and HCl and Cl_2 are not likely to exceed the limits provided by LAC 33:V.3011 - 3015. The facility may burn hazardous waste only under the operating conditions that the owner or operator establishes under LAC 33:V.3007.B.3 until the owner or operator submits a revised certification of precompliance under LAC 33:V.3007.B.8 or a certification of compliance under LAC 33:V.3007.C, or until a permit is issued.

2. Information Required. The following information must be submitted with the certification of precompliance to support the determination that the limits established for the operating parameters identified in LAC 33:V.3007.B.3 are not likely to result in an exceedance of the allowable emission rates for particulate matter, metals, and HCl and Cl_2:

a. general facility information:

i. EPA facility ID number;

ii. facility name, contact person, telephone number, and address;

iii. description of boilers and industrial furnaces burning hazardous waste, including type and capacity of device;

iv. a scaled plot plan showing the entire facility and location of the boilers and industrial furnaces burning hazardous waste; and

v. a description of the air pollution control system on each device burning hazardous waste, including the temperature of the flue gas at the inlet to the particulate matter control system;

b. except for facilities complying with the Tier I or Adjusted Tier I feed rate screening limits for metals or total chlorine and chloride provided by LAC 33:V.3013.B or E and LAC 33:V.3015.B or E, respectively, the estimated uncontrolled (at the inlet to the air pollution control system) emissions of particulate matter, each metal controlled by LAC 33:V.3013, and hydrogen chloride and chlorine, and the following information to support such determinations:

i. the feed rate (lb/hr) of ash, chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each feedstream (hazardous waste, other fuels, industrial furnace feedstocks);

ii. the estimated partitioning factor to the combustion gas for the materials identified in LAC 33:V.3007.B.2.a and the basis for the estimate and an estimate of the partitioning to HCl and Cl_2 of total chloride and chlorine in feed materials. To estimate the partitioning factor, the owner or operator must use either best engineering judgment or the procedures specified in 40 CFR 266, Appendix IX;

iii. for industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under LAC 33:V.3007.C.3.b.i, the estimated enrichment factor for each metal. To estimate the enrichment factor, the owner or operator must use either best engineering judgment or the procedures specified in "Alternative Methodology for Implementing Metals Controls" in 40 CFR 266, Appendix IX;

iv. if best engineering judgment is used to estimate partitioning factors or enrichment factors under LAC 33:V.3007.B.2.b or c respectively, the basis for the judgment. When best engineering judgment is used to develop or evaluate data or information and make determinations under this Section, the determinations must be made by a qualified, registered professional engineer and a certification of his/her determinations in accordance with LAC 33:V.513 must be provided in the certification of precompliance;

c. for facilities complying with the Tier I or Adjusted Tier I feed rate screening limits for metals or total chlorine and chloride provided by LAC 33:V.3013.B or E and 3015.B.1 or E, the feed rate (lb/hr) of total chloride and chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each feed stream (hazardous waste, other fuels, industrial furnace feedstocks);

d. for facilities complying with the Tier II or Tier III emission limits for metals or HCl and Cl_2 (under LAC 33:V.3013.C or D or 3015.B.2 or C, the estimated controlled (outlet of the air pollution control system) emissions rates of particulate matter, each metal controlled by LAC 33:V.3013, and HCl and Cl_2, and the following information to support such determinations:

i. the estimated air pollution control system (APCS) removal efficiency for particulate matter, HCl, Cl_2, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium;

ii. to estimate APCS removal efficiency, the owner or operator must use either best engineering judgment or the procedures prescribed in 40 CFR 266 Appendix IX;

iii. if best engineering judgment is used to estimate APCS removal efficiency, the basis for the judgment is required. Use of best engineering judgment must be in conformance with provisions of LAC 33:V.3007.B.2.b.iv;

e. determination of allowable emissions rates for HCl, Cl_2, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium, and the following information to support such determinations:

i. for all facilities:

(a). physical stack height;

(b). good engineering practice stack height as defined by 40 CFR 51.100(ii);

(c). maximum flue gas flow rate;

(d). maximum flue gas temperature;

(e). attach a US Geological Service topographic map (or equivalent) showing the facility location and surrounding land within five kilometers of the facility;

(f). identify terrain type (complex or noncomplex); and

(g). identify land use (urban or rural);

ii. for owners and operators using Tier III site specific dispersion modeling to determine allowable levels under LAC 33:V.3013.D or 3015.C, or adjusted Tier I feed rate screening limits under LAC 33:V.3013.E or 3015.E:

(a). dispersion model and version used;

(b). source of meteorological data;

(c). the dilution factor in micrograms per cubic meter per gram per second of emissions for the maximum annual average off-site (unless on-site is required) ground level concentration (MEI location); and

(d). indicate the MEI location on the map required under LAC 33:V.3007.B.2.e.i.(e);

f. for facilities complying with the Tier II or III ~~sions~~ rate controls for metals or HCl and Cl_2, a ~~parison~~ of the estimated controlled emissions rates determined under LAC 33:V.3017.B.2.d with the allowable emission rates determined under LAC 33:V.3017.B.2.e;

g. for facilities complying with the Tier I (or adjusted Tier I) feed rate screening limits for metals or total chloride and chlorine, a comparison of actual feed rates of each metal and total chlorine and chloride determined under LAC 33:V.3007.B.2.c to the Tier I allowable feed rates; and

h. for industrial furnaces that feed hazardous waste for any purpose other than solely as an ingredient (as defined by LAC 33:V.3007.A.5.b) at any location other than the product discharge end of the device, documentation of compliance with the requirements of LAC 33:V.3007.A.5.a.i-iii;

i. for industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under LAC 33:V.3007.C.3.b.i:

i. the applicable particulate matter standard in lb/hr; and

ii. the precompliance limit on the concentration of each metal in collected PM.

3. Limits on Operating Conditions. The owner and ~~erator~~ shall establish limits on the following parameters consistent with the determinations made under LAC 33:V.3007.B.2 and certify (under provisions of LAC 33:V.3007.B.9) to the administrative authority that the facility will operate within the limits during interim status when there is hazardous waste in the unit until revised certification of precompliance under LAC 33:V.3007.B.8 or certification of compliance under LAC 33:V.3007.C:

a. feed rate of total hazardous waste and (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E) pumpable hazardous waste;

b. feed rate of each metal in the following feedstreams:

i. total feedstreams, except that industrial furnaces that comply with the alternative metals implementation approach under LAC 33:V.3007.B.4 must specify limits on the concentration of each metal in collected particulate matter in lieu of feed rate limits for total feedstreams;

ii. total hazardous waste feed unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E; and

iii. total pumpable hazardous waste feed, unless ~~omplying~~ with the Tier I or adjusted Tier I metals feed rate ~~screening~~ limits under LAC 33:V.3013.B or E;

c. total feed rate of chlorine and chloride in total feedstreams;

d. total feed rate of ash in total feedstreams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited; and

e. maximum production rate of the device in appropriate units when producing normal product, unless complying with the Tier I or Adjusted Tier I feed rate screening limits for chlorine under LAC 33:V.3015.B.1 or E and for all metals under LAC 33:V.3013.B or E and the uncontrolled emissions do not exceed the standard under LAC 33:V.3011.

4. Operating Requirements for Furnaces that Recycle PM. Owners and operators of furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions controls under LAC 33:V.3007.C.3.b.i must comply with the special operating requirements provided in "Alternative Methodology for Implementing Metals Controls" in 40 CFR 266, Appendix IX.

5. Measurement of Feed Rates and Production Rate

a. General Requirements. Limits on each of the parameters specified in LAC 33:V.3007.B.3 (except for limits on metals concentrations in collected particulate matter (PM) for industrial furnaces that recycle collected PM) shall be established and continuously monitored under either of the following methods:

i. Instantaneous Limits. A limit for a parameter may be established and continuously monitored and recorded on an instantaneous basis (i.e., the value that occurs at any time) not to be exceeded at any time; or

ii. Hourly Rolling Average Limits. A limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(a). A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds;

(b). An hourly rolling average is the arithmetic mean of the 60 most recent one-minute average values recorded by the continuous monitoring system.

b. Rolling Average Limits for Carcinogenic Metals and Lead. Feed rate limits for the carcinogenic metals (arsenic, beryllium, cadmium, and chromium) and lead may be established either on an hourly rolling average basis as prescribed by LAC 33:V.3007.B.5.a.ii or on (up to) a 24-hour rolling average basis. If the owner or operator elects to use an averaging period from 2 to 24 hours:

i. the feed rate of each metal shall be limited at any time to 10 times the feed rate that would be allowed on a hourly rolling average basis;

ii. the continuous monitor shall meet the following specifications:

(a). a continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds;

(b). the rolling average for the selected averaging period is defined as the arithmetic mean of one-hour block averages for the averaging period. A one-hour block average is the arithmetic mean of the one-minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour.

c. Feed Rate Limits for Metals, Total Chloride and Chlorine, and Ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of LAC 33:V.3007.B.5.a and b.

6. Public Notice Requirements at Precompliance. On or before August 21, 1991, the owner or operator must submit a notice with the following information for publication in a major local newspaper of general circulation and send a copy of the notice to the appropriate units of state and local government. The owner or operator must provide to the administrative authority with the certification of precompliance evidence of submitting the notice for publication. The notice, which shall be entitled "Notice of Certification of Precompliance with Hazardous Waste Burning Requirements of LAC 33:V.3007.B", must include:

a. name and address of the owner or operator of the facility as well as the location of the device burning hazardous waste;

b. date that the certification of precompliance is submitted to the administrative authority;

c. brief description of the regulatory process required to comply with the interim status requirements of this Section including required emissions testing to demonstrate conformance with emissions standards for organic compounds, particulate matter, metals, and HCl and Cl_2;

d. types and quantities of hazardous waste burned including. but not limited to, source, whether solid or liquid, as well as an appropriate description of the waste;

e. type of device(s) in which the hazardous waste is burned including a physical description and maximum production rate of each device;

f. types and quantities of other fuels and industrial furnace feedstocks fed to each unit;

g. brief description of the basis for this certification of precompliance as specified in LAC 33:V.3007.B.2;

h. locations where the record for the facility can be viewed and copied by interested parties. These records and locations shall, at a minimum, include:

i. the administrative record kept by the Louisiana Department of Environmental Quality (LDEQ) where the supporting documentation was submitted or another location designated by the administrative authority; and

ii. the BIF correspondence file kept at the facility site where the device is located. The correspondence must include all correspondence between the facility and the director, administrative authority, including copies of all certifications and notifications, such as the precompliance certification, precompliance public notice, notice of compliance testing, compliance test report, compliance certification, time extension requests and approvals or denials, enforcement notifications of violations, and copies of EPA and state site visit reports submitted to the owner or operator;

i. notification of the establishment of a facility mailing list whereby interested parties shall notify the LDEQ that they wish to be placed on the mailing list to receive future information and notices about this facility; and

j. location (mailing address) of the applicable LDEQ Regional Office, Hazardous Waste Division, where further information can be obtained on LDEQ regulation of hazardous waste burning.

7. Monitoring Other Operating Parameters. When the monitoring systems for the operating parameters listed in LAC 33:V.3007.C.1.e-m are installed and operating in conformance with vendor specifications or (for CO, HC, and oxygen) specifications provided by 40 CFR 266, Appendix IX, as appropriate, the parameters shall be continuously monitored and records shall be maintained in the operating record.

8. Revised Certification of Precompliance. The owner or operator may revise at any time the information and operating conditions documented under LAC 33:V.3007.B.2 and 3 in the certification of precompliance by submitting a revised certification of precompliance under procedures provided by those paragraphs.

a. The public notice requirements of LAC 33:V.3007.B.6 do not apply to recertifications.

b. The owner or operator must operate the facility within the limits established for the operating parameters under LAC 33:V.3007.B.3 until a revised certification is submitted under this Paragraph or a certification of compliance is submitted under LAC 33:V.3007.C.

9. Certification of Precompliance Statement. The owner or operator must include the following signed statement with the certification of precompliance submitted to the administrative authority:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly

gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results and other information used to determine conformance with the requirements of LAC 33:V.3007.B are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manages the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating limits established in this certification pursuant to LAC 33:V.3007.B.3 and 4 are enforceable limits at which the facility can legally operate during interim status until: (1) A revised certification of precompliance is submitted, (2) a certification of compliance is submitted, or (3) an operating permit is issued."

C. Certification of Compliance. The owner or operator shall conduct emissions testing to document compliance with the emissions standards of LAC 33:V.3007.a.5.a-e, 3009.B-E, 3011, 3013, and 3015, under the procedures prescribed by this Subsection, except under extensions of time provided by LAC 33:V.3007.C.7. Based on the compliance test, the owner or operator shall submit to the administrative authority, on or before August 21, 1992, a complete and accurate "certification of compliance" (under LAC 33:V.3007.C.4) with those emission standards establishing limits on the operating parameters specified in LAC 33:V.3007.C.1.

1. Limits on Operating Conditions. The owner or operator shall establish limits on the following parameters based on operations during the compliance test (under procedures prescribed in LAC 33:V.3007.C.4.d) or as otherwise specified and include these limits with the certification of compliance. The boiler or industrial furnace must be operated in accordance with these operating limits and the applicable emissions standards of LAC 33:V.3009.B-E, 3011, 3013, 3015, and 3007.A.5.a.iv at all times when there is hazardous waste in the unit:

a. feed rate of total hazardous waste and (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E), pumpable hazardous waste;

b. feed rate of each metal in the following feedstreams:

i. total feed streams, except that:

(a). facilities that comply with Tier I or Adjusted Tier I metals feed rate screening limits may set their operating limits at the metal feed rate screening limit determined under LAC 33:V.3013.B or E; and

(b). industrial furnaces that must comply with the alternative metals implementation approach under LAC 33:V.3007.C.3.b.ii must specify limits on the concentration of each metal in the collected particulate matter in lieu of feed rate limits for total feedstreams.

ii. total hazardous waste feed (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E); and

iii. total pumpable hazardous waste feed;

c. total feed rate of chlorine and chloride in total feed streams, except that facilities that comply with Tier I or Adjusted Tier I feed rate screening limits may set their operating limits at the total chlorine and chlorine feed rate screening limits determined under LAC 33:V.3015.B.1 or E;

d. total feed rate of ash in total feedstreams, except that the ash feed rate for cement kilns and light-weighted aggregate kilns is not limited;

e. carbon monoxide concentration, and where required, hydrocarbon concentration in stack gas. When complying with the CO controls of LAC 33:V.3009.B, the CO limit is 100 ppmv, and when complying with the HC controls of LAC 33:V.3009.C, the HC limit is 20 ppmv. When complying with the CO controls of LAC 33:V.3009.C, the CO limit is established based on the compliance test;

f. maximum production rate of the device in appropriate units when producing normal product, unless complying with the Tier I or Adjusted Tier I feed rate screening limits for chlorine under LAC 33:V.3015.B.1 or E and for all metals under LAC 33:V.3013.B or E and the uncontrolled particulate emissions do not exceed the standard under LAC 33:V.3011;

g. maximum combustion chamber temperature where the temperature measurement is as close to the combustion zone as possible and is upstream of any quench water injection, (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E);

h. maximum flue gas temperature entering a particulate matter control device (unless complying with Tier I or Adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E and the total chlorine and chlorine feed rate screening limits under LAC 33:V.3015.B or E);

i. for systems using wet scrubbers, including wet ionizing scrubbers (unless complying with the Tier I or Adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E:

i. minimum liquid to flue gas ratio;

ii. minimum scrubber blowdown from the system or maximum suspended solids content of scrubber water; and

iii. minimum pH level of the scrubber water;

j. for systems using venturi scrubbers, the minimum differential gas pressure across the venturi (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E and the total chlorine and

~~chloride feed rate screening limits under LAC 33:V.3015.B.1~~ or E);

k. for systems using dry scrubbers (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under LAC 33:V.3015.B.1 or E and the total chlorine and chloride feed rate screening limits under LAC 33:V.3015.B.1 or E):

i. minimum caustic feed rate; and

ii. maximum flue gas flow rate;

l. for systems using wet ionizing scrubbers or electrostatic precipitators (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E and the total chlorine and chloride feed rate screening limits under LAC 33:V.3015.B.1 or E):

i. minimum electrical power in kilovolt amperes (kVA) to the precipitator plates; and

ii. maximum flue gas flow rate;

m. for systems using fabric filters (baghouses), the minimum pressure drop (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under LAC 33:V.3013.B or E and the total chlorine and chloride feed rate screening limits under LAC 33;V.3015.B.1 or E).

2. Prior Notice of Compliance Testing. At least 30 days prior to the compliance testing required by LAC 33:V.3007.C.3, the owner or operator shall notify the administrative authority and submit the following information:

a. general facility information including:

i. EPA facility ID number;

ii. facility name, contact person, telephone number, and address;

iii. person responsible for conducting compliance testing, including company name, address, and telephone number, and a statement of qualifications;

iv. planned date of the compliance test;

b. specific information on each device to be tested including:

i. description of boiler or industrial furnace;

ii. a scaled plot plan showing the entire facility and location of the boiler or industrial furnace;

iii. a description of the air pollution control system;

iv. identification of the continuous emission monitors that are installed, including:

(a). carbon monoxide monitor;

(b). oxygen monitor;

(c). hydrocarbon monitor, specifying the minimum temperature of the system and, if the temperature is less than 150°C, an explanation of why a heated system is not used (see ~~LAC 33:V.3007.C.5) and a brief description of the sample gas~~ conditioning system;

v. indication of whether the stack is shared with another device that will be in operation during the compliance test;

vi. other information useful to an understanding of the system design or operation;

c. information on the testing planned, including a complete copy of the test protocol and Quality Assurance/Quality Control (QA/QC) plan, and a summary description for each test providing the following information at a minimum:

i. purpose of the test (e.g., demonstrate compliance with emissions of particulate matter); and

ii. planned operating conditions, including levels for each pertinent parameter specified in LAC 33:V.3007.C.1.

3. Compliance Testing

a. General. Compliance testing must be conducted under conditions for which the owner or operator has submitted a certification of precompliance under LAC 33:V.3007.B and under conditions established in the notification of compliance testing required by LAC 33:V.3007.C.2. The owner or operator may seek approval on a case-by-case basis to use compliance test data from one unit in lieu of testing a similar on-site unit. To support the request, the owner or operator must provide a comparison of the hazardous waste burned and other feed streams and the design, operation, and maintenance of both the tested unit and the similar unit. The administrative authority shall provide a written approval to use compliance test data in lieu of testing a similar unit if he finds that the hazardous wastes, the devices, and the operating conditions are sufficiently similar and the data from the other compliance test is adequate to meet the requirements of LAC 33:V.3007.C.

b. Special Requirements for Industrial Furnaces that Recycle Collected PM. Owners and operators of industrial furnaces that recycle back into the furnace particulate matter (PM) from the air pollution control system must comply with one of the following procedures for testing to determine compliance with the metals standards of LAC 33:V.3013.C or D:

i. the special testing requirements prescribed in "Alternative Method for Implementing Metals Controls" in 40 CFR 266, Appendix IX; or

ii. stack emissions testing for a minimum of six hours each day while hazardous waste is burned during interim status. The testing must be conducted when burning normal hazardous waste for that day at normal feed rates for that day and when the air pollution control system is operated under normal conditions. During interim status, hazardous waste analysis for metals content must be sufficient for the owner or operator to determine if changes in metals content may affect

the ability of the facility to meet the metals emissions standards established under LAC 33:V.3013.C or D. Under this option, operating limits (under LAC 33:V.3007.C.1) must be established during compliance testing under LAC 33:V.3007.C.3 only on the following parameters:

(a). feed rate of total hazardous waste;

(b). total feed rate of chlorine and chloride in total feedstreams;

(c). total feed rate of ash in total feedstreams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited;

(d). carbon monoxide concentration and, where required, hydrocarbon concentration in stack gas;

(e). maximum production rate of the device in appropriate units when producing normal product; or

iii. conduct compliance testing to determine compliance with the metals standards to establish limits on the operating parameters of LAC 33:V.3007.C.1 only after the kiln system has been conditioned to enable it to reach equilibrium with respect to metals fed into the system and metals emissions. During conditioning, hazardous waste and raw materials having the same metals content as will be fed during the compliance test must be fed at the feed rates that will be fed during the compliance test.

c. Conduct of Compliance Testing

i. If compliance with all applicable emissions standards of LAC 33:V.3009-3015 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.

ii. Prior to obtaining test data for purposes of demonstrating compliance with the applicable emissions standards of LAC 33:V.3009-3015 or establishing limits on operating parameters under this Section, the facility must operate under compliance test conditions for a sufficient period to reach steady-state operations. Industrial furnaces that recycle collected particulate matter back into the furnace and that comply with LAC 33:V.3007.C.3.b.i or ii, however, need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals.

iii. Compliance test data on the level of an operating parameter for which a limit must be established in the certification of compliance must be obtained during emissions sampling for the pollutant(s) (i.e., metals, PM, HCl/Cl_2, organic compounds) for which the parameter must be established as specified by LAC 33:V.3007.C.1.

4. Certification of Compliance. Within 90 days of completing compliance testing, the owner or operator must certify to the administrative authority compliance with the emissions standards of LAC 33:V.3007.A.5.a.iv, 3009.B,C, and E, 3011, 3013, and 3015. The certification of compliance must include the following information:

a. general facility and testing information including:

i. EPA facility ID number;

ii. facility name, contact person, telephone number, and address;

iii. person responsible for conducting compliance testing, including company name, address, and telephone number, and a statement of qualifications;

iv. date(s) of each compliance test;

v. description of boiler or industrial furnace tested;

vi. person responsible for quality assurance/quality control (QA/QC), title, and telephone number, and statement that procedures prescribed in the QA/QC plan submitted under LAC 33:V.3007.C.2.c have been followed, or a description of any changes and an explanation of why changes were necessary;

vii. description of any changes in the unit configuration prior to or during testing that would alter any of the information submitted in the prior notice of compliance testing under LAC 33:V.3007.C.2, and an explanation of why the changes were necessary;

viii. description of any changes in the planned test conditions prior to or during the testing that alter any of the information submitted in the prior notice of compliance testing under LAC 3007.C.2, and an explanation of why the changes were necessary; and

ix. the complete report on results of emissions testing;

b. specific information on each test including:

i. purpose(s) of test (e.g., demonstrate conformance with the emissions limits for particulate matter, metals, HCl, Cl_2, and CO);

ii. summary of test results for each run and for each test including the following information:

(a). date of run;

(b). duration of run;

(c). time-weighted average and highest hourly rolling average CO level for each run and for the test;

(d). highest hourly rolling average HC level, if HC monitoring is required for each run and for the test;

(e). if dioxin and furan testing is required under LAC 33:V.3009.E, time-weighted average emissions for each run and for the test of chlorinated dioxin and furan emissions, and the predicted maximum annual average ground level concentration of the toxicity equivalency factor;

(f). time-weighted average particulate matter emissions for each run and for the test;

(g). time-weighted average HCl and Cl_2 emissions for each run and for the test;

(h). time-weighted average emissions for the metals subject to regulation under LAC 33:V.3013 for each run and for the test; and

(i). QA/QC results;

c. comparison of the actual emissions during each test with the emissions limits prescribed by LAC 33:V.3009.B, C, and E, 3011, 3013, and 3015 and established for the facility in the certification of precompliance under LAC 33:V.3007.B;

d. determination of operating limits based on all valid runs of the compliance test for each applicable parameter listed in LAC 33:V.3007.C.1 using either of the following procedures:

i. Instantaneous Limits. A parameter may be measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the operating limit specified as the time-weighted average during all runs of the compliance test; or

ii. Hourly Rolling Average Basis

(a). The limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(i). a continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds;

(ii). an hourly rolling average is the arithmetic mean of the 60 most recent one-minute average values recorded by the continuous monitoring system;

(b). The operating limit for the parameter shall be established based on compliance test data as the average over all test runs of the highest hourly rolling average value for each run;

iii. Rolling Average Limits for Carcinogenic Metals and Lead. Feed rate limits for the carcinogenic metals (i.e., arsenic, beryllium, cadmium and chromium) and lead may be established either on an hourly rolling average basis as prescribed by LAC 33:V.3007.C.4.d.ii or on (up to) a 24-hour rolling average basis. If the owner or operator elects to use an averaging period from 2 to 24 hours:

(a). the feed rate of each metal shall be limited at any time to 10 times the feed rate that would be allowed on a hourly rolling average basis;

(b). the continuous monitor shall meet the following specifications:

(i). a continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds;

(ii). the rolling average for the selected averaging period is defined as the arithmetic mean of one-hour block averages for the averaging period. A one-hour block average is the arithmetic mean of the one-minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour; and

(c). the operating limit for the feed rate of each metal shall be established based on compliance test data as the average over all test runs of the highest hourly rolling average feed rate for each run;

iv. Feed Rate Limits for Metals, Total Chloride and Chlorine, and Ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of LAC 33:V.3007.C.4.d.i-iii;

e. Certification of Compliance Statement. The following statement shall accompany the certification of compliance:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results and other information used to determine conformance with the requirements of LAC 33:V.3007.C are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manages the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating conditions established in this certification pursuant to LAC 33:V.3007.C.4.d are enforceable limits at which the facility can legally operate during interim status until a revised certification of compliance is submitted."

5. Special Requirements for HC Monitoring Systems. When an owner or operator is required to comply with the hydrocarbon (HC) controls provided by LAC 33;V.3007.A.5.a.iv or 3009.C, a conditioned gas monitoring system may be used in conformance with specifications provided in 40 CFR 266, Appendix IX provided that the owner or operator submits a certification of compliance without using extensions of time provided by LAC 33:V.3007.C.7. However, owners and operators of facilities

electing to comply with the alternative hydrocarbon provision LAC 33:V.3009.F and requesting a time extension under C 33:V.3007.C.7.b.ii may establish a baseline HC level and comply with interim HC limits established by the time extension using a conditioned gas monitoring system if the administrative authority determines that the owner or operator have demonstrated that they have made a good faith effort to operate a heated monitoring system but found it to be impractical.

6. Special Operating Requirements for Industrial Furnaces that Recycle Collected PM. Owners and operators of industrial furnaces that recycle back into the furnace particulate matter (PM) from the air pollution control system must:

a. (when complying with the requirements of LAC 33:V.3007.C.7), comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in 40 CFR 266, Appendix IX; and

b. (when complying with the requirements of LAC 33:V.3007.C.3.b.ii), comply with the operating requirements prescribed by that paragraph.

7. Extensions of Time

a. If the owner or operator does not submit a complete certification of compliance for all of the applicable emissions ndards of LAC 33:V.3009-3015 by August 21, 1992, e/she must either:

i. stop burning hazardous waste and begin closure activities under LAC 33:V.3007 for the hazardous waste portion of the facility; or

ii. limit hazardous waste burning only for purposes of compliance testing (and pretesting to prepare for compliance testing) a total period of 720 hours for the period of time beginning August 21, 1992, submit a notification to the administrative authority by August 21, 1992 stating that the facility is operating under restricted interim status and intends to resume burning hazardous waste, and submit a complete certification of compliance by August 21, 1993; or

iii. obtain a case-by-case extension of time under LAC 33:V.3007.C.7.b.

b. The owner or operator may request a case-by-case extension of time to extend any time limit provided by LAC 33:V.3007.C if compliance with the time limit is not practicable for reasons beyond the control of the owner or operator.

i. In granting an extension, the administrative authority may apply conditions as the facts warrant to ensure timely compliance with the requirements of this Section and hat the facility operates in a manner that does not pose a hazard to human health and the environment.

ii. When an owner or operator requests an extension of time to enable the facility to comply with the alternative hydrocarbon provisions of LAC 33:V.3009.F and to obtain a RCRA operating permit because the facility cannot meet the HC limit of LAC 33:V.3009.C, the administrative authority shall, in considering whether to grant the extension:

(a). determine whether the owner or operator has submitted in a timely manner a complete Part B permit application that includes information required under LAC 33:V.535; and

(b). consider whether the owner or operator has made a good faith effort to certify compliance with all other emission controls, including the controls on dioxins and furans of LAC 33:V.3009.E and the controls on PM, metals, and HCl/Cl_2.

iii. If an extension is granted, the administrative authority shall, as a condition of the extension, require the facility to operate under flue gas concentration limits on CO and HC that, based on available information, including information in the part B permit application, are baseline CO and HC levels as defined by LAC 33:V.3009.F.1.

8. Revised Certification of Compliance. The owner or operator may submit at any time a revised certification of compliance (recertification of compliance) under the following procedures:

a. prior to submittal of a revised certification of compliance, hazardous waste may not be burned for more than a total of 720 hours under operating conditions that exceed those established under a current certification of compliance, and such burning may be conducted only for purposes of determining whether the facility can operate under revised conditions and continue to meet the applicable emissions standards of LAC 33:V.3009-3015;

b. at least 30 days prior to first burning hazardous waste under operating conditions that exceed those established under a current certification of compliance, the owner or operator shall notify the administrative authority and submit the following information:

i. EPA facility ID number, and facility name, contact person, telephone number, and address;

ii. operating conditions that the owner or operator is seeking to revise and description of the changes in facility design or operation that prompted the need to seek to revise the operating conditions;

iii. a determination that when operating under the revised operating conditions, the applicable emissions standards of LAC 33:V.3009-3015 are not likely to be exceeded. To document this determination, the owner or operator shall submit the applicable information required under LAC 33:V.3007.B.2; and

iv. complete emissions testing protocol for any pretesting and for a new compliance test to determine compliance with the applicable emissions standards of LAC 33:V.3009-3015 when operating under revised operating conditions. The protocol shall include a schedule of pre-

testing and compliance testing. If the owner and operator revises the scheduled date for the compliance test, he/she shall notify the administrative authority in writing at least 30 days prior to the revised date of the compliance test;

c. conduct a compliance test under the revised operating conditions and the protocol submitted to the administrative authority to determine compliance with the applicable emissions standards of LAC 33:V.3009 - 3015; and

d. submit a revised certification of compliance under LAC 33:V.3007.C.4.

D. Periodic Recertifications. The owner or operator must conduct compliance testing and submit to the administrative authority a recertification of compliance under provisions of LAC 33:V.3007.C within three years from submitting the previous certification or recertification. If the owner or operator seeks to recertify compliance under new operating conditions, he/she must comply with the requirements of LAC 33:V.3007.C.8.

E. Noncompliance with Certification Schedule. If the owner or operator does not comply with the interim status compliance schedule provided by LAC 33:V.3007.B-D, hazardous waste burning must terminate on the date that the deadline is missed, closure activities must begin under LAC 33:V.3007, and hazardous waste burning may not resume except under an operating permit issued under LAC 33:V.537. For purposes of compliance with the closure provisions of LAC 33:V.3007.L, 4381.D.2, and 4383, the boiler or industrial furnace has received "the known final volume of hazardous waste" on the date that the deadline is missed.

F. Start-Up and Shutdown. Hazardous waste (except waste fed solely as an ingredient under the Tier I, or adjusted Tier I, feed rate screening limits for metals and chloride/chlorine) must not be fed into the device during start-up and shutdown of the boiler or industrial furnace, unless the device is operating within the conditions of operation specified in the certification of compliance.

G. Automatic Waste Feed Cutoff. During the compliance test required by LAC 33:V.3007.C.3, and upon certification of compliance under LAC 33:V.3007.C, a boiler or industrial furnace must be operated with a functioning system that automatically cuts off the hazardous waste feed when the applicable operating conditions specified in LAC 33:V.3007.C.1.a and e-m deviate from those established in the certification of compliance. In addition:

1. to minimize emissions of organic compounds, the minimum combustion chamber temperature (or the indicator of combustion chamber temperature) that occurred during the compliance test must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber, with the minimum temperature during the compliance test defined as either:

a. if compliance with the combustion chamber temperature limit is based on an hourly rolling average, the minimum temperature during the compliance test is considered to be the average over all runs of the lowest hourly rolling average for each run; or

b. if compliance with the combustion chamber temperature limit is based on an instantaneous temperature measurement, the minimum temperature during the compliance test is considered to be the time-weighted average temperature during all runs of the test; and

2. operating parameters limited by the certification of compliance must continue to be monitored during the cutoff, and the hazardous waste feed shall not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.

H. Fugitive Emissions. Fugitive emissions must be controlled by:

1. keeping the combustion zone totally sealed against fugitive emissions; or

2. maintaining the combustion zone pressure lower than atmospheric pressure; or

3. an alternate means of control that the owner or operator can demonstrate provides fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Support for such demonstration shall be included in the operating record.

I. Changes. A boiler or industrial furnace must cease burning hazardous waste when changes in combustion properties, or feed rates of the hazardous waste, other fuels, or industrial furnace feedstocks, or changes in the boiler or industrial furnace design or operating conditions deviate from the limits specified in the certification of compliance.

J. Monitoring and Inspections

1. The owner or operator must monitor and record, at a minimum, the following while burning hazardous waste:

a. feed rates and composition of hazardous waste, other fuels, and industrial furnace feedstocks, and feed rates of ash, metals, and total chloride and chlorine as necessary to ensure conformance with the certification of precompliance or certification of compliance;

b. carbon monoxide (CO), oxygen, and if applicable, hydrocarbons (HC) must be monitored on a continuous basis at a common point in the boiler or industrial furnace downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with the operating limits specified in the certification of compliance. CO, HC and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in 40 CFR 266, Appendix IX;

c. upon the request of the administrative authority, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feedstocks as appropriate) and the stack gas emissions must be conducted to verify that the operating

conditions established in the certification of precompliance or ification of compliance achieve the applicable standards of .C 33:V.3009-3015.

2. The boiler or industrial furnace and associated equipment (pumps, valves, pipes, fuel, storage tanks, etc.) must be subjected to thorough visual inspection at least daily when hazardous waste is burned for leaks, spills, fugitive emissions, and signs of tampering.

3. The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every seven days when hazardous waste is burned to verify operability, unless the owner or operator has written documentation that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate, and the administrative authority approves less frequent inspections or testing. Support for such demonstration shall be included in the operating record. At a minimum, operational testing must be conducted at least monthly.

4. These monitoring and inspection data must be recorded and the records must be placed in the operating log.

K. Recordkeeping. The owner or operator must keep in the operating record of the facility all information and data required by this Section until closure of the boiler or industrial furnace unit.

L. Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the boiler or industrial furnace site and must comply with LAC 33:V.3023-3025.

[Note: Parts of this Section were previously promulgated in LAC 33:V.4142 which has been repealed.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3009. Standards to Control Organic Emissions

A boiler or industrial furnace burning hazardous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under LAC 33:V.3005.E, it will meet the following standards:

A. DRE Standard. A boiler or industrial furnace burning hazardous waste must meet the destruction and removal efficiency (DRE) performance standard of LAC 33:V.3009.

1. General. A boiler or industrial furnace burning hazardous waste must achieve a DRE of 99.99 percent for all organic hazardous constituents in the waste feed. To demonstrate conformance with this requirement, 99.99 percent DRE must be demonstrated during a trial burn for each principal organic hazardous constituent (POHC) designated under LAC 33:V.3009.A in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \left[1 - \frac{W_{out}}{W_{in}}\right] x\ 100$$

Where:

W_{in} = mass feed rate of one POHC in the hazardous waste fired to the boiler or industrial furnace;

W_{out} = mass emission rate of the same POHC present in stack gas prior to release to the atmosphere.

2. Designation of POHCs. Principal organic hazardous constituents (POHCs) are those compounds for which compliance with the DRE requirements shall be demonstrated in a trial burn in conformance with procedures prescribed in LAC 33:V.537. One or more POHCs will be specified in the facility's permit for each waste feed to be burned. POHCs shall be designated based on the degree of difficulty of destruction of the organic constituents in the hazardous waste and on their concentrations or mass in the waste feed, considering the results of hazardous waste analysis and trial burns or alternative data submitted with Part II of the facility's permit application. POHCs are most likely to be selected from among those compounds listed in LAC 33:V.4901.G.Table 6 that are also present in the normal waste feed. However, if the applicant demonstrates to the administrative authority's satisfaction that a compound not listed in LAC 33:V.4901.G.Table 6 or not present in the normal waste feed is a suitable indicator of compliance with the DRE requirements of this Section, that compound may be designated as a POHC. Such POHCs need not be toxic or organic compounds.

3. Dioxin-Listed Waste. A boiler or industrial furnace burning hazardous waste containing (or derived from) EPA Hazardous Waste Numbers F020, F021, F022, F023, F026 or F027 must achieve a DRE of 99.9999 percent for each POHC designated (under LAC 3009.A.1.b) in its permit. This performance must be demonstrated on POHCs that are more difficult to burn than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. The DRE is determined for each POHC from the equation in LAC 33:V.3009.A.1. In addition, the owner or operator of the boiler or industrial furnace must notify the administrative authority of his intent to burn EPA Hazardous Waste Numbers F020, F021, F022, F026 or F027.

4. Automatic Waiver of DRE Trial Burn. Owners and operators of boilers operated under the special operating requirements provided by LAC 33:V.3021 are considered to be in compliance with the DRE standard of LAC 33:V.3009.A.1 and are exempt from the DRE trial burn.

5. Low Risk Waste. Owners and operators of boilers or industrial furnaces that burn hazardous waste in compliance with the requirements of LAC 33:V.3019.A are considered to

be in compliance with the DRE standard of LAC 33:V.3009.A.1 and are exempt from the DRE trial burn.

B. Carbon Monoxide Standard

1. Except as provided in LAC 33:V.3009.C, the stack gas concentration of carbon monoxide (CO) from a boiler or industrial furnace burning hazardous waste cannot exceed 100 ppmv on an hourly rolling average basis (i.e., over any 60-minute period), continuously corrected to seven percent oxygen, dry gas basis.

2. CO and oxygen shall be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Carbon Monoxide and Oxygen for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in LAC 33:V.Chapter 30.Appendix IX.

3. Compliance with the 100 ppmv CO limit must be demonstrated during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). To demonstrate compliance, the highest hourly rolling average CO level during any valid run of the trial burn or compliance test must not exceed 100 ppmv.

C. Alternative Carbon Monoxide Standard

1. The stack gas concentration of carbon monoxide (CO) from a boiler or industrial furnace burning hazardous waste may exceed the 100 ppmv limit provided that stack gas concentrations of hydrocarbons (HC) do not exceed 20 ppmv, except as provided by LAC 33:V.3009.F for certain industrial furnaces.

2. HC limits must be established under this Section on an hourly rolling average basis (i.e., over any 60-minute period), reported as propane, and continuously corrected to seven percent oxygen, dry gas basis.

3. HC shall be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Hydrocarbons for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in LAC 33:V.Chapter 30.Appendix IX. CO and oxygen shall be continuously monitored in conformance with LAC 33:V.3009.B.2.

4. The alternative CO standard is established based on CO data during the trial burn (for a new facility) and the compliance test (for an interim status facility). The alternative CO standard is the average over all valid runs of the highest hourly average CO level for each run. The CO limit is implemented on an hourly rolling average basis, and continuously corrected to seven percent oxygen, dry gas basis.

D. Special Requirements for Furnaces. Owners or operators of industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see LAC 33:V.3007.A.5.b) at any location other than the end where products are normally discharged and where fuels are normally fired must comply with the hydrocarbon limits provided by LAC 33:V.3009.C or F irrespective of whether stack gas CO concentrations meet the 100 ppmv limit of LAC 33:V.3009.B.

E. Controls for Dioxins and Furans. Owners or operators of boilers and industrial furnaces that are equipped with a dry particulate matter control device that operates within the temperature range of 450-750°F, and industrial furnaces operating under an alternative hydrocarbon limit established under LAC 33:V.3009.F must conduct a site-specific risk assessment as follows to demonstrate that emissions of chlorinated dibenzo-p-dioxins and dibenzofurans do not result in an increased lifetime cancer risk to the hypothetical maximum exposed individual (MEI) exceeding 1 in 100,000:

1. during the trial burn (for new facilities or an interim status facility applying for a permit) or compliance test (for interim status facilities), determine emission rates of the tetra-octa congeners of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs/CDFs) using Method 23, "Determination of Polychlorinated Dibenzo-p-Dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) from Stationary Sources", in LAC 33:V.Chapter 30.Appendix IX;

2. estimate the 2,3,7,8-TCDD toxicity equivalence of the tetra-octa CDD/CDF congeners using "Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners" in 40 CFR 266, Appendix IX. Multiply the emission rates of CDD/CDF congeners with a toxicity equivalence greater than zero (see the procedure) by the calculated toxicity equivalence factor to estimate the equivalent emission rate of 2,3,7,8-TCDD;

3. conduct dispersion modeling using methods recommended in Guideline on Air Quality Models (Revised) or the "Hazardous Waste Combustion Air Quality Screening Procedure", which are provided in 40 CFR 266, Appendices X and IX, respectively, or "EPA SCREEN Screening Procedure" as described in Screening Procedures for Estimating Air Quality Impact of Stationary Sources to predict the maximum annual average off-site ground level concentration of 2,3,7,8-TCDD equivalents determined under LAC 33:V.3009.E.2. The maximum annual average on-site concentration must be used when a person resides on-site; and

4. the ratio of the predicted maximum annual average ground level concentration of 2,3,7,8-TCDD equivalents to the risk-specific dose for 2,3,7,8-TCDD provided in 40 CFR 266, Appendix V (2.2×10^{-7}) shall not exceed 1.0.

F. Alternative HC Limit for Furnaces with Organic Matter in Raw Material. For industrial furnaces that cannot meet the 20 ppmv HC limit because of organic matter in normal raw material, the administrative authority alternative HC limit on a case-by-case basis (under a Part II permit proceeding) at a level that ensures that flue gas HC (and CO) concentrations when burning hazardous waste are not greater than when not burning hazardous waste (the baseline HC level) provided that the owner or operator complies with the following requirements. However, cement kilns equipped with a by-pass

duct meeting the requirements of LAC 33:V.3009.G are not eligible for an alternative HC limit.

1. When the baseline HC (and CO) level is determined, the owner or operator must demonstrate that the facility is designed and operated to minimize hydrocarbon emissions from fuels and raw materials and that the facility is producing normal products under normal operating conditions feeding normal feedstocks and fuels. The baseline HC level is defined as the average overall valid test runs the highest hourly rolling average HC value for each run when the facility does not burn hazardous waste, adjusted as appropriate to consider the variability of hydrocarbon levels under good combustion operating conditions. The baseline CO level is determined based on the test runs to establish the baseline HC level and is defined as the average overall test runs of the highest hourly rolling average CO value for each run. More than one baseline level must be determined if the facility operates under different modes that may generate significantly lower HC (and CO) levels.

2. The owner or operator must develop an approach to monitor over time changes in the operation of the facility that could reduce the baseline HC level.

3. The owner or operator must conduct emissions testing during the trial burn to:

a. determine the baseline HC (and CO) level;

b. demonstrate that, when hazardous waste is burned, HC (and CO) levels do not exceed the baseline level; and

c. identify the types and concentrations of organic compounds listed in LAC 33:V.4901.G.Table 6, that are emitted and conduct dispersion modeling to predict the maximum annual average ground level concentration of each organic compound. On-site ground level concentrations must be considered for this evaluation if a person resides on site:

i. sampling and analysis of organic emissions shall be conducted using procedures prescribed by the administrative authority;

ii. dispersion modeling shall be conducted according to procedures provided by LAC 33:.3009.E.2; and

d. demonstrate that maximum annual average ground level concentrations of the organic compounds identified in LAC 33:V.3009.F.3.c do not exceed the following levels:

i. for the noncarcinogenic compounds listed in 40 CFR 266, Appendix IV, the levels established in Appendix IV;

ii. for the carcinogenic compounds listed in 40 CFR 266, Appendix V, the sum for all compounds of the ratios of the actual ground level concentration to the level established in Appendix V cannot exceed 1.0. To estimate the health risk from chlorinated dibenzo-p-dioxins and dibenzofuran congeners, use the procedures prescribed by LAC 33:V.3009.E.3 to estimate the 2,3,7,8-TCDD toxicity equivalence of the congeners;

iii. for compounds not listed in 40 CFR 266, Appendix IV or V, 0.1 micrograms per cubic meter.

4. All hydrocarbon levels specified under this Paragraph are to be monitored and reported as specified in LAC 33:V.3009.C.1 and 2.

G. Monitoring CO and HC in the By-Pass Duct of a Cement Kiln. Cement kilns may comply with the carbon monoxide and hydrocarbon limits provided by LAC 33:V.3009.B-D by monitoring in the by-pass duct provided that:

1. hazardous waste is fired only into the kiln and not at any location downstream from the kiln exit relative to the direction of gas flow; and

2. the by-pass duct diverts a minimum of 10 percent of kiln off-gas into the duct.

H. Use of Emissions Test Data to Demonstrate Compliance and Establish Operating Limits. Compliance with the requirements of this Section must be demonstrated simultaneously by emissions testing or during separate runs under identical operating conditions. Further, data to demonstrate compliance with the CO and HC limits of this Section or to establish alternative CO or HC limits under this Section must be obtained during the time that DRE testing, and where applicable, CDD/CDF testing under LAC 33:V.3009.E and comprehensive organic emissions testing under LAC 33:V.3009.F is conducted.

I. Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under LAC 33:V.3005) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section may be "information" justifying modification or revocation and re-issuance of a permit under LAC 33:V.323.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3011. Standards to Control Particulate Matter

A. A boiler or industrial furnace burning hazardous waste may not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) after correction to a stack gas concentration of seven percent oxygen, using procedures prescribed in 40 CFR 60, Appendix A, methods 1 through 5, and 40 CFR 266, Appendix IX.

B. An owner or operator meeting the requirements of LAC 33:V.3019.B for the low risk waste exemption is exempt from the particulate matter standard.

C. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under LAC 33:V.3005) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section may be "information" justifying modification or revocation and re-issuance of a permit under LAC 33:V.323.

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§3013. Standards to Control Metals Emissions

A. General. The owner or operator must comply with the metals standards provided by LAC 33:V.3013.B-F for each metal listed in LAC 33:V.3013.B that is present in hazardous waste at detectable levels using analytical procedures specified in Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods (SW-846).

B. Tier I Feed Rate Screening Limits. Feed rate screening limits for metals are specified in Appendix I of this Part as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in LAC 33:V.3013.B.7.

1. Noncarcinogenic Metals. The feed rates of antimony, barium, lead, mercury, thallium, and silver in all feedstreams, including hazardous waste, fuels, and industrial furnace feedstocks shall not exceed the screening limits specified in 40 CFR 266 Appendix I.

a. The feed rate screening limits for antimony, barium, mercury, thallium, and silver are based on either:

i. an hourly rolling average as defined in LAC 33:V.3005.E.6.a.ii; or

ii. an instantaneous limit not to be exceeded at any time.

b. The feed rate screening limit for lead is based on one of the following:

i. an hourly rolling average as defined in LAC 33:V.3005.E.6.a.ii;

ii. an averaging period of two to 24 hours as defined in LAC 33:V.3005.E.6.a with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis; or

iii. an instantaneous limit not to be exceeded at any time.

2. Carcinogenic Metals

a. The feed rates of arsenic, cadmium, beryllium, and chromium in all feed streams, including hazardous waste, fuels, and industrial furnace feedstocks shall not exceed values derived from the screening limits specified in LAC 33:V.Chapter 30.Appendix A. The feed rate of each of these metals is limited to a level such that the sum of the ratios of the actual feed rate to the feed rate screening limit specified in LAC 33:V.Chapter 30.Appendix A, shall not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^{n} \frac{AFR_{(i)}}{FRSL_{(i)}} \leq 1.0$$

Where:

n=number of carcinogenic metals;

AFR=actual feed rate to the device for metal "i";

FRSL=feed rate screening limit provided by Appendix I of this Part for metal "i".

b. The feed rate screening limits for the carcinogenic metals are based on either:

i. an hourly rolling average; or

ii. an averaging period of two to 24 hours, as defined in LAC 33:V.3005.E.6.b, with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis.

3. TESH

a. The terrain-adjusted effective stack height (TESH) is determined according to the following equation:

TESH=Ha+H1-Tr

Where:

Ha=Actual physical stack height;

H1=Plume rise as determined from 40 CFR 266 Appendix VI as a function of stack flow rate and stack gas exhaust temperature;

Tr=Terrain rise within five kilometers of the stack.

b. The stack height (Ha) may not exceed good engineering practice as specified in 40 CFR 51.100(ii).

c. If the TESH for a particular facility is not listed in the table in the appendices, the nearest lower TESH listed in the table shall be used. If the TESH is four meters or less, a value of four meters shall be used.

4. Terrain Type. The screening limits are a function of whether the facility is located in noncomplex or complex terrain. A device located where any part of the surrounding terrain within five kilometers of the stack equals or exceeds the elevation of the physical stack height (Ha) is considered to be in complex terrain and the screening limits for complex terrain apply. Terrain measurements are to be made from U.S. Geological Survey 7.5-minute topographic maps of the area surrounding the facility.

5. Land Use. The screening limits are a function of whether the facility is located in an area where the land use is urban or rural. To determine whether land use in the vicinity of the facility is urban or rural, use procedures provided in 40 CFR 266, Appendices IX or X.

6. Multiple Stacks. Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls of metals emissions under a RCRA operating permit or interim status controls must comply with the screening limits for all such units assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics. The worst-case stack is determined from the following equation as applied to each stack:

$$K = HVT$$

Where:

K=a parameter accounting for relative influence of stack height and plume rise;

H=physical stack height (meters);

V=stack gas flow rate (m^3/second); and

T=exhaust temperature (°K).

The stack with the lowest value of K is the worst-case stack.

7. Criteria for Facilities Not Eligible for Screening Limits. If any criteria below are met, the Tier I and Tier II screening limits do not apply. Owners and operators of such facilities must comply with either the Tier III standards provided by LAC 33:V.3013.D or with the Adjusted Tier I feed rate screening limits provided by LAC 33:V.3013.E:

a. the device is located in a narrow valley less than one kilometer wide;

b. the device has a stack taller than 20 meters and is located such that the terrain rises to the physical height within one kilometer of the facility;

c. the device has a stack taller than 20 meters and is located within five kilometers of a shoreline of a large body of water such as an ocean or large lake;

d. the physical stack height of any stack is less than 2.5 times the height of any building within five building heights or five projected building widths of the stack and the distance from the stack to the closest boundary is within five building heights or five projected building widths of the associated building;

e. the administrative authority determines that standards based on site-specific dispersion modeling are required.

8. Implementation. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate screening limits are not exceeded.

C. Tier II Emission Rate Screening Limits. Emission rate screening limits are specified in LAC 33:V.Chapter 30.Appendix A as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in LAC 33:V.3013.B.7.

1. Noncarcinogenic Metals. The emission rates of antimony, barium, lead, mercury, thallium, and silver shall not exceed the screening limits specified in 40 CFR 266, Appendix I.

2. Carcinogenic Metals. The emission rates of arsenic, cadmium, beryllium, and chromium shall not exceed values derived from the screening limits specified in LAC 33:V.Chapter 30.Appendix A. The emission rate of each of these metals is limited to a level such that the sum of the ratios of the actual emission rate to the emission rate screening limit specified in LAC 33:V.Chapter 30.Appendix A shall not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^{n} \frac{AER_{(i)}}{ERSL_{(i)}} \leq 1.0$$

Where:

n=number of carcinogenic metals;

AER=actual emission rate for metal "i";

ERSL=emission rate screening limit provided by LAC 33:V.Chapter 30.Appendix A, for metal "i".

3. Implementation. The emission rate limits must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by LAC 33:V.3013.B.1.a and b and 2.b. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under LAC 33:V.3005 or 3007 are not exceeded.

4. Definitions and Limitations. The definitions and limitations provided by LAC 33:V.3013.B for the following terms also apply to the Tier II emission rate screening limits provided by LAC 33:V.3013.B: terrain-adjusted effective stack height; good engineering practice stack height; terrain type; land use; and criteria for facilities not eligible to use the screening limits.

5. Multiple Stacks

a. Owners or operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA operating permit or interim status controls must comply with the emissions screening limits for any such stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

b. The worst-case stack is determined by procedures provided in LAC 33:V.3013.B.6.

c. For each metal, the total emissions of the metal from those stacks shall not exceed the screening limit for the worst-case stack.

D. Tier III and Adjusted Tier I Site-Specific Risk Assessment

1. General. Conformance with the Tier III metals controls must be demonstrated by emissions testing to determine the emission rate for each metal. In addition, conformance with either the Tier III or Adjusted Tier I metals controls must be demonstrated by air dispersion modeling to predict the maximum annual average off-site ground level concentration for each metal and compliance with acceptable ambient levels must be demonstrated.

2. Acceptable Ambient Levels. 40 CFR 266 Appendices IV and V list the acceptable ambient levels for purposes of this rule. Reference air concentrations (RACs) are listed for the noncarcinogenic metals and 10^{-5} risk-specific doses (RSDs) are listed for the carcinogenic metals. The RSD for a metal is the acceptable ambient level for that metal provided that only one of the four carcinogenic metals is emitted. If more than one carcinogenic metal is emitted, the acceptable ambient level for the carcinogenic metals is a fraction of the RSD as described in LAC 33:V.3013.D.3.

3. Carcinogenic Metals. For the carcinogenic metals, arsenic, cadmium, beryllium, and chromium, the sum of the ratios of the predicted maximum annual average off-site ground level concentrations (except that on-site concentrations must be considered if a person resides on site) to the risk-specific dose (RSD) for all carcinogenic metals emitted shall not exceed 1.0 as determined by the following equation:

$$\sum_{i=1}^{n} \frac{Predicted\ Ambient\ Concentration_{(i)}}{Risk\text{-}Specific\ Dose_{(i)}} \leq 1.0$$

Where:

n = number of carcinogenic metals

4. Noncarcinogenic Metals. For the noncarcinogenic metals, the predicted maximum annual average off-site ground level concentration for each metal shall not exceed the reference air concentration (RAC).

5. Multiple Stacks. Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA operating permit or interim status controls must conduct emissions testing (except that facilities complying with Adjusted Tier I controls need not conduct emission testing) and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedance of the acceptable ambient levels.

6. Implementation. Under Tier III, the metals controls must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by LAC 33:V.3013.B.1.a and b. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under LAC 33:V.3005 or 3007 are not exceeded.

E. Adjusted Tier I Feed Rate Screening Limits. The owner or operator may adjust the feed rate screening limits provided by LAC 33:V.Chapter 30.Appendix A to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit for a metal is determined by back-calculating from the acceptable ambient levels provided by LAC 33:V.Chapter 30.Appendices D and E using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit. The feed rate screening limits for carcinogenic metals are implemented as prescribed in LAC 33:V.3013.B.2.

F. Alternative Implementation Approaches

1. The administrative authority may approve, on a case-by-case basis, approaches to implement the Tier II or Tier III metals emission limits provided by LAC 33:V.3013.C or D alternative to monitoring the feed rate of metals in each feedstream.

2. The emission limits provided by LAC 33:V.3013.D must be determined as follows:

a. for each noncarcinogenic metal, by back-calculating from the RAC provided in 40 CFR 266, Appendix IV to determine the allowable emission rate for each metal using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with LAC 33:V.3013.H; and

b. for each carcinogenic metal, by:

i. back-calculating from the RSD provided in 40 CFR 266, Appendix V, to determine the allowable emission rate for each metal if that metal were the only carcinogenic metal emitted using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with LAC 33:V.3013.H; and

ii. if more than one carcinogenic metal is emitted, selecting an emission limit for each carcinogenic metal not to exceed the emission rate determined by LAC 33:V.3013.F.2.b.i such that the sum for all carcinogenic metals of the ratio of the selected emission limit to the emission rate determined by that paragraph does not exceed 1.0.

G. Metal Emission Testing

1. General. Emission testing for metals shall be conducted using the Multiple Metals Train as described in 40 CFR 266, Appendix IX.

2. Hexavalent Chromium. Emissions of chromium are assumed to be hexavalent chromium unless the owner or operator conducts emissions testing to determine hexavalent chromium emissions using procedures prescribed in 40 CFR 266, Appendix IX.

H. Dispersion Modeling. Dispersion modeling required under this Section shall be conducted according to methods recommended in 40 CFR 266, Appendix X, the "Hazardous Waste Combustion Air Quality Screening Procedure" described in 40 CFR 266, Appendix IX, or "EPA SCREEN Screening Procedure" as described in Screening Procedures for Estimating Air Quality Impact of Stationary Sources to predict the maximum annual average off-site ground level concentration. However, on-site concentrations must be considered when a person resides on-site.

I. Enforcement. For purposes of permit enforcement, compliance with the operating requirements specified in the permit (under LAC 33:V.3005.C) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section may be "information" justifying modifications, revocation, or reissuance of a permit under LAC 33:V.323.

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§3015. Standards to Control Hydrogen Chloride (HCl) and Chlorine Gas (Cl_2) Emissions

A. General. The owner or operator must comply with the hydrogen chloride (HCl) and chlorine (Cl_2) controls provided by LAC 33:V.3015.B, C, or E.

B. Screening Limits

1. Tier I Feed Rate Screening Limits. Feed rate screening limits are specified for total chlorine in 40 CFR 266, Appendix II, as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. The feed rate of total chlorine and chloride, both organic and inorganic, in all feedstreams, including hazardous waste, fuels, and industrial furnace feedstocks shall not exceed the levels specified.

2. Tier II Emission Rate Screening Limits. Emission rate screening limits for HCl and Cl_2 are specified in LAC 33:V.Chapter 30.Appendix C as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. The stack emission rates of HCl and Cl_2 shall not exceed the levels specified.

3. Definitions and Limitations. The definitions and limitations provided by LAC 33:V.3013.B for the following terms also apply to the screening limits provided by this Subsection: terrain-adjusted effective stack height, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screen limits.

4. Multiple Stacks. Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on HCl or Cl_2 emissions under a RCRA operating permit or interim status controls must comply with the Tier I and Tier II screening limits for those stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

a. The worst-case stack is determined by procedures provided in LAC 33:V.3013.B.6.

b. Under Tier I, the total feed rate of chlorine and chloride to all subject devices shall not exceed the screening limit for the worst-case stack.

c. Under Tier II, the total emissions of HCl and Cl_2 from all subject stacks shall not exceed the screening limit for the worst-case stack.

C. Tier III Site-Specific Risk Assessments

1. General. Conformance with the Tier III controls must be demonstrated by emissions testing to determine the emission rate for HCl and Cl_2, air dispersion modeling to predict the maximum annual average off-site ground level concentration for each compound, and a demonstration that acceptable ambient levels are not exceeded.

2. Acceptable Ambient Levels. 40 CFR 266, Appendix IV, lists the reference air concentrations (RACs) for HCl (seven micrograms per cubic meter) and Cl_2 (0.4 micrograms per cubic meter).

3. Multiple Stacks. Owners and operators of facilities with more than one on-site stack from a boiler, industrial furnace, incinerator, or other thermal treatment unit subject to controls on HCl or Cl_2 emissions under a RCRA operating permit or interim status controls must conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedance of the acceptable ambient levels for HCl and Cl_2.

D. Averaging Periods. The HCl and Cl_2 controls are implemented by limiting the feed rate of total chlorine and chloride in all feedstreams, including hazardous waste, fuels, and industrial furnace feedstocks. Under Tier I, the feed rate of total chloride and chlorine is limited to the Tier I Screening Limits. Under Tier II and Tier III, the feed rate of total

chloride and chlorine is limited to the feed rates during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate limits are based on either:

1. an hourly rolling average as defined in LAC 33:V.3005.E.6; or

2. an instantaneous basis not to be exceeded at any time.

E. Adjusted Tier I Feed Rate Screening Limits. The owner or operator may adjust the feed rate screening limit provided by LAC 33:V.Chapter 30.Appendix B, to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit is determined by back-calculating from the acceptable ambient level for Cl_2 provided by LAC 33:V.Chapter 30.Appendix D, using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit.

F. Emissions Testing. Emissions testing for HCl and Cl_2 shall be conducted using the procedures described in 40 CFR 266, Appendix IX.

G. Dispersion Modeling. Dispersion modeling shall be conducted according to the provisions of LAC 33:V.3013.H.

H. Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under LAC 33:V.3005) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section may be "information" justifying modification or revocation and re-issuance of a permit under LAC 33:V.323.

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§3017. Small Quantity On-site Burner Exemption

A. Exempt Quantities. Owners and operators of facilities that burn hazardous waste in an on-site boiler or industrial furnace are exempt from the requirements of this Chapter provided that:

1. The quantity of hazardous waste burned in a device for a calendar month does not exceed the limits provided in the following table based on the terrain-adjusted effective stack height as defined in LAC 33:V.3013.B.3;

Exempt Quantities for Small Quantity Burner Exemption

Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/month)	Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/month)
0 to 3.9	0	40.0 to 44.9	210
4.0 to 5.9	13	45.0 to 49.9	260
6.0 to 7.9	18	50.0 to 54.9	330
8.0 to 9.9	27	55.0 to 59.9	400
10.0 to 11.9	40	60.0 to 64.9	490
12.0 to 13.9	48	65.0 to 69.9	610
14.0 to 15.9	58	70.0 to 74.9	680
16.0 to 17.9	69	75.0 to 79.9	760
18.0 to 19.9	76	80.0 to 84.9	850
20.0 to 21.9	84	85.0 to 89.9	960
22.0 to 23.9	93	90.0 to 94.9	1,100
24.0 to 25.9	100	95.0 to 99.9	1,200
26.0 to 27.9	110	100.0 to 104.9	1,300
28.0 to 29.9	130	105.0 to 109.9	1,500
30.0 to 34.9	140	110.0 to 114.9	1,700
35.0 to 39.9	170	115.0 or greater	1,900

2. The maximum hazardous waste firing rate does not exceed at any time 1 percent of the total fuel requirements for the device (hazardous waste plus other fuel) on a total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste;

3. The hazardous waste has a minimum heating value of 5,000 Btu/lb, as generated; and

4. The hazardous waste fuel does not contain (and is not derived from) EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, or F027.

B. Mixing with Nonhazardous Fuels. If hazardous waste fuel is mixed with a nonhazardous fuel, the quantity of hazardous waste before such mixing is used to comply with LAC 33:V.3013.A.

C. Multiple Stacks. If an owner or operator burns hazardous waste in more than one on-site boiler or industrial furnace exempt under this Section, the quantity limits provided by LAC 33:V.3013.A are implemented according to the following equation:

$$\sum_{i=1}^{n} \frac{\textit{Actual Quantity Burned}_{(i)}}{\textit{Allowable Quantity Burned}_{(i)}} \leq 1.0$$

Where:

n = the number of stacks;

Actual Quantity Burned=the waste quantity burned per month in device "i";

Allowable Quantity Burned = the maximum allowable exempt quantity for stack "i" from the table in LAC 33:V.3017.A.1.

Note: Hazardous wastes that are subject to the special requirements for small quantity generators under LAC 33:V.Chapter 39 may be burned in an off-site device under the exemption provided by LAC 33:V.3017, but must be included in the quantity determination for the exemption.

D. Notification Requirements. The owner or operator of facilities qualifying for the small quantity burner exemption under this Section must provide a one-time signed, written notice to the administrative authority indicating the following:

1. The combustion unit is operating as a small quantity burner of hazardous waste;

2. The owner or operator is in compliance with the requirements of this Section; and

3. The maximum quantity of hazardous waste that the facility may burn per month as provided by LAC 33:V.3017.A.1.

E. Recordkeeping Requirements. The owner or operator must maintain at the facility for at least three years sufficient records documenting compliance with the hazardous waste quantity, firing rate, and heating value limits of this Section. At a minimum, these records must indicate the quantity of hazardous waste and other fuel burned in each unit per calendar month, and the heating value of the hazardous waste.

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§3019. Low Risk Waste Exemption

A. Waiver of DRE Standard. The DRE standard of LAC 33:V.3009.A does not apply if the boiler or industrial furnace is operated in conformance with LAC 33:V.3019.A.1 and the owner or operator demonstrates by procedures prescribed in LAC 33:V.3019.A.2 that the burning will not result in unacceptable adverse health effects.

1. The device shall be operated as follows:

a. A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the administrative authority on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this Section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

b. Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb;

c. The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and

d. The device operates in conformance with the carbon monoxide controls provided by LAC 33:V.3009.B.1. Devices subject to the exemption provided by this Section are not eligible for the alternative carbon monoxide controls provided by LAC 33:V.3009.C.

2. Procedures to demonstrate that the hazardous waste burning will not pose unacceptable adverse public health effects are as follows:

a. Identify and quantify those nonmetal compounds listed in LAC 33:V.4901.G.Table 6 that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained;

b. Calculate reasonable, worst-case emission rates for each constituent identified in LAC 33:V.3019.A.2.a of this Section by assuming the device achieves 99.9 percent destruction and removal efficiency. That is, assume that 0.1 percent of the mass weight of each constituent fed to the device is emitted;

c. For each constituent identified in LAC 33:V.3019.A.2.a, use emissions dispersion modeling to predict the maximum annual average ground level concentration of the constituent:

i. Dispersion modeling shall be conducted using methods specified in LAC 33:V.3013;

ii. Owners or operators of facilities with more than one on-site stack from a boiler or industrial furnace that is exempt under this Section must conduct dispersion modeling of emissions from all stacks exempt under this Section to predict ambient levels prescribed by this Paragraph;

d. Ground level concentrations of constituents predicted under LAC 33:V.3019.A.2.c must not exceed the following levels:

i. for the noncarcinogenic compounds listed in LAC 33:V.Chapter 30.Appendix D, the levels established in LAC 33:V.Chapter 30.Appendix D;

ii. for the carcinogenic compounds listed in LAC 33:V.Chapter 30.Appendix E, the sum for all constituents of the ratios of the actual ground level concentration to the level established in LAC 33:V.Chapter 30.Appendix E, cannot exceed 1.0; and

iii. for constituents not listed in LAC 33:V.Chapter 30.Appendices D or E, 0.1 micrograms per cubic meter.

B. Waiver of Particulate Matter Standard. The particulate matter standard of LAC 33:V.3013 does not apply if:

1. The DRE standard is waived under LAC 33:V.3019.A; and

2. the owner or operator complies with the Tier I or adjusted Tier I metals feed rate screening limits provided by LAC 33:V.3013.B or E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3021. Waiver of DRE Trial Burn for Boilers

Boilers that operate under the special requirements of this Section, and that do not burn hazardous waste containing (or derived from) EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027, are considered to be in conformance with the DRE standard of LAC 33:V.3009.A, and a trial burn to demonstrate DRE is waived. When burning hazardous waste:

A. a minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the administrative authority on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this Section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

B. Boiler load shall not be less than 40 percent. Boiler load is the ratio at any time of the total heat input to the maximum design heat input;

C. Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb, and each material fired in a burner where hazardous waste is fired must have a heating value of at least 8,000 Btu/lb, as-fired;

D. The device shall operate in conformance with the carbon monoxide standard provided by LAC 33:V.3009.B.1. Boilers subject to the waiver of the DRE trial burn provided by this Section are not eligible for the alternative carbon monoxide standard provided by LAC 33:V.3009.C;

E. The boiler must be a watertube type boiler that does not feed fuel using a stoker or stoker type mechanism; and

F. The hazardous waste shall be fired directly into the primary fuel flame zone of the combustion chamber with an air or steam atomization firing system, mechanical atomization system, or a rotary cup atomization system under the following conditions:

1. Viscosity. The viscosity of the hazardous waste fuel as-fired shall not exceed 300 SSU;

2. Particle Size. When a high pressure air or steam atomizer, low pressure atomizer, or mechanical atomizer is used, 70 percent of the hazardous waste fuel must pass through a 200 mesh (74 micron) screen, and when a rotary cup atomizer is used, 70 percent of the hazardous waste must pass through a 100 mesh (150 micron) screen;

3. Mechanical Atomization Systems. Fuel pressure within a mechanical atomization system and fuel flow rate shall be maintained within the design range taking into account the viscosity and volatility of fuel;

4. Rotary Cup Atomization Systems. Fuel flow rate through a rotary cup atomization system must be maintained within the design range taking into account the viscosity and volatility of the fuel.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3023. Standards for Direct Transfer

A. Applicability. The regulations in this Section apply to owners and operators of boilers and industrial furnaces subject to LAC 33:V.3005 or 3007 if hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit.

B. Definitions

1. When used in this Section, the following terms have meanings given below:

Container—any portable device in which hazardous waste is transported, stored, treated, or otherwise handled, and includes transport vehicles that are containers themselves (e.g., tank trucks, tanker-trailers, and rail tank cars), and containers placed on or in a transport vehicle.

Direct Transfer Equipment—any device (including but not limited to, such devices as piping, fittings, flanges, valves, and pumps) that is used to distribute, meter, or control the flow of hazardous waste between a container (i.e., transport vehicle) and a boiler or industrial furnace.

2. This Section references several requirements provided in LAC 33:V.Chapters 19, 21, and 43.Subpart H and I. For purposes of this Section, the term "tank systems" in those referenced requirements means direct transfer equipment as defined in LAC 33:V.3023.B.1.

C. General Operating Requirements

1. No direct transfer of a pumpable hazardous waste shall be conducted from an open-top container to a boiler or industrial furnace.

2. Direct transfer equipment used for pumpable hazardous waste shall always be closed, except when necessary to add or remove the waste, and shall not be opened, handled, or stored in a manner that may cause any rupture or leak.

3. The direct transfer of hazardous waste to a boiler or industrial furnace shall be conducted so that it does not:

a. generate extreme heat or pressure, fire, explosion, or violent reaction;

b. produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

c. produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

d. damage the structural integrity of the container or direct transfer equipment containing the waste;

e. adversely affect the capability of the boiler or industrial furnace to meet the standards provided by LAC 33:V.3009 - 3015; or

f. threaten human health or the environment.

4. Hazardous waste shall not be placed in direct transfer equipment, if it could cause the equipment or its secondary containment system to rupture, leak, corrode, or otherwise fail.

5. The owner or operator of the facility shall use appropriate controls and practices to prevent spills and overflows from the direct transfer equipment or its secondary containment systems. These include at a minimum:

a. spill prevention controls (e.g., check valves, dry discount couplings); and

b. automatic waste feed cutoff to use if a leak or spill occurs from the direct transfer equipment.

D. Areas Where Direct Transfer Vehicles (Containers) are Located. Applying the definition of container under this Section, owners or operators must comply with the following requirements:

1. The containment requirements of LAC 33:V.2111;

2. The use and management requirements of LAC 33:V.Chapter 43.Subpart I, except for LAC 33:V.4417 and 4425 except that, in lieu of the special requirements of LAC 33:V.4427 for ignitable or reactive waste, the owner or operator may comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjacent property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's (NFPA) "Flammable and Combustible Liquids Code," (1977 or 1981). The owner or operator must obtain and keep on file at the facility a written certification by the local fire marshall that the installation meets the subject NFPA codes; and

3. The closure requirements of LAC 33:V.2117.

E. Direct Transfer Equipment. Direct transfer equipment must meet the following requirements:

1. Secondary Containment. Owners or operators shall comply with the secondary containment requirements of LAC 33:V.4437, except for LAC 33:V.4437.A, D, E, and I as follows:

a. for all new direct transfer equipment, prior to their being put into service; and

b. for existing direct transfer equipment within two years after August 21, 1991.

2. Requirements Prior to Meeting Secondary Containment Requirements

a. For existing direct transfer equipment that does not have secondary containment, the owner or operator shall determine whether the equipment is leaking or is unfit for use. The owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by a qualified, registered professional engineer in accordance with LAC 33:V.513 that attests to the equipment's integrity by August 21, 1992.

b. This assessment shall determine whether the direct transfer equipment is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be transferred to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment shall consider the following:

i. design standard(s), if available, according to which the direct transfer equipment was constructed;

ii. hazardous characteristics of the waste(s) that have been or will be handled;

iii. existing corrosion protection measures;

iv. documented age of the equipment, if available, (otherwise, an estimate of the age); and

v. results of a leak test or other integrity examination such that the effects of temperature variations, vapor pockets, cracks, leaks, corrosion, and erosion are accounted for.

c. If, as a result of the assessment specified above, the direct transfer equipment is found to be leaking or unfit for use, the owner or operator shall comply with the requirements of LAC 33:V.4441.

3. Inspections and Recordkeeping

a. The owner or operator must inspect at least once each operating hour when hazardous waste is being transferred from the transport vehicle (container) to the boiler or industrial furnace:

i. Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;

ii. The above ground portions of the direct transfer equipment to detect corrosion, erosion, or releases of waste (e.g., wet spots, dead vegetation); and

iii. Data gathered from monitoring equipment and leak-detection equipment, (e.g., pressure and temperature gauges) to ensure that the direct transfer equipment is being operated according to its design.

b. The owner or operator must inspect cathodic protection systems, if used, to ensure that they are functioning properly according to the schedule provided in LAC 33:V.4440.B.

c. Records of inspections made under this Paragraph shall be maintained in the operating record at the facility, and available for inspection for at least three years from the date of the inspection;

4. Design and Installation of New Ancillary Equipment. Owners or operators must comply with the requirements of LAC 33:V.4435.

5. Response to Leaks or Spills. Owners or operators must comply with the requirements of LAC 33:V.4441.

6. Closure. Owners or operators must comply with the requirements of LAC 33:V.4442 except for LAC 33:V.1915.C.2-4.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3025. Regulation of Residues

A residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace is not excluded from the definition of a hazardous waste under LAC 33:V.105.D unless the device and the owner or operator meet the following requirements:

A. The device meets the following criteria:

1. Boilers. Boilers must burn at least 50 percent coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal;

2. Ore or Mineral Furnaces. Industrial furnaces subject to LAC 33:V.105.D must process at least 50 percent by weight normal, nonhazardous raw materials;

3. Cement Kilns. Cement kilns must process at least 50 percent by weight normal cement-production raw materials.

B. The owner or operator demonstrates that the hazardous waste does not significantly affect the residue by demonstrating conformance with either of the following criteria:

1. Comparison of Waste-derived Residue with Normal Residue. The waste-derived residue must not contain LAC 33:V.4901.G.Table 6 constituents (toxic constituents) that could reasonably be attributable to the hazardous waste at concentrations significantly higher than in residue generated without burning or processing of hazardous waste, using the following procedure. Toxic compounds that could reasonably be attributable to burning or processing the hazardous waste (constituents of concern) include toxic constituents in the hazardous waste, and the organic compounds listed in LAC 33:V.Chapter 30.Appendix H, that may be generated as products of incomplete combustion. Sampling and analyses shall be in conformance with procedures prescribed in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods:

a. Normal Residue. Concentrations of toxic constituents of concern in normal residue shall be determined based on analyses of a minimum of 10 samples representing a minimum of 10 days of operation. Composite samples may be used to develop a sample for analysis provided that the compositing period does not exceed 24 hours. The upper tolerance limit (at 95-percent confidence with a 95-percent proportion of the sample distribution) of the concentration in the normal residue shall be considered the statistically-derived concentration in the normal residue. If changes in raw materials or fuels reduce the statistically-derived concentrations of the toxic constituents of concern in the normal residue, the statistically-derived concentrations must be revised or statistically-derived concentrations of toxic constituents in normal residue must be established for a new mode of operation with the new raw material or fuel. To determine the upper tolerance limit in the normal residue, the

owner or operator shall use statistical procedures prescribed in "Statistical Methodology for Bevill Residue Determinations" in LAC 33:V.Chapter 30.Appendix I;

b. Waste-derived Residue. Waste-derived residue shall be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the concentrations established for the normal residue under LAC 33:V.3025.B.1.a. If so, hazardous waste burning has significantly affected the residue and the residue shall not be excluded from the definition of a hazardous waste. Concentrations of toxic constituents of concern in the waste-derived residue shall be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent shall be the arithmetic mean of the concentrations in the samples. No results may be disregarded; or

2. Comparison of Waste-Derived Residue Concentrations with Health-Based Limits

a. Nonmetal Constituents. The concentration of each nonmetal toxic constituent of concern (specified in LAC 33:V.3025.B) in the waste-derived residue must not exceed the health-based level specified in 40 CFR 266.Appendix VII or the level of detection (using analytical procedures prescribed in SW-846), whichever is higher. If a health-based limit for a constituent of concern is not listed in CFR 266.Appendix VII, then a limit of 0.002 micrograms per kilogram or the level of detection (using analytical procedures prescribed in SW-846), whichever is higher, shall be used; and

b. Metal Constituents. The concentration of metals in an extract obtained using the Toxicity Characteristic Leaching Procedure of LAC 33:V.4903 must not exceed the levels specified in 40 CFR 266, Appendix VII.

c. Sampling and Analysis. Waste-derived residue shall be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the health-based levels. Concentrations of toxic constituents of concern in the waste-derived residue shall be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent shall be the arithmetic mean of the concentrations in the samples. No results may be disregarded.

C. Records sufficient to document compliance with the provisions of this Section shall be retained until closure of the boiler or industrial furnace unit. At a minimum, the following shall be recorded:

1. Levels of constituents in LAC 33:V.4901.G.Table 6 that are present in waste-derived residues;

2. If the waste-derived residue is compared with normal residue under LAC 33:V.3025:

a. the levels of constituents in LAC 33:V.4901.G.Table 6, that are present in normal residues; and

b. data and information, including analyses of samples as necessary, obtained to determine if changes in raw materials or fuels would reduce the concentration of toxic constituents of concern in the normal residue.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:366 (March 1995).

Chapter 31. Incinerators

§3101. Purpose

To ensure necessary combustion and air pollution control to treat waste listed in the permit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3103. General Requirements

A. The operator of a hazardous waste incinerator shall secure a permit from the Air Quality Division of the department.

[Comment: The permit application must also include the information required in LAC 33:V.3115.]

B. The operator shall provide the administrative authority with an acceptable set of performance standards, principally the composition of flue gases, provisions for shutdown, and an operations warranty from the operator certifying that the equipment and operation satisfy the purposes of the permit, as detailed in this Chapter.

C. Incoming waste monitoring is governed by LAC 33:V.1527.

D. An air monitoring system in the exhaust is required which will permit the required department evaluation.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3105. Applicability

A. These regulations apply to owners and operators of facilities that incinerate hazardous waste. All permit conditions, compliance orders, compliance schedules, and other requirements of the permit required shall be obtained pursuant to LAC 33:V.Subpart 1 and any other requirements pursuant to the regulations of the Louisiana Air Control Law (R.S. 30:2051 et seq.). The regulations in this Chapter apply to owners or operators of facilities that incinerate hazardous waste, except as LAC 33:V.1501.C provides otherwise.

B. The administrative authority, in establishing permit conditions in the application, must exempt the applicant from all requirements of this Chapter except waste analyses (LAC 33:V.3107) and closure (LAC 33:V.3121) if he finds the waste to be burned is:

1. listed as a hazardous waste solely because it is ignitable or corrosive or both as defined in LAC 33:V.4903; or

2. listed as a hazardouse* waste because it is reactive for characteristics other than:

a. when mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment,

b. it is a cyanide or sulfide-bearing waste which when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapors or fumes in a quantity to present a danger to human health or the environment and will not be burned when other hazardous wastes are present in the combustion zone; or

3. it is a hazardous waste solely because it possesses the characteristics of ignitability, corrosivity, or both, as determined by the test for characteristics of hazardous waste under LAC 33:V.Chapter 49; or

4. a hazardous waste solely because it possesses any of the reactivity characteristics as defined below and will not be burned when other hazardous wastes are present in the combustion zone:

a. it reacts violently with water,

b. it forms potentially explosive mixtures with water,

c. it is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement,

d. it is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure,

e. it is a forbidden explosive as defined in LAC 33:V.Subpart 2, Chapter 101 or a Class A explosive as defined in LAC 33:V.Subpart 2, Chapter 101, or a Class B explosive as defined in LAC 33:V.Subpart 2, Chapter 101, or

f. it is normally unstable and readily undergoes violent change without detonating; and

5. if the waste analysis shows that the waste contains none of the hazardous constituents listed in Table 1 which would reasonably be expected to be in the waste.

C. If the waste to be burned is one which is described in LAC 33:V.3105.B above and contains insignificant concentrations of the hazardous constituents listed in Table 1 then the administrative authority may, in establishing permit conditions, exempt the applicant from all requirements of this Section except waste analyses (LAC 33:V.3107) and closure (LAC 33:V.3121) unless he finds that the waste will pose a threat to human health and the environment when burned in an incinerator.

~~D. [Reserved]~~

E. The owner or operator of an incinerator may conduct trial burns subject only to the requirements of LAC 33:V.3115.

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone,1-phenyl-	98-86-2	U004
2-Acetylaminefluarone	Acetamide,N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide,N-(amino-thioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Aldicarb	Propanal,2-methyl-2-(methylthio)-,O -[(methylamino)carbonyl] oxime	116-06-3	P070
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a, 5,8,8a-hexahydro-,(1alpha,4alpha, 4abeta,5alpha,8alpha,8abeta)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	[1,1'-Biphenyl]-4-amine	92-67-1	
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	P119
Aniline	Benzenamine	62-53-3	U012
Antimony	Same	7440-36-0	
Antimony compounds, N.O.S.[1]			
Aramite	Sulfurous acid, 2-chloroethyl2-[4-(1,1-dimethylethyl) phenoxy]-1-methylethyl ester	140-57-8	
Arsenic	Same	7440-38-2	
Arsenic compounds, N.O.S.[1]			
Arsenic acid	Arsenic acid H_3AsO_4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3	P012
Auramine	Benzenamine, 4,4'-carbonimidoylbis[N,N-di-methyl	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barium	Same	7440-39-3	
Barium compounds, N.O.S.[1]			
Barium cyanide	Same	542-62-1	P013
Benz[c]acridine	Same	225-51-4	U016
Benz[a]anthracene	Same	56-55-3	U018
Benzal chloride	Benzene,(dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U019
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine	[1,1'-Biphenyl]-4,4'-diamine	92-87-5	U021
Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205-99-2	
Benzo[j]fluoranthene	Same	205-82-3	
Benzo(k)fluoranthene	Same	207-08-9	

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Benzo[a]pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloro-methyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium	Same	7440-41-7	P015
Beryllium compounds, N.O.S.[1]			
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene,1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one,2,3-dimethoxy-	357-57-3	P018
Butyl benzyl	1,2-Benzenedicarboxylic	85-68-7	
Cacodylic acid	phthalate acid, butyl phenylmethyl ester Arsinic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium compounds, N.O.S.[1]			
Calcium chromate	Chromic acid H_2CrO_4, calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide $Ca(CN)_2$	592-01-8	P021
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difluoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4-[bis(2-chloroethyl) amino]-	305-03-3	U035
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octa-chloro-2,3,3a,4,7,7a-hexahydro-	57-74-9	U036
Chlordane (alpha and gamma isomers)			U036
Chlorinated benzenes, N.O.S.[1]			
Chlorinated ethane, N.O.S.[1]			
Chlorinated fluorocarbons, N.O.S.[1]			
Chlorinated naphthalene, N.O.S.[1]			
Chlorinated phenol, N.O.S.[1]			
Chlornaphazin	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroalkyl ethers, N.O.S.[1]			
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8	P024

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro-alpha-(4-chloro-phenyl)-alpha-hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
beta-Chloro-naphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl) thiourea	Thiourea, (2-chloro-phenyl)	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	
Chromium compounds, N.O.S.[1]			
Chrysene	Same	218-01-9	U050
Citrus red No.2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8	
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Creosote	Same		U051
Cresol (cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
Cyanides (soluble salts and complexes), N.O.S.[1]			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	beta-D-Glucopyranoside, (methyl-ONN-azoxy) methyl	14901-08-7	
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-,2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-di-chlorophenoxy)-	94-75-7	U240

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
2,4-D, salts, esters			U240
Daunomycin	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl) oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-,(8S-cis)-	20830-81-3	U059
DDD	Benzene, 1,1'-(2,2-dichloroethylidene) bis[4-chloro-	72-54-8	U060
DDE	Benzene, 1,1'-(dichloroethenylidene) bis[4-chloro-	72-55-9	
DDT	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-	50-29-3	U061
Diallate	Carbamothioic acid, bis (1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz[a,h]acridine	Same	226-36-8	
Dibenz[a,j]acridine	Same	224-42-0	
Dibenz(a,h)anthracene	Same	53-70-3	U063
7H-Dibenzo[c,g] carbazole	Same	194-59-2	
Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def] chrysene	192-65-4	
Dibenzo[a,h]pyrene	Dibenzo[b,def] chrysene	189-64-0	
Dibenzo[a,i]pyrene	Benzo[rst]pentaphene	189-55-9	U064
1,2-Dibromo-3- chloropropane	Propane, 1,2-dibromo-3- chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S.[1]	Benzene, dichloro-	25321-22-6	
3,3'-Dichloro-benzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluoro-methane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S.[1]	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
1,2-Dichloroethylene	Ethene, 1,2-dichlorol-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'oxybis [2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis [2-chloro-	108-60-1	U027
Dichloromethoxy ethane	Ethane, 1,1'-[methylene-bis(oxy)]bis[2-chloro-	111-91-1	U024
Dichloromethyl ether	Methane, oxybis[chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S[1]	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S.[1]	Propanol dichloro-	26545-73-3	
Dichloropropene, N.O.S.[1]	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro, (1aalpha,2beta,2aalpha, 3beta,6beta,6aalpha, 7beta,7aalpha)-	60-57-1	P037
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl S-methyl dithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	P040
Diethylstilbesterol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1	U089

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluoro-phosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, O,O-dimethylS-[2-(methylamino)-2-oxoethyl] ester	60-51-5	P044
3,3'-Dimethoxyben-zidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazo-benzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	U093
7,12-Dimethylbenz[a] anthracene	Benz[a]anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethyl- benzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
alpha,alpha-Dimethyl-phenethylamine	Benzeneethanamine, alpha,alpha-dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethyl phthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dinitrobenzene, N.O.S.[1]	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o-cresol salts			P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U017

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propyl-nitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$	541-53-7	P049
Endosulfan	6,9-Methano-2,4,3-benzo-dioxathiepin,6,7,8,9,10, 10-hexachloro-1,5,5a,6, 9,9a-hexahydro-, 3-oxide	115-29-7	P050
Endothall	7-Oxabicyclo[2.2.1] heptane-2,3-dicarboxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6, 9,9-hexachloro-1a,2,2a, 3,6,6a,7,7a-octa-hydro-, (1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta, 7aalpha)-	72-20-8	P051
Endrin metabolites			P051
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8	U041
Epinephrine	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino) ethyl]-,(R)-	51-43-4	P042
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethylenebisdithio-carbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenebisdithio-carbamic acid, salts, and esters			U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3	U076

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Famphur	Phosphorothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl] O,O-dimethyl ester	52-85-7	P097
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formic acid	Same	64-18-6	U123
Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4	U126
Halomethanes, N.O.S.[1]			
Heptachlor	4,7-Methano-1H-indene, 1, 4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2,5-Methano-2H-indeno[1, 2-b]oxirene,2,3,4,5,6,7, 7-heptachloro-1a,1b,5, 5a,6,6a-hexa- hydro-, (1aalpha,1bbeta,2alpha, 5alpha,5abeta,6beta, 6aalpha)-	1024-57-3	
Heptachlor epoxide (alpha, beta, and gamma isomers)			
Heptachlorobenzofurans			
Heptachlorobenzo-p-dioxins			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3, 4,4-hexachloro-	87-68-3	U128
Hexachlorocyclopenta-diene	1,3-Cyclopentadiene, 1, 2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzo-furans			
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol,2,2'-methylenebis [3,4,6-trichloro-	70-30-4	U132

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
Hexaethyl tetra-phosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H_2S	7783-06-4	U135
Indeno[1,2,3-cd] pyrene	Same	193-39-5	U137
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140
Isodrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-,(1alpha,4alpha,4abeta,5beta,8beta,8abeta)-	465-73-6	P060
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1	U141
Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	143-50-0	U142
Lasiocarpine	2-Butenoic acid, 2-methyl-,7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-	303-34-1	U143
Lead	Same	7439-92-1	
Lead compounds, N.O.S.[1]			
Lead acetate	Acetic acid, lead(2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead(2+) salt(2:3)	7446-27-7	U145
Lead subacetate	Lead,bis(acetato-O)tetrahydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Maleic hydrazide	3,6-Pyridazinedione, 1, 2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Melphalan	L-Phenylalanine, 4-[bis (2-chloroethyl)aminol]-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S.[1]			
Mercury fulminate	Fulminic acid, mercury (2+) salt	628-86-4	P065
Methacrylonitrile	Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5	U155
Methomyl	Ethanimidothioic acid, N-[[(methylamino)carbonyl] oxy]-, methyl ester	16752-77-5	P066
Methoxychlor	Benezene, 1,1'-(2,2,2-trichloroethylidene)bis [4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methyl chloro-carbonate	Carbonochloridic acid, methyl ester	79-22-1	U156
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157
4,4'-Methylenebis (2-chloraniline)	Benzenamine, 4,4'-methylenebis[2-chloro-	101-14-4	U158
Methylene bromide	Methane, dibromo-	74-95-3	U068
Methylene chloride	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methyl methane-sulfonate	Methanesulfonic acid, methyl ester	66-27-3	

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitro-phenyl) ester	298-00-0	P071
Methylthiouracil	4(1H)-Pyrimidinone, 2, 3-dihydro-6-methyl-2-thioxo-	56-04-2	U164
Mitomycin C	Azirino [2',3':3,4] pyrrolo[1,2-a]indole-4, 7-dione, 6-amino-8-[[(aminocarbonyl)oxy] methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8aalpha, 8balpha)]-	50-07-7	U010
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Mustard gas	Ethane, 1,1'-thiobis [2-chloro-	505-60-2	
Naphthalene	Same	91-20-3	U165
1,4,Naphthoquinone	1,4-Naphthalenedione	130-15-4	U166
alpha-Naphthylamine	1-Naphthalenamine	134-32-7	U167
beta-Naphthylamine	2-Naphthalenamine	91-59-8	U168
alpha-Naphthyl-thiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S.[1]			
Nickel carbonyl	Nickel carbonyl $Ni(CO)_4$, (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide $Ni(CN)_2$	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitric oxide NO	10102-43-9	P076
p-Nitroaniline	Benezenamine, 4-nitro	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	U169
Nitrogen dioxide	Nitrogen oxide NO_2	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt			

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, N-oxide, hydro-chloride salt			
Nitroglycerine	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S.[1]	35576-91-1D		
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3	U172
N-Nitrosodiethanol-amine	Ethanol, 2,2'-(nitroso-imino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N-Nitroso-dimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6	
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N-methyl-urethane	Carbamic acid, methyl-nitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinyl-amine	Vinylamine, N-methyl-N-nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8	
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octamethylpyro-phosphoramide	Diphosphoramide, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO_4, -(T-4)-	20816-12-0	P087
Paraldehyde	1,3,5-Trioxane, 2,4, 6-trimethyl-	123-63-7	U182

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitro-phenyl) ester	56-38-2	P089
Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins			
Pentachlorodibenzo-furans			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitro-benzene (PCNB)	Benzene, Pentachloro-nitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxy-phenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benezenediamine	25265-76-3	
Phenylmercury acetate	Mercury, (acetato-O) phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	298-02-2	P094
Phthalic acid esters, N.O.S.[1]			
Phthalic anhydride	1,3-Isobenzo-furandione	85-44-9	U190
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated biphenyls, N.O.S.[1]			
Potassium cyanide	Potassium cyanide K(CN)	151-50-8	P098
Potassium silver cyanide	Argentate(1-), bis (cyano-C)-, potassium	506-61-6	P099
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl) oxy]-smethyl ester, (3beta,16beta,17alpha, 18beta,20alpha)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Saccharin	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81-07-2	U202
Saccharin salts			U202
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium	Same	7782-49-2	
Selenium compounds, N.O.S.[1]			
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS_2	7488-56-4	U205
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds, N.O.S.[1]			
Silver cyanide	Silver cyanide Ag(CN)	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichloro-phenoxy)-	93-72-1	See F027
Sodium cyanide	Sodium cyanide Na(CN)	143-33-9	P106
Streptozotocin	D-Glucose, 2-deoxy-2-[[(methylnitroso-amino)carbonyl] amino]-	18883-66-4	U206
Strontium sulfide	Strontium sulfide SrS	1314-96-1	P107
Strychnine	Strychnidin-10-one	57-24-9	P108

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Strychnine salts			P108
TCDD	Dibenzo[b,e][1,4] dioxin, 2,3,7,8-tetrachloro-	1746-01-6	
1,2,4,5-Tetra-chlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p-dioxins			
Tetrachlorodibenzo-furans			
Tetrachloroethane, N.O.S.[1]	Ethane, tetra-chloro-, N.O.S.	25322-20-7	
1,1,1,2-Tetra-chloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2-Tetra-chloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetra-chloro-	127-18-4	U210
2,3,4,6-Tetra-chlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
Tetraethyldithio-pyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethyl pyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	
Thallium compounds, N.O.S.[1]			
Thallic oxide	Thallium oxide Tl_2O_3	1314-32-5	P113
Thallium(I) acetate	Acetic acid, thallium(1+) salt	563-68-8	U214
Thallium(I) carbonate	Carbonic acid, dithallium(1+) salt	6533-73-9	U215
Thallium(I) chloride	Thallium chloride TlCl	7791-12-0	U216
Thallium(I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium(1+) salt	12039-52-0	P114
Thallium(I) sulfate	Sulfuric acid, dithallium(1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino) carbonyl] oxine	39196-18-4	P045
Thiomethanol	Methanethiol	74-93-1	U153
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbo-thioamide	79-19-6	P116
Thiourea	Same	62-56-6	U219
Thiram	Thioperoxydi-carbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl-	137-26-8	U244
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine,ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine,4-methyl-	95-80-7	
Toluene-2,6-diamine	1,3-Benzenediamine,2-methyl-	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine,4-methyl-	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine	Benzenamine	636-21-5	U222
hydrochloride	2-methyl-, hydrochloride		
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
1,2,4-Trichloro-benzene	Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloro-ethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloro-methanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromono-fluoromethane	Methane, trichloro-fluoro-	75-69-4	U121
2,4,5-Trichloro-phenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichloro-phenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichloro-phenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.[1]		25735-29-9	
1,2,3-Trichloro-propane	Propane, 1,2,3-trichloro-	96-18-4	
O,O,O-Triethyl phosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1	
1,3,5-Trinitro-benzene	Benzene, 1,3,5-trinitro-	99-35-4	U234

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
Tris(1-aziridinyl) phosphine sulfide	Aziridine, 1,1', 1"-phosphinothio-ylidynetris-	52-24-4	
Tris(2,3-dibromo-propyl) phosphate	1-Propanol, 2,3-dibromo-, phospate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalene-disulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]-bis[5-amino-4-hydroxy-, tetra-sodium salt	72-57-1	U236
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl) amino]-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V_2O_5	1314-62-1	P120
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, when present at concentrations less than 0.3%	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, when present at concentrations greater than 0.3%	81-81-2	P001
Warfarin salts, when present at concentrations less than 0.3%			U248
Warfarin salts, when present at concentrations greater than 0.3%			P001
Zinc cyanide	Zinc cyanide $Zn(CN)_2$	557-21-1	P121
Zinc phosphide	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10%	1314-84-7	P122
Zinc phosphide	Zinc phosphide Zn_3P_2, when present at concentrations of 10% or less	1314-84-7	U249

[1] The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this table.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:1139 (December 1985), LR 13:433 (August 1987), LR 14:424 (July 1988), LR 15:737 (September 1989), LR 16:399 (May 1990), LR 18:1256 (November 1992), LR 18:1375 (December 1992), LR 20:1000 (September 1994).

§3107. Waste Analysis

A. As a portion of the trial burn plan required by LAC 33:V.3115 or with the permit application, the owner or operator must have included an analysis of the waste feed sufficient to provide all information required by LAC 33:V.529 and 3115.B. Owners or operators of new hazardous waste incinerators must provide the information required by LAC 33:V.3115 to the greatest extent possible.

B. Throughout normal operation the owner or operator must conduct sufficient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in his permit (under LAC 33:V.3117.B).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 20:1109 (October 1994).

§3109. Principal Organic Hazardous Constituents (POHCs)

A. Principal organic hazardous constituents (POHCs) in the waste feed must be treated to the extent required by the performance standard of LAC 33:V.3111.

B. One or more POHCs will be specified in the facility's permit from among those constituents listed in Table 1 for each waste feed to be burned. This specification will be based on the degree of difficulty of incineration of the organic constituents in the waste, and on their concentration or mass in the waste feed, considering the results of waste analyses and trial burns, or alternative data submitted with the facility's permit application. Organic constituents which represent the greatest degree of difficulty of incineration will be those most likely to be designated as POHCs. Constituents are more likely to be designated as POHC's if they are present in large quantities or concentrations in the waste.

C. Trial POHCs will be designated for performance of trial burns in accordance with the procedure specified in LAC 33:V.3115 for obtaining trial burn permits.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3111. Performance Standards

A. An incinerator burning hazardous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under LAC 33:V.3117, it will meet the following performance standards:

1. Except as provided in this paragraph, an incinerator burning hazardous waste must achieve a destruction and removal efficiency (DRE) of 99.99 percent for each POHC designated in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \frac{(W_{in} - W_{out})}{W_{in}} \times 100\%$$

where:

W_{in} = Mass feed rate of one principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator, and

W_{out} = Mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

2. An incinerator burning hazardous wastes F020, F021, F022, F023, F026 or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999 percent for each principal organic hazardous constituent (POHC) designated (under LAC 33:V.3109) in its permit. This performance must be demonstrated on POHCs that are more difficult to incinerate than tetra-, penta- and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in LAC 33:V.3111.A.1. In addition, the owner or operator of the incinerator must notify the administrative authority of his intent to incinerate hazardous wastes F020, F021, F022, F023, F026 or F027.

3. An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (four pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or 1 percent of the HCl in the stack gas prior to entering any pollution control equipment.

4. An incinerator burning hazardous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times \frac{14}{21 - Y}$$

a. Where P_c is the corrected concentration of particulate matter, P_m is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in LAC 33:III.6009. This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the administrative authority will select an appropriate correction procedure, to be specified in the facility permit.

B. For purposes of permit enforcement, compliance with the operating requirements specified in the permit under LAC 33:V.3117 will be regarded as in compliance with this Part. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of this Section may be "information" justifying modification, revocation, or reissuance of a permit under LAC 33:V.3115.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 20:1000 (September 1994).

§3113. Hazardous Waste Permits

A. The owner or operator of a hazardous waste incinerator may burn only hazardous wastes specified in his permit and only under operating conditions specified in LAC 33:V.3117 except:

1. in approved trial burns as specified in LAC 33:V.3115, or

2. under exemptions stated in LAC 33:V.3105.B.

B. Other hazardous waste may be burned only after operating conditions have been specified in a new permit or a permit modification as applicable. Operating requirements for new hazardous wastes may be based on either trial burn results or alternate data included in the permit application under LAC 33:V.3115.

C. The permit for a new hazardous waste incinerator must establish appropriate conditions for each of the applicable requirements of this Chapter, including, but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of LAC 33:V.3117, sufficient to comply with the following standards:

1. for the period beginning with the initial introduction of hazardous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in this Part, not to exceed a duration of 720 hours operating time for treatment of hazardous waste, the operating requirements must be those most likely to ensure compliance with the performance standards of LAC 33:V.3111, based on the administrative authority's engineering judgment: The administrative authority may extend the duration of this period once, for up to 720 additional hours, when good cause for the extension is demonstrated by the applicant;

2. for the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the performance standards of LAC 33:V.3111 and must be in accordance with the approved trial burn plan;

3. for the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the administrative authority, the operating requirements must be those most likely to ensure compliance with the performance standards of LAC 33:V.3111 based on the administrative authority's judgment; and

4. for the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in LAC 33:V.3115 as sufficient to ensure compliance with the performance standards of LAC 33:V.3111.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3115. Incinerator Permits for New or Modified Facilities

A. Conditions. For the purposes of determining operational readiness following completion of physical construction, the administrative authority must establish permit conditions, including but not limited to allowable waste feeds and operating conditions, in the permit to a new hazardous waste incinerator. These permit conditions will be effective for the minimum time required to bring the incinerator to a point of operation readiness sufficient to conduct a trial burn, not to exceed 720 hours operating time for treatment of hazardous waste. The administrative authority may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to LAC 33:V.321.

1. Applicants must submit a statement in the permit application which suggests the conditions necessary to operate in compliance with the performance standard of LAC 33:V.3111 during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates, and the operating parameters identified in LAC 33:V.3117.

2. The administrative authority will review this statement and any other relevant information submitted with the permit application and specify requirements for this period sufficient to meet the performance standards of LAC 33:V.3111 based on his engineering judgment.

B. For the purpose of determining feasibility of compliance with the performance standards of LAC 33:V.3111 and of determining adequate operating conditions under LAC 33:V.3117, the administrative authority must establish conditions in the permit for a new hazardous waste incinerator to be effective during the trial burn. Applicants must propose a trial burn plan which includes the following information:

1. an analysis of each waste or mixture of wastes to be burned which includes:

a. heat value of the waste in the form and composition in which it will be burned;

b. viscosity (if applicable), or description of physical form of the waste; and

c. an identification of any hazardous, organic constituents listed in Table 1 of this Chapter present in the waste to be burned, except that the applicant need not analyze for constituents listed in Table 1 of this Chapter which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified, and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in LAC 33:V.Subpart 1 or an equivalent method approved by the administrative authority;

d. the waste analysis must include an approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in LAC 33:V.Subpart 1 or an equivalent method approved by the administrative authority;

2. a detailed engineering description of the incinerator for which the permit is sought including:

a. manufacturer's name and model number of incinerator (if available);

b. type of incinerator;

c. linear dimensions of the incinerator unit including the cross sectional area of combustion chamber;

d. description of the auxiliary fuel system (type/feed);

e. capacity of prime mover;

f. description of automatic waste feed cut-off system(s);

g. stack gas monitoring and pollution control equipment;

h. nozzle and burner design;

i. construction materials; and

j. location and description of temperature, pressure, and flow indicating and control devices;

3. a detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;

4. a detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the administrative authority's decision under this Section;

5. a detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, combustion gas velocity, use of auxiliary fuel, and any other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator;

6. a description of, and planned operating conditions for, any emission control equipment which will be used;

7. procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction; and

8. such other information as the administrative authority reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this Subsection and the criteria in LAC 33:V.3115.B.11.

9. the administrative authority, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this Section.

10. based on the waste analysis data in the trial burn plan, the administrative authority will specify as trial Principal Organic Hazardous Constituents (POHCs), those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHCs will be specified by the administrative authority based on his estimate of the difficulty of incineration of the constituents identified in the waste analysis, their concentration or mass in the waste feed, and, for wastes listed in LAC 33:V.Chapter 49 and Table 1 of this Chapter.

11. the administrative authority shall approve a trial burn plan if he finds that:

a. the trial burn is likely to determine whether the incinerator performance standard required by LAC 33:V.3111 can be met;

b. the trial burn itself will not present an imminent hazard to human health or the environment;

c. the trial burn will help the administrative authority to determine operating requirements to be specified in LAC 33:V.3117 of this Section; and

d. the information sought in this Section cannot reasonably be developed through other means.

12. during, or immediately after, each approved trial burn the applicant must make the following determinations:

a. a quantitative analysis of the trial POHCs in the ...e feed to the incinerator;

b. a quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, oxygen (O_2) and hydrogen chloride (HCl);

c. a quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial POHCs;

d. a computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in LAC 33:V.3111;

e. if the HCl emission rate exceeds 1.8 kilograms of HCl per hour (four pounds per hour), a computation of HCl removal efficiency in accordance with LAC 33:V.3111;

f. a computation of particulate emissions, in accordance with LAC 33:V.3111;

g. an identification of sources of fugitive emissions and their means of control;

h. a measurement of average, maximum, and minimum temperatures and combustion gas velocity;

i. a continuous measurement of carbon monoxide (CO) in the exhaust gas; and

j. such other information as the administrative authority may specify as necessary to ensure that the trial burn will determine compliance with the performance standards in LAC 33:V.3111 and to establish the operating conditions required by LAC 33:V.3117 as necessary to meet that performance standard.

13. the applicant must submit to the administrative authority a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and must submit the results of all the determinations required in LAC 33:V.3115.B.12. This submission shall be made within 90 days of completion of the trial burn, or later if approved by the administrative authority.

14. all data collected during any trial burn must be submitted to the administrative authority following the completion of the trial burn.

15. all submissions required by this Paragraph must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under LAC 33:V.507 and 509.

16. based on the results of the trial burn, the administrative authority shall set the operating requirements in the final permit according to LAC 33:V.3117. The permit ...odification shall proceed according to LAC 33:V.321.C.

C. For the purposes of allowing operation of a new hazardous waste incinerator, following completion of the trial burn and prior to final modification of the permit conditions to reflect the trial burn results, the administrative authority may establish permit conditions, including, but not limited to, allowable waste feeds and operating conditions sufficient to meet the requirements of LAC 33:V.3117, in the permit to a new hazardous waste incinerator. These permit conditions will be effective for the minimum time required to complete sample analysis, data computation and submission of the trial burn results by the applicant, and modification of the facility permit by the administrative authority.

1. Applicants must submit a statement in the permit application, which identifies the conditions necessary to operate in compliance with the performance standards of LAC 33:V.3111 during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters in LAC 33:V.3117.

2. The administrative authority will review this statement and any other relevant information submitted with the permit application and specify those requirements for this period most likely to meet the performance standards of LAC 33:V.3111 based on his engineering judgment.

D. For the purposes of determining feasibility of compliance with the performance standards of LAC 33:V.3111 and of determining adequate operating conditions under LAC 33:V.3117, the applicant for a permit for an existing hazardous waste incinerator must prepare and submit a trial burn plan and perform a trial burn in accordance with LAC 33:V.3115.B. Applicants who submit trial burn plans and receive approval before submission of a permit application must complete the trial burn and submit the results, specified in LAC 33:V.3115.B.12, with Part III of the permit application. If completion of this process conflicts with the date set for submission of the Part II application, the applicant must contact the administrative authority to establish a later date for submission of the Part II application or the trial burn results. Trial burn results must be submitted prior to issuance of a permit. When the applicant submits a trial burn plan with Part II of the permit application, the administrative authority will specify a time period prior to permit issuance in which the trial burn must be conducted and the results submitted.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:614 (July 1990), LR 18:1256 (November 1992).

§3117. Operating Requirements

A. An incinerator must be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in LAC 33:V.3115 and included with a facility's permit application) to be sufficient to comply with the performance standards of LAC 33:V.3111.

B. Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of LAC 33:V.3111) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits including the following conditions:

1. carbon monoxide (CO) level in the stack exhaust gas;

2. waste feed rate;

3. combustion temperature;

4. an appropriate indicator or combustion gas velocity;

5. allowable variations in incinerator system design or operating procedures; and

6. such other operating requirements as are necessary to ensure that the performance standards of LAC 33:V.3111 are met.

C. During start-up and shut-down of an incinerator, hazardous waste (except wastes exempted in accordance with LAC 33:V.3105 must not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.

D. Fugitive emissions from the combustion zone must be controlled by:

1. keeping the combustion zone totally sealed against fugitive emissions;

2. maintaining a combustion zone pressure lower than atmospheric pressure; or

3. an alternate means of control demonstrated (with the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

E. An incinerator must be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under LAC 33:V.3117.B.

F. An incinerator must cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3119. Monitoring and Inspections

A. The owner or operator must monitor, as a minimum, the following while incinerating hazardous waste:

1. combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit must be monitored on a continuous basis;

2. CO must be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere; and

3. upon request by the administrative authority, sampling and analysis of the waste and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the performance standards of LAC 33:V.3111.

B. The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions, and signs of tampering.

C. The emergency waste feed cutoff system and associated alarms must be tested at least weekly to verify operability, unless the applicant demonstrates to the administrative authority that weekly inspections will unduly restrict or upset operations, and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted at least monthly.

D. This monitoring and inspection data must be recorded and the records must be placed in the operating log as required by LAC 33:V.1523.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§3121. Closure

At closure the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site. At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with LAC 33:V.109.Hazardous Waste.6, that the residue removed from the incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with applicable requirements of LAC 33:V.Chapters 9-43.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

Chapter 32. Miscellaneous Units

§3201. Applicability

The requirements in this Chapter apply to owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units, except as LAC 33:V.1501 provides otherwise.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:399 (May 1990).

§3203. Environmental Performance Standards

A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as necessary to protect human health and the environment, and may include design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Permit terms and provisions shall include those requirements of LAC 33:V.Chapters 19, 21, 23, 25, 27, 29, 31, and all other applicable requirements of LAC 33:V.Subpart 1, and of 40 CFR 146, 1988, pp. 674-694, which are appropriate for the miscellaneous unit being permitted. Protection of human health and the environment includes, but is not limited to:

A. Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in the groundwater or subsurface environment, considering:

1. the volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

2. the hydrologic and geologic characteristics of the unit and the surrounding area;

3. the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater;

4. the quantity and direction of groundwater flow;

5. the proximity to and withdrawal rates of current and potential groundwater users;

6. the patterns of land use in the region;

7. the potential for deposition or migration of waste constituents into subsurface physical structures, and into the root zone of food-chain crops and other vegetation;

8. the potential for health risks caused by human exposure to waste constituents; and

9. the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

B. Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in surface water or wetlands or on the soil surface, considering:

1. the volume and physical and chemical characteristics of the waste in the unit;

2. the effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

3. the hydrologic characteristics of the unit and the surrounding area, including the topography of the land around the unit;

4. the patterns of precipitation in the region;

5. the quantity, quality, and direction of groundwater flow;

6. the proximity of the unit to surface waters;

7. the current and potential uses of nearby surface waters and any water quality standards established for those surface waters;

8. the existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

9. the patterns of land use in the region;

10. the potential for health risks caused by human exposure to waste constituents; and

11. the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

C. Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering:

1. the volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols, and particulates;

2. the effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;

3. the operating characteristics of the unit;

4. the atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;

5. the existing quality of the air, including other sources of contamination and their cumulative impact on the air;

6. the potential for health risks caused by human exposure to waste constituents; and

7. the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:399 (May 1990).

§3205. Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action

Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies must ensure compliance with LAC 33:V.909, 1509, 1511.D, 1529.D-E, 3203, and 3322, as well as meet any additional requirements needed to protect human health and the environment as specified in the permit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:399 (May 1990), amended LR 18:1256 (November 1992).

§3207. Post-closure Care

A miscellaneous unit that is a disposal unit must be maintained in a manner that complies with LAC 33:V.3203 during the post-closure care period. In addition, if a treatment or storage unit has contaminated soils or groundwater that cannot be completely removed or decontaminated during closure, then that unit must also meet the requirements of LAC 33:V.3203 during post-closure care. The post-closure plan under LAC 33:V.3523 must specify the procedures that will be used to satisfy this requirement.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:399 (May 1990), amended LR 18:1256 (November 1992).

Chapter 33. Groundwater Protection

§3301. Applicability

A. Except as provided in LAC 33:V.3301.C, the regulations in this Chapter apply to owners or operators of facilities that treat, store or dispose of hazardous waste. The owner or operator must satisfy the requirements identified in LAC 33:V.3301.B for all wastes (or constituents thereof) contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.

B. All solid waste management units must comply with the requirements in LAC 33:V.3322. A surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982 (hereinafter referred to as a "regulated unit") must comply with the requirements of LAC 33:V.3303 through LAC 33:V.3321 in lieu of LAC 33:V.3322 for purposes of detecting, characterizing and responding to releases to the uppermost aquifer. The financial responsibility requirements of LAC 33:V.3322 apply to regulated units.

C. The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this Chapter if:

1. the owner or operator is exempted under LAC 33:V.1501; or

2. he operates a unit which the administrative authority finds:

a. is an engineered structure;

b. does not receive or contain liquid waste or waste containing free liquids;

c. is designed and operated to exclude liquid, precipitation, and other run-on and run-off;

d. has both inner and outer layers of containment enclosing the waste;

e. has a leak detection system built into each containment layer;

f. the owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods; and

g. to a reasonable degree of certainty, will not allow hazardous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period.

3. the administrative authority finds, pursuant to LAC 33:V.2719.D, that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of LAC 33:V.2711 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under LAC 33:V.3301.C can only relieve an owner or operator of responsibility to meet the requirements of this Chapter during the post-closure care period; or

4. the administrative authority finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the port-closure care period specified under LAC 33:V.3521. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under LAC 33:V.3301.C on assumptions that maximize the rate of liquid migration;

5. he designs and operates a pile in compliance with LAC 33:V.2301.C.

D. The regulations under this Chapter apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the regulations in this Subpart:

1. do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

2. apply during the post-closure care period under LAC 33:V.Chapter 35, Subchapter II post-closure requirements if the owner or operator is conducting a detection monitoring program under LAC 33:V.3317;

3. apply during the compliance period under LAC 33:V.3313 if the owner or operator is conducting a compliance monitoring program under LAC 33:V.3319 or a corrective action program under LAC 33:V.3321.

E. Regulations in this Chapter may apply to miscellaneous units when necessary to comply with LAC 33:V.3203 through 3207.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 10:496 (July 1984), LR 16:399 (May 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994).

§3303. Required Programs

A. Owners and operators subject to this Chapter must conduct a monitoring and response program as follows.

1. Whenever hazardous constituents under LAC 33:V.3307 from a regulated unit are detected at the compliance point under LAC 33:V.3311, the owner or operator must institute a compliance monitoring program under LAC 33:V.3319. "Detected" is defined as statistically significant evidence of contamination as described in LAC 33:V.3317.F.

2. Whenever the groundwater protection standard under LAC 33:V.3305 is exceeded, the owner or operator must institute a corrective action program under LAC 33:V.3321. "Exceeded" is defined as statistically significant evidence of increased contamination as described in LAC 33:V.3319.D.

3. Whenever hazardous constituents under LAC 33:V.3307 from a regulated unit exceed concentration limits under LAC 33:V.3309 in groundwater between the compliance point under LAC 33:V.3311 and the downgradient facility property boundary, the owner or operator must institute a corrective action program under LAC 33:V.3321.

4. In all other cases, the owner or operator must institute a detection monitoring program under LAC 33:V.3317.

B. The administrative authority will specify in the facility permit the specific elements of the monitoring and response program. The administrative authority may include one or more of the programs identified in LAC 33:V.3303.A in the facility permit as may be necessary to protect human health and the environment. The administrative authority will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the administrative authority will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

C. In addition, all permitted facilities where pre-existing groundwater contamination continues to be present shall be required to institute compliance monitoring as required in LAC 33:V.3319 of this Chapter and corrective action programs as required in LAC 33:V.3321 of this Chapter. In no case shall free phase or mobile hazardous constituents be unmitigated. Hazardous constituents shall be isolated, reduced or stablized* consistent with the application of good engineering practices and best practical technology.

D. All permits for facilities with pre-existing groundwater contamination shall contain a permit condition containing the concentration limits of hazardous constituents established consistent with LAC 33:V.3305, 3307, and 3309. In no case shall other than background concentration limits be listed in the initial permit. Compliance with corrective action programs required in LAC 33:V.3303, 3319, and 3321 will constitute a permitted variance. Corrective action programs shall be reviewed annually and may be based on predictive computer modeling. Alternate concentrations provided in LAC 33:V.3309.A or B may be set by permit amendment should the original concentration limits be unattainable within 36 months.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 10:496 (July 1984), LR 16:614 (July 1990), LR 18:1256 (November 1992).

§3305. Groundwater Protection Standard

A. The owner or operator must comply with conditions specified in the facility permit that are designed to ensure that hazardous constituents under LAC 33:V.3307 detected (as defined in LAC 33:V.3303.A.1) in the groundwater from a regulated unit do not exceed the concentration limits under LAC 33:V.3309 in the uppermost aquifer underlying the waste management area beyond the point of compliance under LAC 33:V.3311 during the compliance period under LAC 33:V.3313. The administrative authority will establish this groundwater protection standard in the facility permit when hazardous constituents have been detected (as defined in LAC 33:V.3303.A.1) in the groundwater.

B. The groundwater monitoring system shall consist of necessary wells, at least one hydraulically upgradient, to monitor groundwater moving toward the facility, and all the

necessary number of wells downgradient to monitor groundwater leaving the facility. The wells shall be located to intercept contamination at the earliest possible occurrence. Well locations and completion depths must be selected to assure that all probable contaminant flow-paths are monitored. The wells shall be cased, and the casings shall be adequately sealed so that contaminants cannot be introduced from the surface or from one aquifer to another within the well bore, and so that only one water bearing sand is sampled per well. The entire groundwater monitoring system must be approved by the administrative authority.

C. The owner or operator of the facility shall develop and adhere to a groundwater sampling and analysis plan, and shall immediately advise the department when significant changes in groundwater quality are determined and verified.

D. Leachate

1. The leachate monitoring system shall contain a method and device to secure samples, and determine leakage at two locations in each unit where the system is required as follows:

a. at the low point inside the barrier (liner) encased in sand, or other porous material, ensuring that leachate from all contents will percolate to the low point. Provision for pumping out all leachate which gathers inside this barrier shall be made; and

b. at a low point under the barrier (liner) and encased in a porous layer over a dense (at least three feet of clay at 1 x 10^{-7} cm/sec) underlayment, or natural soil, to verify the integrity of the liner.

2. The system shall permit sampling from an accessible surface location.

3. An equivalent system acceptable to the administrative authority may be installed in existing facilities.

E. Air. Installed, or available portable air monitoring devices shall be located at all sites involving: incineration, landfill, or treatment facilities. An installed air monitoring system (triangular grid) with continuous recording shall be installed at all commercial sites.

F. Sampling. Samples shall be taken from all required monitoring systems before waste is introduced (for new sites) to provide adequate base-line data. Sampling shall be done quarterly, and complete records shall be maintained at the site for examination by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 10:496 (July 1984), LR 16:614 (July 1990).

§3307. Hazardous Constituents

A. The administrative authority will specify in the facility permit the hazardous constituents to which the groundwater protection standard of LAC 33:V.3305 applies. Hazardous constituents are constituents identified in Table 1 of LAC 33:V.Chapter 31 that have been detected in groundwater in the uppermost aquifer underlying a regulated unit, and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the administrative authority has excluded them under LAC 33:V.3307.B.

B. The administrative authority upon sufficient demonstration by the permittee may exclude any Table 1, LAC 33:V.Chapter 31 constituents from the list of hazardous constituents specified in the facility permit if he finds that these constituents are not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the administrative authority will consider the following:

1. potential adverse effects on groundwater quality, considering:

a. the physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

b. the hydrogeological characteristics of the facility and surrounding land;

c. the quantity of groundwater and the direction of groundwater flow;

d. the proximity and withdrawal rates of groundwater users;

e. the current and future uses of groundwater in the area;

f. the existing quality of groundwater including other sources of contamination, and their cumulative impact on the groundwater quality;

g. the potential for health risks caused by human exposure to waste constituents;

h. the potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

i. the persistence and permanence of the potential adverse effects; and

2. potential adverse effects on hydraulically-connected surface water quality, considering:

a. the volume and physical and chemical characteristics of the waste in the regulated unit;

b. the hydrogeological characteristics of the facility and surrounding land;

c. the quantity and quality of groundwater, and the ction of groundwater flow;

d. the patterns of rainfall in the region;

e. the proximity of the regulated unit to surface waters;

f. the current and future uses of surface waters and any waters in the area, and any water quality standards established for those surface waters;

g. the existing quality of surface water, including other sources of contamination, and the cumulative impact on surface water quality;

h. the potential for health risks caused by human exposure to waste constituents;

i. the potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

j. the persistence and permanence of the potential adverse effects.

C. In making any determination under LAC 33:V.3307.B of this Section about the use of groundwater in the area around the facility, the administrative authority will consider any identification of underground sources of drinking water and exempted aquifers.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 10:496 (July 1984).

§3309. Concentration Limits

A. The administrative authority will specify in the facility permit concentration limits in the groundwater for hazardous constituents established under LAC 33:V.3307.

1. All permits for facilities with pre-existing groundwater contamination shall set concentration limits at background levels and provide corrective action programs as specified in LAC 33:V.3303.C and D.

2. Permits for facilities without pre-existing groundwater contamination shall set concentration limits at background levels.

3. In other cases in which groundwater contamination is detected after granting of the initial permit, the concentration limits of hazardous constituents shall be established consistent with LAC 33:V.3303.C and D, and:

a. must not exceed the background level of that constituent in the groundwater at the time that limit is specified in the permit; or

b. for any of the constituents listed in LAC 33:V.3309. Table 1, must not exceed the respective value given in that table if the background level of the constituent is below the value given; or

c. after compliance monitoring and corrective action measures specified in LAC 33:V.3319 and 3321 have demonstrated the original concentration limits are unattainable after a 36-month time frame, the administrative authority may set by permit amendment, alternative concentration limits which must not exceed those provided in LAC 33:V.3309.B.

Table 1. Maximum Concentration of Constituents for Groundwater Protection

Constituent	Maximum Concentration[1]
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,9a-octahydro-1, 4-endo-5, 8-demethano napthalene)	0.0002

Table 1. Maximum Concentration of Constituents for Groundwater Protection

Constituent	Maximum Concentration[1]
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2, 2-bis) (p-methoxyphenylethane)	0.01
Toxaphene ($C_{10}H_{10}Cl_6$, Technical chlorinated camphene, 67-69 percent chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01

[1] Milligrams per liter

B. The administrative authority may establish an alternate concentration limit for a hazardous constituent if he finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded.

In no case shall alternate concentration limits of hazardous constituents be established which will result in the potential for concentrations of hazardous constituents in potable water aquifers that exceed recognized U. S. Environmental Protection Agency Drinking Water Quality Standards or background levels whichever are higher, at the property boundary of the permitted site. In setting such alternative concentration limits, the administrative authority will consider the best available evidence accepted by the scientific community, including nationally accepted guidelines which have been established by risk assessment methodology.

C. In making any determination under LAC 33:V.3309.B about the use of groundwater in the area around the facility, the administrative authority will consider any identification of underground sources of drinking water and exempted aquifers identified in the permit application under LAC 33:V.Chapter 3.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 10:496 (July 1984), LR 16:614 (July 1990).

§3311. Point of Compliance

A. The administrative authority will specify in the facility permit the point of compliance at which the groundwater protection standard of LAC 33:V.3305.A applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area or the delineated zone of contamination that extends down into the uppermost aquifer underlying the regulated units or the delineated zone of contamination.

B. The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit.

1. The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit.

2. If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3313. Compliance Period

A. The administrative authority will specify in the facility permit the compliance period during which the groundwater protection standard of LAC 33:V.3305 applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period.)

B. The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of LAC 33:V.3319.

C. If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in LAC 33:V.3313.A. of this Section, the compliance period is extended until the owner or operator can demonstrate that

the groundwater protection standard of LAC 33:V.3305 has been exceeded for a period of three consecutive years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3315. General Groundwater Monitoring Requirements

The owner or operator must comply with the following requirements for any groundwater monitoring program developed to satisfy LAC 33:V.3317, 3319, or 3321:

A. The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that fulfill the following requirements.

1. The samples must represent the quality of groundwater that has not been affected by leakage from a regulated unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

a. hydrogeologic conditions do not allow the owner or operator to determine which wells are hydraulically upgradient; and

b. sampling at other wells will provide an indication of background groundwater quality that is representative or more representative than that provided by the upgradient wells.

2. The samples must represent the quality of water passing the point of compliance.

3. The samples must allow for the detection (as defined in LAC 33:V.3303.A.1) of contamination when hazardous waste or hazardous constituents have migrated from the waste management area to the uppermost aquifer.

B. If a facility contains more than one regulated unit, separate groundwater monitoring systems are not required for each regulated unit, if provisions for sampling the groundwater in the uppermost aquifer will enable detection and measurement at the compliance point for hazardous constituents for the regulated units.

C. All monitoring wells must be cased in a manner that maintains the integrity of the monitoring-well bore hole. This casing must be screened or perforated, and packed with gravel or sand, where necessary, to enable collection of groundwater samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the groundwater.

D. The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the waste management area. At a minimum, the program must include procedures and techniques for:

1. sample collection;

2. sample preservation and shipment;

3. analytical procedures; and

4. chain of custody control.

E. The groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling, and that accurately measure hazardous constituents in groundwater samples.

F. The groundwater monitoring program must include a determination of the groundwater surface elevation each time groundwater is sampled.

G. In detection monitoring or where appropriate in compliance monitoring, data on each indicator parameter and on each hazardous constituent specified in the permit will be collected from background wells and wells at the compliance point(s). The number and kinds of samples collected to establish background shall be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size shall be as large as necessary to ensure with reasonable confidence that a contaminant release to groundwater from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit which shall be specified in the unit permit upon approval by the administrative authority. This sampling procedure shall be:

1. a sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity, and hydraulic gradient, and the fate and transport characteristics of the potential contaminants, or

2. an alternate sampling procedure proposed by the owner or operator and approved by the administrative authority.

H. The owner or operator will specify one of the following statistical methods to be used in evaluating groundwater monitoring data for each indicator parameter and hazardous constituent that, upon approval by the administrative authority, will be specified in the unit permit. The statistical test chosen shall be conducted separately for each indicator parameter and hazardous constituent in each well. Where practical quantification limits (PQLs) are used in any of the following statistical procedures to comply with LAC 33:V.3315.I.5, the PQL must be proposed by the owner or operator and approved by the administrative authority. Use of any of the following statistical methods must be protective of human health and the environment and must comply with the performance standards outlined in LAC 33:V.3315.I.

1. 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 constituent.

2. 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 constituent.

3. A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

4. A control chart approach that gives control limits for each constituent.

5. Another statistical test method submitted by the owner or operator and approved by the administrative authority.

I. Any statistical method chosen under LAC 33:V.3315.H for specification in the unit permit shall comply with the following performance standards, as appropriate:

1. The statistical method used to evaluate groundwater monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator 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 constituents differ, more than one statistical method may be needed.

2. If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background 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 experimentwise 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.

3. If a control chart approach is used to evaluate ground-water monitoring data, the specific type of control chart and its associated parameter values shall be proposed by the owner or operator and approved by the administrative authority if he or she finds it to be protective of human health and the environment.

4. If a tolerance interval or a prediction interval is used to evaluate ground-water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be proposed by the owner or operator and approved by the administrative authority if he or she finds these parameters to be protective of human health and the environment. These parameters will 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 constituent of concern.

5. 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 quantification limit (PQL) approved by the administrative authority under LAC 33:V.3315.H 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.

6. 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.

J. Groundwater monitoring data collected in accordance with LAC 33:V.3315.G including actual levels of constituents must be maintained in the facility operating record. The administrative authority will specify in the permit when the data must be submitted for review.

~~K. The groundwater monitoring program must insure* that~~ the permittee maintains records from all ~~required~~ groundwater monitoring wells and ~~associated~~ groundwater surface elevations ~~for the~~ active life of the facility, including the ~~operating, closure, and post closure care periods.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:614 (July 1990).

* As appeared in the published rule.

§3317. Detection Monitoring Program

An owner or operator required to establish a detection monitoring program under this Subpart must, at a minimum, discharge the following responsibilities:

A. The owner or operator must monitor for indicator parameters (e.g., specific conductance, total organic carbon, or total organic halogen), waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents in groundwater. The authority will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

1. the types, quantities, and concentrations of constituents in wastes managed at the regulated unit;

2. the mobility, stability, and persistance* of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;

3. the detectability of indicator parameters, waste constituents, and reaction products in groundwater; and

4. the concentrations or values, and coefficients of ...iation of proposed monitoring parameters or constituents in groundwater background.

B. The owner or operator must install a groundwater monitoring system at the compliance point as specified under LAC 33:V.3311. The groundwater monitoring system must comply with LAC 33:V.3315.A.2, B, and C;

C. The owner or operator must conduct a groundwater monitoring program for each chemical parameter and hazardous constituent specified in the permit pursuant to LAC 33:V.3317.A in accordance with LAC 33:V.3315.G. The owner or operator must maintain a record of groundwater analytical data as measured and in a form necessary for the determination of statistical significance under LAC 33:V.3315.H.

D. The administrative authority will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the permit under LAC 33:V.3317.A in accordance with LAC 33:V.3315.G. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semi-annually during detection monitoring.

E. The owner or operator must use procedures and methods ...r sampling and analysis that meet the requirements of LAC ...:V.3315.D and E.

F. The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified in the permit pursuant to LAC 33:V.3317.A at a frequency specified under LAC 33:V.3317.D.

1. In determining whether statistically significant evidence of contamination exists, the owner or operator must use the method(s) specified in the permit under LAC 33:V.3315.H. These method(s) must compare data collected at the compliance point(s) to the background groundwater quality data.

2. The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well at the compliance point within a reasonable period of time after completion of sampling. The administrative authority will specify in the facility permit what period is reasonable, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of groundwater samples.

G. If the owner or operator determines pursuant to LAC 33:V.3317.F that there is statistically significant evidence of contamination for chemical parameters or hazardous ...onstituents specified pursuant to LAC 33:V.3317.A at any monitoring well at the compliance point, he or she must do the following.

1. Notify the administrative authority of this finding in writing within seven days. The notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.

2. Immediately sample the groundwater in all monitoring wells and determine whether constituents listed in LAC 33:V.3325.Table 4 are present, and if so, in what concentrations.

3. For any LAC 33:V.3325 compounds found in the analysis pursuant to LAC 33:V.3317.G.2, the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to LAC 33:V.3317.G.2, the hazardous constituents found during this initial LAC 33:V.3325.Table 4 analysis will form the basis for compliance monitoring.

4. Within 90 days, submit to the administrative authority an application for a permit modification to establish a compliance monitoring program meeting the requirements of LAC 33:V.3319. The application must include the following information:

a. an identification of the concentration of any LAC 33:V.3325.Table 4 constituent detected in the groundwater at each monitoring well at the compliance point;

b. any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of LAC 33:V.3319;

c. any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of LAC 33:V.3319;

d. for each hazardous constituent detected (as defined in LAC 33:V.3301.A.1) at the compliance point, a proposed concentration limit under LAC 33:V.3309.A.3.a or b, or a notice of intent to seek an alternate concentration limit under LAC 33:V.3309.B.

5. Within 180 days, submit to the administrative authority:

a. all data necessary to justify an alternate concentration limit sought under LAC 33:V.3309.B; and

b. an engineering feasibility plan for a corrective action program necessary to meet the requirement of LAC 33:V.3321, unless

i. all hazardous constituents identified under LAC 33:V.3317.G.2 are listed in Table 1 of LAC 33:V.3309, and their concentrations do not exceed the respective values given in that table; or

ii. the owner or operator has sought an alternate concentration limit under LAC 33:V.3309.B for every hazardous constituent identified under LAC 33:V.3317.G.2.

6. If the owner or operator determines, pursuant to LAC 33:V.3317.F, that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to LAC 33:V.3317.A at any monitoring well at the compliance point, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The owner or operator may make a demonstration under this Paragraph in addition to, or in lieu of, submitting a permit modification application under LAC 33:V.3317.G.4; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in LAC 33:V.3317.G.4 unless the demonstration made under this Paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph, the owner or operator must:

a. notify the administrative authority in writing within seven days of determining statistically significant evidence of contamination at the compliance point that he or she intends to make a demonstration under this Paragraph;

b. within 90 days, submit a report to the administrative authority that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

c. within 90 days, submit to the administrative authority an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and

d. continue to monitor in accordance with the detection monitoring program established under this Section.

H. If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this Section, he or she must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 10:496 (July 1984), LR 16:399 (May 1990), LR 16:614 (July 1990).

* As appeared in the published rule.

§3319. Compliance Monitoring Program

An owner or operator required to establish a compliance monitoring program under this Chapter must, at a minimum, discharge the following responsibilities:

A. The owner or operator must monitor the groundwater to determine whether regulated units are in compliance with the groundwater protection standard under LAC 33:V.3305. The administrative authority will specify the groundwater protection standard in the facility permit, including:

1. a list of the hazardous constituents identified under LAC 33:V.3307;

2. concentration limits under LAC 33:V.3309 for each of those hazardous constituents;

3. the compliance point under LAC 33:V.3311; and

4. the compliance period under LAC 33:V.3313.

B. The owner or operator must install a groundwater monitoring system at the compliance point as specified under LAC 33:V.3311. The groundwater monitoring system must comply with LAC 33:V.3315.A.2, B, and C.

C. The administrative authority will specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with LAC 33:V.3315.G and H.

1. The owner or operator must conduct a sampling program for each chemical parameter or hazardous constituent in accordance with LAC 33:V.3315.G.

2. The owner or operator must record groundwater analytical data as measured and in the form necessary for the determination of statistical significance under LAC 33:V.3315.H for the compliance period of the facility.

D. The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in the permit, pursuant to LAC 33:V.3319.A at a frequency specified under LAC 33:V.3319.F.

1. In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the method(s) specified in the permit under LAC 33:V.3315.H. The method(s) must compare data collected at the compliance point(s) to a concentration limit developed in accordance with LAC 33:V.3309.

2. The owner or operator must determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable period after completion of sampling. The administrative authority will specify that period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of groundwater samples.

E. The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer at least annually.

F. The administrative authority will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with LAC 33:V.3315.G. A sequence of at least four samples from each well (background

and compliance wells) must be collected at least semi-annually ring the compliance period of the facility.

G. The owner or operator must analyze samples from all monitoring wells at the compliance point for all constituents listed in LAC 33:V.3325.Table 4 at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in LAC 33:V.3317.F. If the owner or operator finds LAC 33:V.3325.Table 4 constituents in the groundwater that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month and repeat the LAC 33:V.3325.Table 4 analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentrations of these additional constituents to the administrative authority within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then he or she must report the concentrations of these additional constituents to the administrative authority within seven days after completion of the initial analysis and add them to the monitoring list.

H. If the owner or operator determines, pursuant to LAC 33:V.3319.D, that any concentration limits under LAC 33:V.3309 are being exceeded at any monitoring well at the oint of compliance, he or she must:

1. notify the administrative authority of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded; and

2. submit, to the administrative authority, an application for a permit modification to establish a corrective action program meeting the requirements of LAC 33:V.3321 within 180 days, or within 90 days if an engineering feasibility study has been previously submitted to the administrative authority under LAC 33:V.3317.H.5. The application must at a minimum include the following information:

a. a detailed description of corrective actions that will achieve compliance with the groundwater protection standard specified in the permit under LAC 33:V.3319.A; and

b. a plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of this Section.

I. If the owner or operator determines, pursuant to LAC 33:V.3319.D, that the groundwater concentration limits under this Section are being exceeded at any monitoring well at the point of compliance, he or she may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artificat* caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. In making a demonstration under this Subsection, the owner or operator must:

1. notify the administrative authority in writing within seven days that he intends to make a demonstration under this Paragraph;

2. within 90 days, submit a report to the administrative authority which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis or evaluation;

3. within 90 days, submit to the administrative authority an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and

4. continue to monitor in accord with the compliance monitoring program established under this Chapter.

J. If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this Section, he must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:399 (May 1990), LR 16:614 (July 1990).

*As appeared in the published rule.

§3321. Corrective Action Program

An owner or operator required to establish a corrective action program under this Subpart must, at a minimum, discharge the following responsibilities:

A. the owner or operator must take corrective action to ensure that regulated units are in compliance with the groundwater protection standard under LAC 33:V.3305. The administrative authority will specify the groundwater protection standard in the facility permit, including:

1. a list of the hazardous constituents identified under LAC 33:V.3307;

2. concentration limits under LAC 33:V.3309 for each of those hazardous constituents;

3. the compliance point under LAC 33:V.3311; and

4. the compliance period under LAC 33:V.3313.

B. the owner or operator must implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit will specify the specific measures that will be taken;

C. the owner or operator must begin corrective action within a reasonable time period after the groundwater protection standard is exceeded. The administrative authority

will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action will begin and such a requirement will operate in lieu of LAC 33:V.3319.I.2;

D. in conjunction with a corrective action program, the owner or operator must establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under LAC 33:V.3319 and must be as effective as that program in determining compliance with the groundwater protection standard under LAC 33:V.3305 and in determining the success of a corrective action program under LAC 33:V.3321.E, where appropriate;

E. in addition to the other requirements of this Section, the owner or operator must conduct a corrective action program to remove or treat in place any hazardous constituents under LAC 33:V.3307 that exceed concentration limits under LAC 33:V.3309 in groundwater:

1. between the compliance point under LAC 33:V.3311 and the downgradient facility property boundary, and

2. beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the administrative authority that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis.

3. corrective action measures under this Subsection must be initiated and completed within a reasonable period of time considering the extent of contamination.

4. corrective action measures under this Subsection may be terminated once the concentration of hazardous constituents under LAC 33:V.3307 is reduced to levels below their respective concentration limits under LAC 33:V.3309.

F. the owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the groundwater protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he must continue that corrective action for as long as necessary to achieve compliance with the groundwater protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if he can demonstrate, based on data from the groundwater monitoring program under LAC 33:V.3321.D, that the groundwater protection standard of LAC 33:V.3305 has not been exceeded for a period of three consecutive years;

G. the owner or operator must report in writing to the administrative authority on the effectiveness of the corrective action program. The owner or operator must submit these reports semi-annually; and

H. if the owner or operator determines that the corrective action program no longer satisfies the requirements of this Section, he must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:614 (July 1990), amended LR 17:658 (July 1991).

§3322. Corrective Action

A. The owner or operator of a facility seeking a permit for the treatment, storage, or disposal of hazardous waste must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

B. Corrective action will be specified in the permit in accordance with LAC 33:V.2601 and 3322. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.

C. The owner or operator must implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the administrative authority that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such actions. The owner or operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for such corrective action must be provided.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:614 (July 1990), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§3323. Monitoring Well Abandonment and Sealing of Bore Holes

An owner or operator shall provide for the sealing of any vertical migration path resulting from exploratory boring and/or monitoring programs.

A. Any boring made in evaluating a site, monitoring, or other purpose related to the hazardous waste site shall be completely filled with cement-bentonite, or other equivalent technology approved by the administrative authority. The hole shall be left open only as necessary to obtain core samples, water samples and establish the initial water level. If subsequent samples or water level readings are to be taken, the hole shall be completed as a well with suitable casing and sealing of the annulus between the hole and the casing.

B. When a monitoring well is to be abandoned, the owner or operator shall obtain approval for such abandonment. A request shall be made to the administrative authority, including the following information:

1. name and address of the facility;
2. well identification and exact location;
3. well construction data, including:
   a. well depth and intermediate stratification;
   b. screen length and material;
   c. casing size and material;
   d. sealing of the annulus; and
   e. other pertinent data;
4. reason for abandonment; and
5. proposed abandonment method, including sealing method and material proposed.

C. The administrative authority may accept the proposal or require modification as necessary to protect groundwater.

D. For any monitoring well which goes through or into a recognized potable water aquifer, and any well which the administrative authority feels could directly impact such aquifer, the owner or operator shall additionally complete and submit an abandonment report as required by the Water Resources Section of the Office of Public Works in the Department of Transportation and Development, ~~or its successor agency.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992).

§3325. Groundwater Monitoring List [1]

Table 4 lists groundwater monitoring constituents.

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-	8100	200
			8270	10
Acenaphthylene	208-96-8	Acenaphthylene	8100	200
			8270	10
Acetone	67-64-1	2-propanone	8240	100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	10
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	100
2-Acetylamino-fluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-	8270	10
Acrolein	107-02-8	2-Propenal	8030	5
			8240	5
Acrylonitrile	107-13-1	2-Propenenitrile	8030	5
			8240	5

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
Aldrin	309-00-2	1,4:5,8-Dimethano-naphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a,-hexa-hydro (1α,4α,4aβ,5β,8α,8aβ)	8080 8270	0.05 10
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010 8240	5 100
4-Amino-biphenyl	92-67-1	[1,1'-Biphenyl]-4-amine	8270	10
Aniline	62-53-3	Benzenamine	8270	10
Anathracene	120-12-7	Anthracene	8100 8270	200 10
Antimony	(Total)	Antimony	6010 7040 7041	300 2,000 30
Aramite	140-57-8	Sulfurous acid,2-chloro-ethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methyl-ethyl ester	8270	10
Arsenic	(Total)	Arsenic	6010 7060 7061	500 10 20
Barium	(Total)	Barium	6010 7080	20 1,000
Benzene	71-43-2	Benzene	8020 8240	2 5
Benzo[a]anthracene; Benzanthracene	56-55-3	Benz[a]anthracene	8100 8270	200 10
Benzo[b]-fluoranthene	205-99-2	Benz[e]acephen-anthry- lene	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 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20
Beryllium	(Total)	Beryllium	6010 7090	3 50
alpha-BHC	319-84-6	Cyclohexane,1,2,3,4,5, 6-hexachloro-,(1α,2α,3β,4α,5β ,6β)	8080 8250	0.05 10
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5, 6-hexachloro-,(1α,2β,3α,4β,5α ,6β)-	8080 8250	0.05 40
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5, 6-hexachloro-,(1α,2α,3α, 4β,5α,6β)-	8080 8250	0.1 30
gamma-BHC;Lindane	58-89-9	Cyclohexane, 1,2,3,4,5, 6-hexachloro-,(1α,2α,3β,4α,5α ,6β)	8080 8250	0.05 10
Bis(2-chloro-ethoxy) methane-	111-91-1	Ethane,1,1'-[methyl-enebis(oxy)]bis[2- chloro-	8270	10
Bis(2-chloro- ethyl) ether	111-44-4	Ethane, 1,1'-oxybis[2- chloro-	8270	10
Bis(2-chloro-1-methylethyl)ether; 2,2'-Dichlorodi-isopropyl ether	108-60-1	Propane, 2,2'-oxybis [1-chloro-	8010 8270	100 10
Bis(2-ethyl-hexyl) phthalat	117-81-7	1,2-Benzenedicarboxylic acid,bis(2-ethylhexyl) ester	8060 8270	20 10
Bromodichloro-methane	75-27-4	Methane, bromodichloro-	8010 8240	1 5
Bromoform;Tri-bromomethane	75-25-2	Methane, tribromo-	8010 8240	2 5
4-Bromophenyl-phenyl ether	101-55-3	Benzene,1-bromo-4- phenoxy-	8270	10
Butyl benzyl phthalate;Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenyl- methyl ester	8060 8270	5 10
Cadmium	(Total)	Cadmium	6010 7130 7131	40 50 1
Carbon disulfide	75-15-0	Carbon disulfide	8240	5

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010 8240	1 5
Chlordane	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octa-chloro-2,3,3a,4,7,7a-hexahydro-	8080 8250	0.1 10
p-Chloroaniline	106-47-8	Benzenamine, 4 chloro-	8270	20
Chlorobenzene	108-90-7	Benzene, chloro-	8010 8020	2 2
Chloro- benzilate	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chloro-phenyl)-α-hydroxy-, ethyl ester	8270	10
p-Chloro- m-cresol	59-50-7	Phenol, 4-chloro-3- methyl-	8040 8270	5 20
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010 8240	5 10
Chloroform	67-66-3	Methane, trichloro-	8010 8240	0.5 5
2-Chloro-naphthalene	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-	8270	10
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-	8010 8240	50 5
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

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
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	40
2,4-D; 2,4-Di-chlorophenoxy-acetic 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'-(dichloro-ethenylidene) bis[4- chloro--	8080 8270	0.05 10
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-	8080 8270	0.1 10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, 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
Dibromochloro-methane;Chlorodi-bromomethane	124-48-1	Methane, dibromo- chloro-	8010 8240	1 5
1,2-Dibromo-3chloro propane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-	8010 8240 8270	100 5 10
1,2-Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-	8010 8240	10 5
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	8060 8270	5 10

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010	2
			8020	5
			8120	10
			8270	10
m-Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-	8010	5
			8020	5
			8120	10
			8270	10
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010	2
			8020	5
			8120	15
			8270	10
3,3'-Dichloro-benzidine	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)-	8240	5
Dichlorodifluoro-methane	75-71-8	Methane, dichloro- difluoro-	8010	10
			8240	5
1,1-Dichloro- ethane	75-34-3	Ethane,1,1-dichloro-	8010	1
			8240	5
1,2-Dichloro- ethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-	8010	0.5
			8240	5
1,1-Dichloro-ethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro-	8010	1
			8240	5
trans-1,2-Dichloroethylene	156-60-5	Ethene,1,2-dichloro-(E)-	8010	1
			8240	5
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040	5
			8270	10
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10
1,2-Dichloro-propane	78-87-5	Propane, 1,2- dichloro-	8010	0.5
			8240	5
cis-1,3- Dichloro-propene	10061-01-5	1-Propene, 1,3- dichloro-,(Z)-	8010	20
			8240	5

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3- dichloro-, (E)-	8010 8240	5 5
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth [2,3-b]oxirene,3,4,5, 6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (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	8270	10
Dimethoate	60-51-5	Phosphorodithioic acid, O,O-dimethyls-[2-(methylamino)-2-oxoethyl] ester	8270	10
p-(Dimethyl-amino)azobenzene	60-11-7	Benzenamine, N,N-di-methyl-4-(phenylazo)-	8270	10
7,12-Dimethyl-benz[a] anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-	8270	10
3,3'-Dimethyl-benzidine	119-93-7	[1,1'-Biphenyl]-4,4'- diamine, 3,3'-dimethyl-	8270	10
alpha, alpha-Dimethyl-phenethylamine	122-09-8	Benzeneethanamine, α,α-dimethyl-	8270	10
2,4-Dimethyl- phenol	105-67-9	Phenol, 2,4-dimethyl-	8040	5
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	8060 8270	5 10
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-	8270	10
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-Dinitro- toluene	121-14-2	Benzene, 1-methyl-2, 4-dinitro-	8090 8270	0.2 10

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
2,6-Dinitro- toluene	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 10
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060 8270	30 10
1,4-Dioxane	123-91-1	1,4-Dioxane	8015	150
Diphenylamine	122-39-4	Benzenamine, N-phenyl-	8270	10
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester	8140 8270	2 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 8250	0.1 10
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexa-chloro-1,5,5a,6,9, 9a-hexahydro-,3-oxide, (3α,5aα,6β,9β,9aα)-	8080	0.05
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-Dimethanonaphth[2,3-b] oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ, 7β,7aα)-	8080 8250	0.1 10
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]pe ntalene- 5-carboxaldehyde, 2,2a,3,3,4,7-hexachloro-decahy dro-,(1α,2β,2aβ, 4β,4aβ,5β,6aβ,6bβ,7R*)-	8080 8270	0.2 10
Ethylbenzene	100-41-4	Benzene, ethyl-	8020 8240	2 5

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	8015 8240 8270	10 5 10
Ethyl methane-sulfonate	62-50-0	Methanesulfonic acid, ethyl ester	8270	10
Famphur	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl]-O,O-di-methyl ester	8270	10
Fluoranthene	206-44-0	Fluoranthene	8100	200
Fluorene	86-73-7	9H-Fluorene	8100 8270	200 10
Heptahclor*	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-hepta-chloro-3a,4,7,7a-tetrahydro-	8080 8270	0.05 10
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno [1,2-b]oxirene,2,3,4,5, 6,7,7-heptachloro- 1a,1b,5,5a,6,6ahexa-hydro-,(1aα,1bβ,2α, 5α,5aβ,6β,6aα)	8080 8270	1 10
Hexachlorobenzene	118-74-1	Benzene, hexachloro-	8120 8270	0.5 10
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8120 8270	5 10
Hexachloro-cyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	8120 8270	5 10
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120 8270	0.5 10
Hexachlorophene	70-30-4	Phenol,2,2'-methyl-enebis [3,4,6- tri-chloro-	8270 8270	10 10
Hexachloropropene	1888-71-7	1-Propene,1,1,2,3,3,3-hexachloro	8270	10
2-Hexanone	591-78-6	2-Hexanone	8240	50
Indeno(1,2,3- cd) pyrene	193-39-5	Indeno[1,2,3-cd] pyrene	8100 8270	200 10

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015	50
Isodrin	465-73-6	1,4,5,8-Dimethano-naphthalene,1,2,3,4,10,10-hexa chloro-1,4,4a,5,8,8a-hexahydro- (1α,4α,4aβ, 5β,8β,8aβ) -	8270	10
Isophorone	78-59-1	2-Cyclohexen-1-one,3,5,5-trimethyl-	8090 8270	60 10
Isosafrole	120-58-1	1,3-Benzodioxole,5-(1-propenyl)-	8270	10
Kepone	143-50-0	1,3,4-Metheno-2H-cylo-buta-[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a,5b,6-dec achloroocta-hydro-	8270	10
Lead	(Total)	Lead	6010 7420 7421	40 1,000 10
Mercury	(Total)	Mercury	7470	2
Methacrylonitrile	126-98-7	2-Propenenitrile, 2-methyl-	8015 8240	5 5
Methapyrilene	91-80-5	1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-t hienylmethyl)-	8270	10
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 8240	20 10
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010 8240	1 10
3-Methyl-cholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	10
Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-	8010 8240	15 5
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-	8010 8240	5 5

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
Methyl ethyl ketone; MEK	78-93-3	2-Butanone	8015 8240	10 100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010 8240	40 5
Methylmethacrylate	80-62-6	2-Propenoic acid, 2-methyl-,methyl ester	8015 8240	2 5
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester	8270	10
2-Methyl-naphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl)ester	8140 8270	0.5 10
4-Methyl-2-pentanone; Methyl misobutyl ketone	108-10-1	2-Pentanone, 4-methyl	8015 8240	5 50
Naphthalene	91-20-3	Naphthalene	8100 8270	200 10
1,4-Naphthoquinone	130-15-4	1,4-Naphthalene-dione	8270	10
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10
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
4-Nitroquinoline, 1-oxide	56-57-5	Quinoline, 4-nitro-, 1-oxide	8270	10
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso	8270	10

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
N-Nitroso-diethylamine	55-18-5	Ethanamine, N-ethyl- N-nitroso	8270	10
N-Nitroso-dimethylamine	62-75-9	Methanamine, N- methyl-N-nitroso-	8270	10
N-Nitroso-diphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8270	10
N-Nitrosodipropyl-amine;Di-n-propyl-nitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8270	10
N-Nitrosom-ethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosomor-pholine	59-89-2	Morpholine, 4-nitroso-	8270	10
N-Nitrosopiperi-dine	100-75-4	Piperidine, 1- nitroso-	8270	10
N-Nitrosopyrroli-dine	930-55-2	Pyrrolidine, 1- nitroso-	8270	10
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-nitro-phenyl) ester	8270	10
Polychlorinated biphenyls; PCBs	See Note 7	1,1'-Biphenyl, chloro derivatives	8080 8250	50 100
Polychlorinated dibenzo-p- dioxins; PCDDs	See Note 8	Dibenzo[b,e][1,4]dioxin, chloro derivatives	8280	0.01
Polychlorinated dibenzofurans; PCDFs	See Note 9	Dibenzofuran, chloro derivatives	8280	0.01
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	8270	10
Pentachloroethane	76-01-7	Ethane, pentachloro-	8240 8270	5 10
Pentachloro-nitrobenzene	82-68-8	Benzene, pentachloro- nitro-	8270	10
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040 8270	5 50
Phenacetin	62-44-2	Acetamide, N-(4- ethoxyphenyl)	8270	10
Phenanthrene	85-01-8	Phenanthrene	8100 8270	200 10

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[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 8270	2 10
2-Picoline	109-06-8	Pyridine, 2-methyl-	8240 8270	5 10
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-pro-pynyl)-	8270	10
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015 8240	60 5
Pyrene	129-00-0	Pyrene	8100 8270	200 10
Pyridine	110-86-1	Pyridine	8240 8270	[illegible] 10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	[illegible]0
Selenium	(Total)	Selenium	6010 7740 7741	75[illegible] 20 20
Silver	(Total)	Silver	6010 7760	70 100
Silvex; 2,4,5-TP	93-72-1	Propanoic acid,2-(2,4,5-trichlorophenoxy)-	8150	2
Styrene	100-42-5	Benzene, ethenyl-	8020 8240	1 5
Sulfide	18496-25-8	Sulfide	9030	10,000
2,4,5-T; 2,4,5-, Trichlorophenoxy-acetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2
2,3,7,8-TCDD; 2,3,7,8-Tetra-chlorodibenzo-p-dioxin	1746-01-6	Dibenzo[b,e][1,4]dioxin2,3,7,8-tetrachloro-	8280	0.00 5

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2- tetrachloro-	8010 8240	5 5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2- tetrachloro-	8010 8240	0.5 5
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-	8010 8240	0.5 5
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6- tetrachloro-	8270	10
Tetraethyl dithiopyrophosphate; Sulfotepp	3689-24-5	Thiodiphosphoric acid ($[(HO)_2P(S)]_2O$), tetraethyl ester	8270	10
Thallium	(Total)	Thallium	6010 7840 7841	400 1,000 10
Tin	(Total)	Tin	7870	8,000
Toluene	108-88-3	Benzene, methyl-	8020 8240	2 5
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	10
Toxaphene	8001-35-2	Toxaphene	8080 8250	2 10
1,2,4-Trichlorobenzene	120-82-1	Benzene,1,2,4-trichloro-	8270	10
1,1,1-Trichloroethane; Methylchloroform	71-55-6	Ethane, 1,1,1-trichloro-	8240	5
1,1,2-Trichloroethane	79-00-5	Ethane,1,1,2-,trichloro-	8010 8240	0.2 5
Trichloro- ethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010 8240	1 5
Trichlorofluoromethane	75-69-4	Methane,trichlorofluoro-	8010 8240	10 5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5-trichloro-	8270	10

Table 4. Groundwater Monitoring List [1]

Common name[2]	CAS RN[3]	Chemical abstracts service index name[4]	Suggested methods[5]	PQL (µg/L)[6]
2,4,6-Tri-chlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040 8270	5 10
1,2,3-Tri-chloropropane	96-18-4	Propane,1,2,3-tri-chloro-	8010 8240	10 5
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-triethyl ester	8270	10
sym-Trinitro-benzene	99-35-4	Benzene, 1,3,5- trinitro	8270	10
Vanadium	(Total)	Vanadium	6010 7910 7911	80 2,000 40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8240	5
Vinyl chloride	75-01-4	Ethene, chloro-	8010 8240	2 10
Xylene (total)	1330-20-7	Benzene, dimethyl-	8020 8240	5 5
Zinc	(Total)	Zinc	6010 7950	20 50

[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 names are those used in the ninth Cumulative 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. Analytical details can be found in SW-846 and in documentation on file at the agency. *Caution*: The methods listed are representative 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 groundwaters 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. *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] 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 averaged value for PCB congeners.

[8] This category contains congener chemicals, including tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-dioxins, and hexachlorodibenzo-p-

dioxins. The PQL shown is an average value for PCDD congeners.

[9] This category contains congener chemicals, including tetrachlorodibenzofurans, pentachlorodibenzofurans, and hexachlorodibenzofurans. The PQL shown is an average value for PCDF congeners.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:399 (May 1990), amended LR 18:1256 (November 1992).

Chapter 35. Closure and Post-closure

§3501. Applicability

A. Closure and post-closure procedures ensure protection of the public and ecology against leakage of hazardous wastes to the environment from closed facilities which formerly stored, treated, and/or disposed of such wastes.

B. Except as LAC 33:V.105.D provides otherwise, LAC 33:V.3503 through 3517 (which concern closure) apply to all hazardous waste facilities in operation or under construction as of the effective date of LAC 33:V.Subpart 1 and to all hazardous waste facilities permitted under LAC 33:V.Subpart 1, as applicable.

C. LAC 33:V.3519, 3521, 3523, 3525 and 3527 (post-closure care) apply to the owners and operators of:

1. all hazardous waste disposal facilities;

2. piles, surface impoundments, or any facility from which the owner or operator intends to remove waste at closure, to the extent that these sections are made applicable to such facilities in LAC 33:V.2315 and 2911;

3. tank systems that are required under LAC 33:V.1915 to meet the requirements for landfills; and

4. containment buildings that are required under LAC 33:V.1803 to meet the requirements for landfills.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 16:614 (July 1990), LR 18:1256 (November 1992), LR 21:266 (March 1995).

§3503. Notification of Intention to Close a Facility

A. At least 180 days prior to closure, the operator must notify the administrative authority of intention to close and supply the following information:

1. date of planned closure;

2. requested changes, if any, in the closure plan submitted with the permit application, which take advantage of new technology, unforeseen situations, and other requests which improve the safety of the closed facility;

3. closure schedule and estimated costs of each phase of the closure plan; and

4. request for release of closure funds in amounts and times as required by the closure schedules.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

Subchapter A. Closure Requirements

§3505. Closure Procedures

A. If closure methods are unchanged from the plan approved with the permit, the administrative authority will acknowledge receipt of the notification to close and prepare appropriate documents which will be executed upon completion and acceptance of each phase of the closure plan so that funds can be released.

B. If the request is made to change the closure plan, the operator will submit revisions to the plan, supported by necessary scientific and engineering data to permit evaluation by the department, and the procedures established in permit process will be followed in evaluating and approving the requested changes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3507. Closure Performance Standards

Pursuant to LAC 33:V.3509, the owner or operator must close his facility in a manner that:

A. minimizes the need for further maintenance; and

B. controls, minimizes, or eliminates, to the extent necessary to prevent threats to human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the groundwater, surface waters, or to the atmosphere;

C. complies with closure requirements of this Chapter, including, but not limited to, the requirements of LAC 33:V.~~1803, 1911,~~ 1915, 2117, 2315, 2521, 2719, 2911, 3121, and 3203-3207.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:399 (May 1990), LR 18:1256 (November 1992), LR 21:266 (March 1995).

§3509. Closure Financial Responsibility

A. The operator shall submit, with the permit application, a closure plan which provides the estimated cost of closure, and post-closure monitoring including long-term monitoring devices, and the number of years of estimated operation before closure, and which is designed to minimize the need for future maintenance and to ensure against leakage or escape of hazardous waste.

B. The operator shall create a "closure fund" under the requirements in LAC 33:V.Chapters 35 and 37.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3511. Closure Plan; Amendment of Plan

A. Written Plan

1. The owner or operator of a hazardous waste management facility must have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by LAC 33:V.2911.D and 2315.C to have contingent closure plans. The plan must be submitted with the permit application, in accordance with LAC 33:V.517.M and approved by the administrative authority as part of the permit issuance procedures under LAC 33:V.Chapters 3 and 7. In accordance with LAC 33:V.311 of this Part, the approved closure plan will become a condition of any hazardous waste permit.

2. The administrative authority's approval of the plan must ensure that the approved closure plan is consistent with LAC 33:V.3507, 3511-3517, and the applicable requirements of LAC 33:V.Chapter 33, 1803, 1911, 1915, 2117, 2315, 2521, 2719, 2911, 3121, and 3203. Until final closure is completed and certified in accordance with LAC 33:V.3517, a copy of the approved plan and all approved revisions must be furnished to the administrative authority upon request, including request by mail.

B. Content of Plan. The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include, at least:

1. a description of how each hazardous waste management unit at the facility will be closed in accordance with LAC 33:V.3507;

2. a description of how final closure of the facility will be conducted in accordance with LAC 33:V.3507. The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility; and

3. an estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the type(s) of the off-site hazardous waste management units to be used, if applicable; and

4. a detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard;

5. a detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground water monitoring, leachate collection, and run-on and run-off control;

6. a schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure (for example, in the case of a landfill, unit estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included); and

7. for facilities that use trust funds to establish financial assurance LAC 33:V.3707 and 3711 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

C. Amendment of Plan. The owner or operator must submit a written notification of or request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the applicable procedures in LAC 33:V.Chapters 3 and 7. The written notification or request must include a copy of the amended closure plan for review or approval by the administrative authority.

1. The owner or operator may submit a written notification or request to the administrative authority for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

2. The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved closure plan whenever:

a. changes in operating plans or facility design affect the closure plan; or

b. there is a change in the expected year of closure, if applicable; or

c. in conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.

3. The owner or operator must submit a written request for a permit modification including a copy of the amended closure plan for approval at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit modification no later than 30 days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under LAC 33:V.2911.D or 2315.D must submit an amended closure plan to the administrative authority no later than 60 days from the date that the owner or operator or administrative authority determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of LAC 33:V.2521, or no later than 30 days from that date if the determination is made during partial closure or final closure. The administrative authority will approve, disapprove, or modify this amended plan in accordance with the procedures in LAC 33:V.Chapters 3 and 7. In accordance with LAC 33:V.311 of this Part, the approved closure plan will become a condition of any hazardous waste permit issued.

4. The administrative authority may request modifications to the plan under the conditions described in LAC 33:V.3511.A.2. The owner or operator must submit the modified plan within 60 days of the administrative authority's request, or within 30 days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the administrative authority will be approved in LAC 33:V.Chapters 3 and 7.

D. Notification of Partial Closure and Final Closure

1. The owner or operator must notify the administrative authority in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator must notify the administrative authority in writing at least 45 days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed. The owner or operator must notify the administrative authority in writing at least 45 days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.

2. The date when he or she "expects to begin closure" must be one of the following:

a. No later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the administrative authority that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he or she has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the administrative authority may approve an extension to this one-year limit.

b. For units meeting the requirements of LAC 33:V.3513.D, no later than 30 days after the date on which the hazardous waste management unit receives the known final volume of non-hazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one year after the date on which the unit received the most recent volume of non-hazardous wastes. If the owner or operator can demonstrate to the administrative authority that the hazardous waste management unit has the capacity to receive additional non-hazardous wastes and he or she has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the administrative authority may approve an extension to this one-year limit.

3. If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order under R.S. 30:2025, to cease receiving hazardous wastes or to close, then the requirements of this Paragraph do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in LAC 33:V.3513.

E. Removal of Wastes and Decontamination or Dismantling of Equipment. Nothing in this Section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 14:791 (November 1988), LR 16:399 (May 1990), LR 16:614 (July 1990), LR 17:478 (May 1991), LR 18:1256 (November 1992), LR 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3513. Closure; Time Allowed for Closure

A. Within 90 days after receiving the final volume of hazardous wastes, or the final volume on non-hazardous wastes if the owner or operator receives administrative

authority allowance pursuant to LAC 33:V.3513.D and plies with all applicable requirements in LAC V.3513.D and E, at a hazardous waste management unit or facility, the owner or operator must treat, remove from the facility or unit, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The administrative authority may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:

1. the activities required to comply with this Paragraph will, of necessity, take longer than 90 days to complete, or

2. the hazardous waste management unit or facility has the capacity to receive additional wastes, or has the capacity to receive non-hazardous wastes if the owner or operator receives administrative authority allowance pursuant to LAC 33:V.3513.D and complies with LAC 33:V.3513.D and E, and there is a reasonable likelihood that he or another person will recommence operation of the site, as provided in LAC 33:V.321; and

3. closure of the facility would be incompatible with continued operation of the site; and

4. the owner or operator has taken and will continue to take all steps to prevent threats to human health and the vironment.

B. The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes if the owner or operator complies with all applicable requirements in LAC 33:V.3513.D and E, at the hazardous waste management unit or facility. The administrative authority may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a permit modification and demonstrates that:

1. the partial or final closure activities will, of necessity, take longer than 180 days to complete; or

2. the hazardous waste management unit facility has the capacity to receive additional hazardous wastes or has the capacity to receive non-hazardous wastes if the owner or operator complies with LAC 33:V.3513.D and E; and

3. there is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit within one year, as provided in LAC 33:V.321; and

4. closure of the facility would be incompatible with continued operation of the site; and

5. he has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed, but inactive hazardous waste management unit including compliance with all applicable permit conditions.

C. The demonstrations referred to in LAC 33:V.3513.A and B must be made as follows:

1. the demonstrations in Subsection A must be made at least 30 days prior to the expiration of the 90-day period in Subsection A; and

2. the demonstration in LAC 33:V.3513.B must be made at least 30 days prior to the expiration of the 180-day period in LAC 33:V.3513.B, unless the owner or operator is otherwise subject to the deadlines in LAC 33:V.3513.D.

D. The administrative authority may allow an owner or operator to receive only non-hazardous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of hazardous wastes at that unit if the following conditions are met.

1. The owner or operator requests a permit modification in compliance with all applicable requirements in LAC 33:V.Chapters 1, 3, 5, 7, 27, 31, and 43, and in the permit modification request demonstrates that:

a. the unit has the existing design capacity as indicated on the Part I application to receive non-hazardous wastes;

b. there is a reasonable likelihood that the owner or operator or another person will receive non-hazardous wastes in the unit within one year after the final receipt of hazardous wastes;

c. the nonhazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27, 28, 29, 31, 32, 33, 35, and 37;

d. closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and

e. the owner or operator is operating and will continue to operate in compliance with all applicable permit requirements.

2. The request to modify the permit includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required under LAC 33:V.503.A, and closure and post-closure plans, and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate to reflect any changes due to the presence of hazardous constituents in the non-hazardous wastes and changes in closure activities, including the expected year of closure if applicable under LAC 33:V.3511.B.7, as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes.

3. The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes.

4. The request to modify the permit and the demonstrations referred to in LAC 33:V.3513.D.1 and 2 are submitted to the administrative authority no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit, or no later than 90 days after the effective date of this rule, whichever is later.

E. In addition to the requirements in LAC 33:V.3513.D, an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in LAC 33:V.Chapter 29 must do the following.

1. Submit with the request to modify the permit:

a. a contingent corrective measures plan, unless a corrective action plan has already been submitted under LAC 33:V.3319; and

b. a plan for removing hazardous wastes in compliance with LAC 33:V.3513.E.2.

2. Remove all hazardous wastes from the unit by removing all hazardous liquids and removing all hazardous sludges to the extent practicable without impairing the integrity of the liner(s), if any.

3. Removal of hazardous wastes must be completed no later than 90 days after the final receipt of hazardous wastes. The administrative authority may approve an extension to this deadline if the owner or operator demonstrates that the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.

4. If a release that is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters or constituents specified in the permit or that exceeds the facility's groundwater protection standard at the point of compliance, if applicable, is detected in accordance with the requirements in LAC 33:V.Chapter 33, the owner or operator of the unit:

a. must implement corrective measures in accordance with the approved contingent corrective measures plan required by LAC 33:V.3513.E.1 no later than one year after detection of the release or approval of the contingent corrective measures plan, whichever is later;

b. may continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

c. may be required by the administrative authority to implement corrective measures in less than one year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

5. During the period of corrective action, the owner or operator shall provide semiannual reports to the administrative authority that describe the progress of the corrective action program, compile all groundwater monitoring data, and evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.

6. The administrative authority may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in LAC 33:V.3513.E.4, or fails to make substantial progress in implementing corrective action and achieving the facility's groundwater protection standard or background levels if the facility has not yet established a groundwater protection standard.

7. If the owner or operator fails to implement corrective measures as required in LAC 33:V.3513.E.4, or if the administrative authority determines that substantial progress has not been made pursuant to LAC 33:V.3513.E.6, he or she shall do the following.

a. The administrative authority will notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadlines in LAC 33:V.3513.A and B, and provide a detailed statement of reasons for this determination.

b. The administrative authority will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than 20 days after the date of the notice.

c. If the administrative authority receives no written comments, the decision will become final five days after the close of the comment period. The administrative authority will notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, must be submitted within 15 days of the final notice, and that closure must begin in accordance with the deadlines in LAC 33:V.3513.A and B.

d. If the administrative authority receives written comments on the decision, he or she shall make a final decision within 30 days after the end of the comment period, and provide the owner or operator in writing and the public through a newspaper notice with a detailed statement of reasons for the final decision. If the administrative authority determines that substantial progress has not been made, closure must be initiated in accordance with the deadlines in LAC 33:V.3513.A and B.

e. The final determinations made by the administrative authority under LAC 33:V.3513.E.7.c and d are not subject to administrative appeal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR

13:433 (August 1987), LR 17:478 (May 1991), LR 20:1000 (September 1994).

§3515. Disposal or Decontamination of Equipment, Structures and Soils

During the partial and final closure periods, all contaminated equipment, structures, and soils must be properly disposed of or decontaminated, unless otherwise specified in LAC 33:V.1915, 2315, 2521, 2719, and 2911, or under the authority of LAC 33:V.3203 and 3207. By removing any hazardous waste or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that waste in accordance with all applicable requirements of LAC 33:V.Chapter 11.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:399 (May 1990), LR 16:614 (July 1990).

§3517. Certification of Closure

A. Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of the completion of final closure, the owner or operator must submit to the administrative authority, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the administrative authority upon request until he releases the owner or operator from the financial assurance requirements for closure under LAC 33:V.3707.

B. Survey Plat. No later than the submission of the certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the administrative authority, a survey plat indicating the location and dimensions of landfills cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use, must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable Chapter 35 regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987).

Subchapter B. Post-closure Requirements

§3519. Post-closure Procedures

A. Any proposed transfer of ownership of the property shall be reported to the administrative authority at least 60 days prior to execution of such sale.

B. The administrative authority must approve any new owner. Criteria for approval includes agreement to land use restrictions necessary to protect public health and financial responsibility covering liability due to change in land use.

C. The administrative authority will conduct an annual evaluation of the site for the period of post-closure.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§3521. Post-closure Care and Use of Property

A. Length of Post-closure

1. Post-closure care for each hazardous waste management unit subject to the requirements of LAC 33:V.3519 through 3527 must continue for at least 30 years after the date of completing closure of that unit and must consist of at least the following:

a. monitoring and reporting in accordance with the requirements of LAC 33:V.Chapters 23, 25, 27, 29, 32 and 33; and

b. maintenance and monitoring of waste containment systems in accordance with the requirements of LAC 33:V.Chapters 23, 25, 27, 29, 32 and 33.

2. Any time preceding partial closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular unit, the administrative authority may, in accordance with the permit modification procedures in LAC 33:V.321:

a. shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if he finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or groundwater monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the hazardous waste management unit or facility is secure); or

b. extend the post-closure care period applicable to the hazardous waste management unit or facility if he finds that the extended period is necessary to protect human health and

the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

B. The administrative authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507 during part or all of the post-closure period when:

1. hazardous wastes may remain exposed after completion of partial or final closure; or

2. access by the public or domestic livestock may pose a hazard to human health.

C. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the facility's monitoring systems, unless the administrative authority finds that the disturbance:

1. is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

2. is necessary to reduce a threat to human health or the environment.

D. All post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in LAC 33:V.3525.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:399 (May 1990).

§3523. Post-closure Plan, Amendment of Plan

A. Written Plan. The owner or operator of a hazardous waste disposal unit must have a written post-closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous wastes at partial or final closure are required by LAC 33:V.2911.D and 2315.C to have contingent post-closure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent post-closure plans under LAC 33:V.2315.C and 2911.D must submit a post-closure plan to the administrative authority within 90 days from the date that the owner or operator or administrative authority determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of LAC 33:V.3519-3527. The plan must be submitted with the permit application, in accordance with LAC 33:V.517.P, and approved by the administrative authority as part of the permit issuance procedures under these regulations. In accordance with LAC 33:V.311 the approved post-closure plan will become a condition of any hazardous waste permit issued.

B. For each hazardous waste management unit subject to the requirements of this Section, the post-closure plan must identify the activities that will be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

1. a description of the planned monitoring activities and frequencies at which they will be performed to comply with LAC 33:V.Chapters 23, 25, 27, 29, 32 and 33 during the post-closure care period; and

2. a description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:

a. the integrity of the cap and final cover or other containment systems in accordance with the requirements of LAC 33:V.Chapters 23, 25, 27, 29, 32 and 33; and

b. the functioning of the monitoring equipment in accordance with the requirements of LAC 33:V. Chapters 23, 25, 27, 29, 32 and 33; and

3. the name, address and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period.

C. Until final closure of the facility, a copy of the approved post-closure plan must be furnished to the administrative authority upon request, including request by mail. After final closure has been certified, the person or office specified in LAC 33:V.3525 must keep the approved post-closure plan during the remainder of the post-closure period.

D. Amendment of Plan. The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements of LAC 33:V.Chapters 3 and 7. The written notification or request must include a copy of the amended post-closure plan for review or approval by the administrative authority.

1. The owner or operator may submit a written notification or request to the administrative authority for a permit modification to amend the post-closure plan at any time during the active life of the facility or during the post-closure care period.

2. The owner or operator must submit a written notification of or request for a permit modification to authorize a change in the approved post-closure plan whenever:

a. changes in operating plans or facility design affect the approved post-closure plan; or

b. there is a change in the expected year of final closure, if applicable; or

c. events which occur during the active life of the facility, including partial and final closures, affect the approved post-closure plan.

3. The owner or operator must submit a written request for a permit modification at least 60 days prior to the proposed

change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at a closure and is not otherwise required to submit a contingent post-closure plan under LAC 33:V.2911.D and 2315.C must submit a post-closure plan to the administrative authority no later than 90 days after the date that the owner or operator or administrative authority determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of LAC 33:V.2521. The administrative authority will approve, disapprove or modify this plan in accordance with the procedures in LAC 33:V.Chapters 3 and 7. In accordance with LAC 33:V.311, the approved post-closure plan will become a permit condition.

4. The administrative authority may request modifications to the plan under the conditions described in LAC 33:V.3523.D.2. The owner or operator must submit the modified plan no later than 60 days after the administrative authority's request or no later than 90 days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent post-closure plan. Any modifications requested by the administrative authority will be approved, disapproved, or modified in accordance with the procedures in LAC 33:V.Chapters 3 and 7.

E. Certification of Completion of Post-closure Care. No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the administrative authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the administrative authority upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under LAC 33:V.3711.I.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 14:791 (November 1988), LR 16:399 (May 1990), LR 16:614 (July 1990), LR 18:1256 (November 1992).

§3525. Post-closure Notices

A. No later than 60 days after certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the administrative authority a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

B. Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator must:

1. record, in accordance with state law, a notation on the deed to the facility property or on some other instrument which is normally examined during the title search—that will in perpetuity notify any potential purchaser of the property that:

a. the land has been used to manage hazardous wastes; and

b. its use is restricted under LAC 33:V.Chapter 35; and

c. the survey plat and record of the type, location and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by LAC 33:V.3517 and 3527 have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the administrative authority; and

2. submit a certification, signed by the owner or operator, that he has recorded the notation specified in Subsection B.1 of this Section, including a copy of the document in which the notation has been placed, to the administrative authority.

C. If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in LAC 33:V.Chapters 3 and 7. The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of LAC 33:V.3521. By removing hazardous waste, the owner or operator may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of this Chapter. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the administrative authority approve either:

1. the removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

2. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

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

Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 18:1256 (November 1992).

§3527. Certification of Completion of Post-closure Care

No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the administrative authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the administrative authority upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under LAC 33:V.3711.I.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987).

Chapter 37. Financial Requirements

§3701. Applicability

A. The requirements of this Chapter apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this Part.

B. The requirements of LAC 33:V.3709 and 3711 apply only to owners and operators of:

1. disposal facilities;

2. piles and surface impoundments from which the owner or operator intends to remove the wastes at closure, to the extent that these sections are made applicable to such facilities in LAC 33:V.Chapters 23 and 29;

3. tank systems that are required under LAC 33:V.1915 to meet the requirements for landfills; and

4. containment buildings that are required under LAC 33:V.1803 to meet the requirements for landfills.

C. States and the federal government are exempt from the requirements of this Chapter.

[Comment: The permit application should include a description of the financial structure of the operating unit including capital structure, principal ownership, and insurance coverage for personal injury and property damage.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:614 (July 1990), LR 21:266 (March 1995).

§3703. Definitions of Terms as Used in This Chapter

A. General Terms

1. *Closure plan* means the plan for closure prepared in accordance with the requirements of LAC 33:V.Chapter 35.

2. *Current closure cost estimate* means the most recent of the estimates prepared in accordance with LAC 33:V.3705.A-C.

3. *Current post-closure cost estimate* means the most recent of the estimates prepared in accordance with LAC 33:V.3709.A-C.

4. *Parent corporation* means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a subsidiary of the parent corporation.

5. *Post-closure plan* means the plan for the post-closure care prepared in accordance with the requirements of LAC 33:V.Chapter 35.

6. The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

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

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

c. *Current liabilities* mean 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.

d. *Independently audited* refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

e. *Liabilities* mean 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.

f. *Net working capital* means current assets minus current liabilities.

g. *Net worth* means total assets minus total liabilities and is equivalent to owner's equity.

h. *Tangible net worth* means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

7. *Current plugging and abandonment cost estimates* ns most recent cost estimates prepared in accordance with 40 CFR 144.62a, b, and c, required by the Office of Conservation, or any other substantially equivalent state program.

8. *Substantial business relationship* means the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A "substantial business relationship" must arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the applicable administrative authority.

B. Insurance-Related Terms. In the liability insurance requirements the terms bodily injury and property damage shall have the meanings given these terms by applicable state law. However, these terms do not include those liabilities which, consistent with standard industry practices, are excluded from coverage in liability policies for bodily injury and property damage. The meanings of other terms used in the liability insurance requirements are to be consistent with their common meanings within the insurance industry. The definitions of several of the terms given below are intended to assist in the understanding of these regulations and are not tended to limit their meaning in a way that conflicts with eneral insurance industry usage.

1. *Accidental occurrence* means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

2. *Legal defense costs* mean any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

3. *Nonsudden accidental occurrence* means an occurrence which takes place over time and involves continuous or repeated exposure.

4. *Sudden accidental occurrence* means an occurrence which is not continuous or repeated in nature.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 13:651 (November 1987), LR 16:614 (July 1990), LR 18:723 (July 1992).

Subchapter A. Closure Requirements

§3705. Cost Estimate for Closure

A. The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in LAC 33:V.3503 through 3517 and applicable closure requirements in LAC 33:V.1803, 1915, 2117, 2315, 2521, 2719, 2911, 3121, and 3203-3207.

1. The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see LAC 33:V.3511.B); and

2. The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of owner or operator in LAC 33:V.3703.A. The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

3. The closure cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous wastes or non-hazardous wastes if applicable under LAC 33:V.3513.D, facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.

4. The owner or operator may not incorporate a zero cost for hazardous wastes or non-hazardous wastes if applicable under LAC 33:V.3513.D, that might have economic value.

B. During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with LAC 33:V.3707. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the administrative authority as specified in LAC 33:V.3707.F. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business, as specified in LAC 33:V.3705.B.1 and 2. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

1. The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

2. Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

C. During the active life of the facility, the owner or operator must revise the closure cost estimate no later than 30 days after the administrative authority has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in LAC 33:V.3705.B.

D. The owner or operator must keep, at the facility during the operating life of the facility, the latest closure cost estimate prepared as specified in LAC 33:V.3705.A and C and, when

this estimate has been adjusted as specified in LAC 33:V.3705.B, the latest adjusted closure cost estimate. ~~The cost estimate must be available to the administrative authority by mail request also.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 16:399 (May 1990), LR 17:478 (May 1991), LR 18:723 (July 1992), LR 21:266 (March 1995).

§3707. Financial Assurance for Closure

~~An owner or operator of each facility must establish~~ financial assurance for closure of the facility. Under this Part, the owner or operator must choose from the options as specified in LAC 33:V.3707.A through F, which choice the administrative authority must find acceptable based on the ~~application and the circumstances.~~

A. Closure Trust Fund

1. An owner or operator may satisfy the requirements of this Part by establishing a closure trust fund which conforms to the requirements of this Subpart, and submitting an originally signed duplicate of the trust agreement to the administrative authority. An owner or operator of a new facility must submit the originally signed duplicate of the trust agreement to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

2. The wording of the trust agreement must be identical to the wording specified in LAC 33:V.3719.A.1, and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see LAC 33:V.3719.A.2). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

3. Payments into the trust fund must be made annually by the owner or operator over the term of the initial permit, or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:

a. For a new facility, the first payment must be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the administrative authority before this initial receipt of hazardous waste. The first payment must be at least equal to the current closure cost estimate, except as provided in LAC 33:V.3707.G divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\textit{Next Payment} = \frac{CE - CV}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

b. If an owner or operator has previously established a trust fund as specified in LAC 33:V.4403.A and the value of that trust fund is less than the current closure cost estimate when a permit under these regulations is awarded for the facility, then the amount of the current closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in LAC 33:V.3707.A.3. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made. The amount of each payment must be determined by this formula:

$$\textit{Next Payment} = \frac{CE - CV}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the "pay-in period."

4. The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current closure cost estimate at the time the fund is established. However, he must 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 LAC 33:V.3707.A.3.

5. If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this Section or in LAC 33:V.4403, 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 specifications of this Section and LAC 33:V.4403.A, as applicable.

6. After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator 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 owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this Section to cover the difference.

7. If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the administrative authority for release of the amount in excess of the current closure cost estimate.

8. If an owner or operator substitutes other financial assurance as specified in this Part for all or part of the trust fund, he may submit a written request to the administrative authority for release of the amount in excess of the current closure cost estimate covered by the trust fund.

9. Within 60 days after receiving a request from the owner or operator for release of funds as specified in LAC 33:V.3707.A.7 and A.8, the administrative authority will instruct the trustee to release to the owner or operator such funds as the administrative authority specifies in writing.

10. After beginning partial or final closure, an owner or operator, or any other person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the administrative authority. The owner or operator may request reimbursement for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its operating life. Within 60 days after receiving bills for partial or final closure activities, the administrative authority will instruct the trustee to make reimbursements in those amounts as the administrative authority specifies in writing, if the administrative authority determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the administrative authority has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with LAC 33:V.3707 that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the administrative authority does not instruct, the trustee to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

11. The administrative authority will agree to termination of the trust when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3707.I;

B. Surety Bond Guaranteeing Payment Into a Closure Trust Fund

1. An owner or operator may satisfy the requirements of this Part by obtaining a surety bond which conforms to the requirements of this Paragraph and submitting the bond to the administrative authority. An owner or operator of a new facility must submit the bond to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. 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 wording of the surety bond must be identical to the wording specified in LAC 33:V.3719.B.

3. The owner or operator who uses a surety bond to satisfy the requirements of this Part must also establish 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. This standby trust fund must meet the requirements specified in LAC 33:V.3707.A except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the surety bond; and

b. until the standby trust fund is funded pursuant to the requirements of this Part, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC 33:V.3707.A;

ii. updating of Schedule A of the trust agreement to show current closure cost estimates;

iii. annual valuations as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The bond must guarantee that the owner or 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 final closure is issued by the administrative authority, or court of competent jurisdiction; or

c. provide alternate financial assurance as specified in this Part and obtain the administrative authority's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the administrative authority of a notice of cancellation of the bond from the surety.

5. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

6. The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in LAC 33:V.3707.G.

7. Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, 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 cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in this Part to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the administrative authority.

8. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator, and to the administrative authority. 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.

9. The owner or operator may cancel the bond if the administrative authority has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this Part.

C. Surety Bond Guaranteeing Performance of Closure

1. An owner or operator may satisfy the requirements of this Section by obtaining a surety bond which conforms to the requirements of this Subsection and submitting the bond to the administrative authority. An owner or operator of a new facility must submit the bond to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. 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 wording of the surety bond must be identical to the wording specified in LAC 33:V.3719.C.

3. The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish 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. This standby trust must meet the requirements specified in LAC 33:V.3707 except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the surety bond; and

b. unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC 33:V.3707.A;

ii. updating of Schedule A of the trust agreement (for example, see LAC 33:V.Chapter 37) to show current closure cost estimates;

iii. annual valuations as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The bond must guarantee that the owner or operator will:

a. perform final 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 Part, and obtain the administrative authority's written approval of the assurance provided, within 90 days after receipt of both the owner or operator, and the administrative authority of a notice of cancellation of the bond from the surety.

5. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final administrative determination by the administrative authority pursuant to R.S. 30:2025 that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other permit requirements when required to do so, under the terms of the bond the surety will perform final closure as guaranteed by the bond or will deposit the amount of the penal sum into the standby trust fund.

6. The penal sum of the bond must be in an amount at least equal to the current closure cost estimate.

7. Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, 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 cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in this Part. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the administrative authority.

8. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the administrative authority. 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.

9. The owner or operator may cancel the bond if the administrative authority has given prior written consent. The administrative authority will provide such written consent when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3707.I.

10. The surety will not be liable for deficiencies in the performance of closure by the owner or operator after the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3707.I.

D. Closure Letter of Credit

1. An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this Subsection and submitting the letter to the administrative authority. An owner or operator of a new facility must submit the letter of credit to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit must be effective before the initial receipt of hazardous waste. The issuing institution must be an entity which 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. The wording of the letter of credit must be identical to the wording specified in LAC 33:V.3719.D.

3. An owner or operator who uses a letter of credit to satisfy the requirements of this Section must also establish 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 in accordance with instructions from the administrative authority. This standby trust fund must meet the requirements of the trust fund specified in LAC 33:V.3707.A, except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the letter of credit; and

b. unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC 33:V.3707.A;

ii. updating of Schedule A of the trust agreement (see LAC 33:V.3719.A) to show current closure cost estimates;

iii. annual valuations as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA identification number, name, address, and the amount of funds assured for closure of the facility by the letter of credit.

5. The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator 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 begin on the date when both the owner or operator and the administrative authority have received the notice, as evidenced by the return receipts.

6. The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in LAC 33:V.3707.A.

7. Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, 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 cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in this Part to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the administrative authority.

8. Following a final administrative determination by the administrative authority pursuant to R.S. 30:2025 that the owner or operator has failed to perform final 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.

9. If the owner or operator does not establish alternate financial assurance as specified in this Part, and obtain written approval of such alternate assurance from the administrative authority within 90 days after receipt by both the owner or operator and the administrative authority of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the administrative authority will draw on the letter of credit, beyond the current expiration date, the administrative authority will draw on the letter of credit. The administrative authority may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the administrative authority will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this Part and obtain written approval of such assurance from the administrative authority.

10. The administrative authority will return the letter of credit to the issuing institution for termination when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3707.I.

E. Closure Insurance

1. An owner or operator may satisfy the requirements of this Part by obtaining closure insurance which conforms to the requirements of this Paragraph and submitting a certificate of such insurance to the administrative authority. An owner or operator of a new facility must submit the certificate of insurance to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance, or be eligible to provide insurance as an excess or surplus lines insurer, in one or more states, and authorized to transact business in Louisiana.

2. The wording of the certificate of insurance must be identical to the wording specified in LAC 33:V.3719.E.

3. The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in LAC 33:V.3707.G. 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 closure insurance policy must guarantee that funds will be available to close the facility whenever 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 partial or final closure, an owner or operator, or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the administrative authority. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the administrative authority will instruct the insurer to make reimbursements in such amounts as the administrative authority specifies in writing, if the administrative authority determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the administrative authority has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with LAC 33:V.3707.I, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the administrative authority does not instruct the insurer to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

6. The owner or operator must maintain the policy in full force and effect until the administrative authority consents to termination of the policy by the owner or operator as specified in LAC 33:V.3707.E.10. Failure to pay the premium, without substitution of alternate financial assurance as specified in this Part, will constitute a significant violation of these regulations, warranting such remedy as the administrative authority deems necessary. Such violation will be deemed to begin upon receipt by the administrative authority of a notice of future cancellation, termination, or failure to renew, due to nonpayment of the premium, rather than upon the date of expiration.

7. Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such 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 owner or operator and the administrative authority. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the administrative authority and the owner or operator, 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 abandoned; or

b. the permit is terminated or revoked, or a new permit is denied; or

c. closure is ordered by the administrative authority or a U.S. District Court or other court of competent jurisdiction; or

d. the owner or operator 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 closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate, and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in this Part to cover the increase. Whenever the current closure cost estimate

decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the administrative authority.

10. The administrative authority will give written consent to the owner or operator that he may terminate the insurance policy when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3707.I.

F. Financial Test and Corporate Guarantee for Closure

1. An owner or operator may satisfy the requirements of this Section by demonstrating that he passes a financial test as specified in this Section. To pass this test the owner or operator must meet the criteria of either of the following:

a. The owner or operator must have:

i. either a ratio of total liabilities to net worth less than 1.5, or a ratio of the sum of net income plus depreciation, depletion, and amortization minus $10 million to total liabilities greater than 0.1; and

ii. tangible net worth greater than the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test.

b. The owner or operator must have:

i. a current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

ii. tangible net worth greater than the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test.

2. The phrase "current closure and post-closure cost estimates" as used in LAC 33:V.3707.F.1 refers to the cost estimates required to be shown in Paragraphs 1-7 of the letter from the owner's or operator's chief financial officer (see LAC 33:V.3719.F).

3. To demonstrate that he meets this test, the owner or operator must submit the following items to the administrative authority:

a. a letter signed by the owner's or operator's chief financial officer and worded as specified in LAC 33:V.3719.F; and

b. a copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

c. a special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

i. he has compared the data with the letter from the chief financial officer specified as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii. in connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

4. An owner or operator of a new facility must submit the items specified in LAC 33:V.3707.F.3 to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

5. After the initial submission of items specified in LAC 33:V.3707.F.3, the owner or operator must send updated information to the administrative authority within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in LAC 33:V.3707.F.3.

6. If the owner or operator no longer meets the requirements of LAC 33:V.3707.F.1, he must send notice to the administrative authority of intent to establish alternate financial assurance as specified in this Part. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

7. The administrative authority may, based on a reasonable belief that the owner or operator may no longer meet the requirements of LAC 33:V.3707.F.1, require reports of financial condition at any time from the owner or operator in addition to those specified in LAC 33:V.3707.F.3. If the administrative authority finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of LAC 33:V.3707.F.1, the owner or operator must provide alternate financial assurance as specified in this Part within 30 days after notification of such a finding.

8. The administrative authority may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see LAC 33:V.3707.F.3). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The administrative

authority will evaluate other qualifications on an individual basis. Based on the application, the circumstances and the accessibility of the applicant's assets, the administrative authority may disallow the use of this test. The owner or operator must provide alternate financial assurance as specified in this Part within 30 days after notification of the disallowance.

9. The owner or operator is no longer required to submit the items specified in LAC 33:V.3707.F.3 when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3707.I.

10. An owner or operator may meet the requirements of this Section by obtaining a written guarantee. The guarantor must be the direct or higher tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements of LAC 33:V.3707.F.1 through 8 for owners or operators, and must comply with the terms of the guarantee. The wording of the guarantee must be identical to the wording specified in LAC 33:V.3719.H. A certified copy of the guarantee must accompany the items sent to the administrative authority as specified in LAC 33:V.3707.F.3. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide that:

a. If the owner or operator fails to perform final closure of a facility covered by the guarantee in accordance with the closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in LAC 33:V.3707.A 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 administrative authority. 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.

c. If the owner or operator fails to provide alternate financial assurance as specified in this Section and obtain the written approval of such alternate assurance from the administrative authority within 90 days after receipt by the administrative authority of a notice of cancellation of the guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

G. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, insurance, ~~and financial test and guarantee, except that the financial test and guarantee may not be combined~~. The mechanisms must be as specified in LAC 33:V.3707.A, B, D, E, and F, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanism. A single trust fund may be established for two or more mechanisms. The administrative authority may use any or all of the mechanisms to provide for closure of the facility.

H. Use of a Financial Mechanism for Multiple Facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the administrative authority must include a list showing, for each facility, the EPA identification number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing the funds available through the mechanism for closure of any of the facilities covered by the mechanism, the administrative authority may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

I. Release of the Owner or Operator from the Requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, ~~and for facilities subject to LAC 33:V.3525, after receiving the certification required under LAC 33:V.3525.B.2~~, the administrative authority will notify the owner or operator in writing that he is no longer required by this Section to maintain financial assurance for final closure of the particular facility, unless the administrative authority has reason to believe that final closure has not been in accordance with the approved closure plan ~~or that the owner or operator has failed to comply with the applicable requirements of LAC 33:V.3525~~. The administrative authority shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan ~~or that the owner or operator has failed to comply with the applicable requirements of LAC 33:V.3525~~.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 18:723 (July 1992).

Subchapter B. Post-closure Requirements

§3709. Cost Estimate for Post-closure Care

A. The owner or operator of a disposal surface impoundment, disposal miscellaneous unit, land treatment unit, or landfill unit, or of a surface impoundment or waste pile required under LAC 33:V.2315 and 2911 to prepare a contingent closure and post-closure plan, must have a detailed written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in LAC 33:V.3519, 3527, 2315, 2521, 2719, 2911, and 3207.

1. The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in LAC 33:V.3703.)

2. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under LAC 33:V.3523.

B. During the active life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with LAC 33:V.3711. For owners or operators using the financial test or corporate guarantee, the post-closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before the submission of updated information to the administrative authority as specified in LAC 33:V.3711.F.5. The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business* as specified in LAC 33:V.3709.B.1 and B.2. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

1. The first adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

2. Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

C. During the active life of the facility, the owner or operator must revise the post-closure cost estimate within 30 days after the administrative authority has approved the request to modify the post-closure plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in LAC 33:V.3709.B.

D. The owner or operator must keep the following at the facility during the operating life of the facility: the latest post-closure cost estimate prepared in accordance with LAC 33:V.3709.A and C and, when this estimate has been adjusted, the latest adjusted post-closure cost estimate.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 16:399 (May 1990).

§3711. Financial Assurance for Post-closure Care

The owner or operator of a facility subject to post-closure monitoring or maintenance requirements must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste or the effective date of the regulation, whichever is later. Under this Section, the owner or operator must choose from the options as specified in LAC 33:V.3711.A through F, which choice the administrative authority must find acceptable based on the application and the circumstances.

A. Post-closure Trust Fund

1. An owner or operator may satisfy the requirements of this Part by establishing a post-closure trust fund which conforms to the requirements of this Paragraph and submitting an originally signed duplicate of the trust agreement to the administrative authority. An owner or operator of a new facility must submit the originally signed duplicate of the trust agreement to the administrative authority at least 60 days before the date on which hazardous waste is first received for disposal. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

2. The wording of the trust agreement must be identical to the wording specified in LAC 33:V.3719.A.1, and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see LAC 33:V.3719.A.2). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

3. Payments into the trust fund must be made annually by the owner or operator over the term of the initial permit, or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is

hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows.

a. For a new facility, the first payment must be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the administrative authority before this initial receipt of hazardous waste. The first payment must be at least equal to the current post-closure cost estimate, except as provided in LAC 33:V.3711.G, divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$Next\ Payment = \frac{CE - CV}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

b. If an owner or operator has previously established a trust fund as specified in LAC 33:V.4407.A, and the value of that trust fund is less than the current post-closure cost estimate when a permit under these regulations is awarded for the facility, the amount of the current post-closure cost estimate still to be paid into the fund must be paid in over the pay-in period as defined in LAC 33:V.3711.A.3. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made. The amount of each payment must be determined by this formula:

$$Next\ Payment = \frac{CE - CV}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

4. The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, he must 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 LAC 33:V.3711.A.3.

5. If the owner or operator establishes a post-closure trust fund after having used one or more 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 if annual payments were made according to specifications of this Subsection and LAC 33:V.4407, as applicable.

6. After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator 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 owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that the fund at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in this Part to cover the difference.

7. During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the administrative authority for release of the amount in excess of the current post-closure cost estimate.

8. If an owner or operator substitutes other financial assurance as specified in this Part for all or part of the trust fund, he may submit a written request to the administrative authority for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

9. Within 60 days after receiving a request from the owner or operator for release of funds as specified in LAC 33:V.3711.A.7 or 8, the administrative authority will instruct the trustee to release to the owner or operator such funds as the administrative authority specifies in writing.

10. During the period of post-closure care, the administrative authority may approve a release of funds if the owner or operator demonstrates to the administrative authority that the value of the trust fund exceeds the remaining cost of post-closure care.

11. An owner or operator, or any other person authorized to perform post-closure care, may request reimbursement for the post-closure expenditures by submitting itemized bills to the administrative authority. Within 60 days after receiving bills for post-closure activities, the administrative authority will instruct the trustee to make reimbursements in those amounts as the administrative authority specifies in writing, if the administrative authority determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the administrative authority does not instruct the trustee to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

12. The administrative authority will agree to termination of the trust when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3711.A.3.

B. Surety Bond Guaranteeing Payment into a Post-closure Trust Fund

1. An owner or operator may satisfy the requirements o this Section by obtaining a surety bond which conforms to the requirements of this Subsection and submitting the bond to the

administrative authority. An owner or operator of a new ...ity must submit the bond to the administrative authority at ... 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. 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 wording of the surety bond must be identical to the wording specified in LAC 33:V.3719.B.

3. The owner or operator who uses a surety bond to satisfy the requirements of this Part must also establish 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. This standby trust fund must meet the requirements specified in LAC 33:V.3711.A except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the surety bond; and

b. until the standby trust fund is funded pursuant to the requirements of this Part, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC ...:V.3711.A.3;

ii. updating of Schedule A of the trust agreement to show current post-closure cost estimates;

iii. annual valuations as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The bond must guarantee that the owner or 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 final closure issued by the administrative authority becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

c. provide alternate financial assurance as specified in this Part, and obtain the administrative authority's written ...pproval of the assurance provided within 90 days after receipt ...y both the owner or operator and the administrative authority of a notice of cancellation of the bond from the surety.

5. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

6. The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in LAC 33:V.3711.G.

7. Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in this Part to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the administrative authority.

8. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator, and to the administrative authority. 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.

9. The owner or operator may cancel the bond if the administrative authority has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this Part.

C. Surety Bond Guaranteeing Performance of Post-closure Care

1. An owner or operator of a facility which has been issued a standard permit may satisfy the requirements of this Section by obtaining a surety bond which conforms to the requirements of this Subsection and by submitting the bond to the administrative authority. An owner or operator of a new facility must submit the bond to the administrative authority at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. 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 wording of the surety bond must be identical to the wording specified in LAC 33:V.3719.C.

3. The owner or operator who uses a surety bond to satisfy the requirements of this Part must also establish 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. This standby trust fund must meet the requirements specified in LAC 33:V.3711.A except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the surety bond; and

b. unless the standby trust fund is funded pursuant to the requirements of this Part, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC 33:V.3711.A.3;

ii. updating of Schedule A of the trust agreement to show current post-closure cost estimates;

iii. annual valuations as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The bond must guarantee that the owner or operator will:

a. perform post-closure care in accordance with the post-closure plan and other requirements of the permit for the facility; or

b. provide alternate financial assurance as specified in this Part, and obtain the administrative authority's written approval of the assurance provided, within 90 days of receipt by both the owner or operator, and the administrative authority of a notice of cancellation of the bond from the surety.

5. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final administrative determination by the administrative authority pursuant to L.R.S. 30:2025 that the owner or operator has failed to perform post-closure care in accordance with the plan and other permit requirements, under the terms of the bond, the surety will perform post-closure care in accordance with the post-closure plan and other permit requirements, or will deposit the amount of the penal sum into the standby trust fund.

6. The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate.

7. Whenever the current post-closure cost estimate increases to an amount greater than the penal sum during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in this Part. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the administrative authority.

8. During the period of post-closure care, the administrative authority may approve a decrease in the penal sum if the owner or operator demonstrates to the administrative authority that the amount exceeds the remaining cost of post-closure care.

9. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator, and to the administrative authority. 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.

10. The owner or operator may cancel the bond if the administrative authority has given prior written consent. The administrative authority will provide such written consent when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3711.I.

11. The surety will not be liable for deficiencies in the performance of post-closure care by the owner or operator after the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3711.I.

D. Post-closure Letter of Credit

1. An owner or operator may satisfy the requirements of this Part by obtaining an irrevocable standby letter of credit which conforms to the requirements of this Paragraph and by submitting the letter to the administrative authority. An owner or operator of a new facility must submit the letter of credit to the administrative authority at least 60 days before the date on which hazardous waste is first received for disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity which 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. The wording of the letter of credit must be identical to the wording specified in LAC 33:V.3719.D.

3. An owner or operator who uses a letter of credit to satisfy the requirements of this Part must also establish 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 in accordance with instructions from the administrative authority. This standby trust fund must meet the requirements of the trust fund specified in LAC 33:V.3711.A, except that:

a. An originally signed duplicate of the trust agreement must be submitted to the administrative authority with the letter of credit; and

b. Unless the standby trust fund is funded pursuant to the requirements of this Part, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC V.3711.A.3;

ii. updating of Schedule A of the trust agreement to show current post-closure cost estimates;

iii. annual valuations as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA identification number, name, address, and the amount of funds assured for post-closure care of the facility by the letter of credit.

5. The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator, 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 begin on the date when both the owner or operator, and the administrative authority have received the notice, as evidenced by the return receipts.

6. The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in LAC 33:V.3711.G.

7. Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, 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 post-closure cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in this Part to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the administrative authority.

8. During the period of post-closure care, the administrative authority may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the administrative authority that the amount exceeds the remaining cost of post-closure care.

9. Following a final administrative determination by the administrative authority pursuant to R.S. 30:2025 that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other permit requirements, the administrative authority may draw on the letter of credit.

10. If the owner or operator does not establish alternate financial assurance as specified in this Part and obtain written approval of such alternate assurance from the administrative authority within 90 days after receipt by both the owner or operator and the administrative authority of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the administrative authority will draw on the letter of credit. The administrative authority may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the administrative authority will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this Part and obtain written approval of such assurance from the administrative authority.

11. The administrative authority will return the letter of credit to the issuing institution for termination when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3711.I.

E. Post-closure Insurance

1. An owner or operator may satisfy the requirements of this Part by obtaining post-closure insurance which conforms to the requirements of this Paragraph and submitting a certificate of such insurance to the administrative authority. An owner or operator of a new facility must submit the certificate of insurance to the administrative authority at least 60 days before the date on which hazardous waste is first received for disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance, or be eligible to provide insurance as an excess or surplus lines insurer in one or more states, and authorized to transact business in Louisiana.

2. The wording of the certificate of insurance must be identical to the wording specified in LAC 33:V.3719.E.

3. The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in LAC 33:V.3711.G. 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 post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure period begins. The policy must also guarantee that once post-closure care 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. An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the administrative authority. Within 60 days after receiving bills for post-closure activities, the administrative authority will instruct the insurer to make reimbursements in those amounts as the administrative authority specifies in writing, if the administrative authority determines that the post-closure expenditures are in accordance with the post-closure plan or otherwise justified. If the administrative authority does not instruct the insurer to make such reimbursements he will provide the owner or operator with a detailed written statement of reasons.

6. The owner or operator must maintain the policy in full force and effect until the administrative authority consents to termination of the policy by the owner or operator as specified in LAC 33:V.3711.E.11. Failure to pay the premium, without substitution of alternate financial assurance as specified in this Part, will constitute a significant violation of these regulations, warranting such remedy as the administrative authority deems necessary. Such violation will be deemed to begin upon receipt by the administrative authority of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

7. Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such 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 owner or operator and the administrative authority. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the administrative authority and the owner or operator, 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 abandoned; or

b. the permit is terminated or revoked or a new permit is denied; or

c. closure is ordered by the administrative authority or a U. S. District Court; or

d. the owner or operator 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 post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in this Part to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the administrative authority.

10. Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to eighty-five percent of the most recent investment rates or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26 week Treasury securities.

11. The administrative authority will give written consent to the owner or operator that he may terminate the insurance policy when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3711.I.

F. Financial Test and Corporate Guarantee for Post-closure Care

1. An owner or operator may satisfy the requirements of this Section by demonstrating that he passes a financial test as specified in this Subsection. To pass this test the owner or operator must meet the criteria of either of the following:

a. The owner or operator must have:

i. either a ratio of total liabilities to net worth less than 1.5, or a ratio of the sum of net income plus depreciation, depletion, and amortization, minus $10 million, to total liabilities greater than 0.1; and

ii. tangible net worth greater than the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test, plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates, and any other obligations covered by a financial test.

b. The owner or operator must have:

i. a current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

ii. tangible net worth greater than the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test, plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure estimates and any other obligations covered by a financial test, plus $10 million.

2. The phrase "current closure and post-closure cost estimates" as used in LAC 33:V.3711.F.1 refers to the cost estimates required to be shown in Paragraphs 1 through 7 of the letter from the owner's or operator's chief financial officer (see LAC 33:V.3719.F).

3. To demonstrate that he meets this test, the owner or operator must submit the following items to the administrative authority:

a. a letter signed by the owner's or operator's chief financial officer and worded as specified in LAC 33:V.3719.F; and

b. a copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

c. a special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

i. he has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii. in connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

4. An owner or operator of a new facility must submit the items specified in LAC 33:V.3711.F.3 to the administrative authority at least 60 days before the date on which hazardous waste is first received for disposal.

5. After the initial submission of items specified in LAC 33:V.3711.F.3, the owner or operator must send updated information to the administrative authority within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in LAC 33:V.3711.F.3.

6. If the owner or operator no longer meets the requirements of LAC 33:V.3711.F.1 of this Part, he must send notice to the administrative authority of intent to establish alternate financial assurance as specified in this Part. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

7. The administrative authority may, based on a reasonable belief that the owner or operator may no longer meet the requirements of LAC 33:V.3711.F.1, require reports of financial condition at any time from the owner or operator in addition to those specified in LAC 33:V.3711.F.3. If the administrative authority finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of LAC 33:V.3711.F.1, the owner or operator must provide alternate financial assurance as specified in this Part within 30 days after notification of such a finding.

8. The administrative authority may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see LAC 33:V.3711.F.3). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The administrative authority will evaluate other qualifications on an individual basis. Based on the application, the circumstances, and the accessibility of the applicant's assets, the administrative authority may disallow the use of this test. The owner or operator must provide alternate financial assurance as specified in this Part within 30 days after notification of the disallowance.

9. During the period of post-closure care, the administrative authority may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the administrative authority that the amount of the cost estimate exceeds the remaining cost of post-closure care.

10. The owner or operator is no longer required to submit the items specified in LAC 33:V.3711.F.3 when:

a. an owner or operator substitutes alternate financial assurance as specified in this Part; or

b. the administrative authority releases the owner or operator from the requirements of this Part in accordance with LAC 33:V.3711.I.

11. An owner or operator may meet the requirements of this Section by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators of LAC 33:V.3711.F.1 through F.9 and must comply with the terms of the guarantee. The wording of the guarantee must be identical to the wording specified in LAC 33:V.3719.H. A certified copy of the guarantee must accompany the items sent to the administrative authority specified in LAC 33:V.3711.F.3. One of these items must be the letter from the guarantor's chief financial officer. If the

guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide that:

a. If the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in LAC 33:V.3711.A in the name of the owner or operator.

b. the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the administrative authority. 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.

c. if the owner or operator fails to provide alternate financial assurance as specified in this Part and obtain the written approval of such alternate assurance from the administrative authority within 90 days after receipt by both the owner or operator and the administrative authority of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

G. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, insurance, and financial test and guarantee, except that the financial test and guarantee may not be combined. The mechanisms must be as specified in LAC 33:V.3711.A, B, D, E, and F, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The administrative authority may use any or all of the mechanisms to provide for post-closure care of the facility.

H. Use of a Financial Mechanism for Multiple Facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the administrative authority must include a list showing, for each facility, the EPA identification number, name, address, and the amount of funds for post-closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the administrative authority may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

I. Release of the Owner or Operator from the Requirements of this Part. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that the post-closure care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the administrative authority will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the administrative authority has reason to believe that post-closure care has not been in accordance with the approved post-closure plan. The administrative authority shall provide the owner or operator with a detailed written statement of any such reason to believe that post-closure care has not been in accordance with the approved post-closure plan.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 14:791 (November 1988), LR 18:723 (July 1992).

Subchapter C. Common Closure and Post-closure Requirements

§3713. Use of a Mechanism for Financial Assurance of Both Closure and Post-closure Care

An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both LAC 33:V.3707 and 3711. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism has been established and maintained for financial assurance of closure and post-closure care.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

Subchapter D. Insurance Requirements

§3715. Liability Requirements

A. Coverage for Sudden Accidental Occurrences. An owner or operator of a hazardous waste treatment, storage, or

disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least $1 million per occurrence, with an annual aggregate of at least $2 million, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in LAC 33:V.3715.A.1, 2, 3, 4, 5, or 6. For any facility that treats, stores, or disposes by land treatment (i.e., surface impoundment, waste pile, landfarm, or landfill) any acute hazardous waste (see Table 3 of LAC 33:V.Chapter 49), or any toxic waste listed because of toxicity or reactivity (see Table 4 of LAC 33:V.Chapter 49) the liability coverage must be at least $5 million per occurrence, with an annual aggregate of at least $5 million exclusive of legal defense costs.

1. An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this Paragraph.

a. Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a certificate of liability insurance. The wording of the endorsement must be identical to the wording specified in LAC 33:V.3719.I. The wording of the certificate of insurance must be identical to the wording specified in LAC 33:V.3719.J. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the administrative authority. If requested by the administrative authority, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the certificate of liability insurance to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.

b. Each insurance policy must be issued by an insurer which, at a minimum, 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 authorized to transact business in Louisiana.

2. An owner or operator may meet the requirements of this Section by passing a financial test or using the corporate guarantee for liability coverage as specified in Paragraph G of this Section.

3. An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage as specified in LAC 33:V.3715.H.

4. An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage as specified in LAC 33:V.3715.I.

5. An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage as specified in LAC 33:V.3715.J.

6. An owner or operator may demonstrate the required liability coverage through use of combinations of financial test, insurance, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this Paragraph, the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurances as "excess" coverage.

7. An owner or operator shall notify the administrative authority in writing within 30 days whenever:

a. a claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in LAC 33:V.3715.A.1-6; or

b. a Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage under LAC 33:V.3715.A.1-6; or

c. a final court order establishing a judgement for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under LAC 33:V.3715.A.1-6.

B. Coverage for Non-sudden Accidental Occurrences. An owner or operator of a surface impoundment, landfill, land treatment facility, or miscellaneous disposal unit that is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by non-sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for non-sudden accidental occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs. An owner or operator who must meet the requirements of this Section may combine the required per-occurrence coverage levels for sudden and non-sudden accidental occurrence into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and non-sudden accidental occurrences into

a single annual aggregate level. Owners or operators who combine coverage levels for sudden and non-sudden accidental occurrences must maintain liability coverage in the amount of at least $5 million per occurrence and $10 million annual aggregate. This liability coverage may be demonstrated as specified in LAC 33:V.3715.B.1, 2, 3, 4, 5, or 6.

1. An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this Paragraph.

a. Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a certificate of liability insurance. The wording of the endorsement must be identical to the wording specified in LAC 33:V.3719.I. The wording of the certificate of insurance must be identical to the wording specified in LAC 33:V.3719.J. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the administrative authority. If requested by the administrative authority, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the certificate of liability insurance to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.

b. Each insurance policy must be issued by an insurer which, at a minimum, 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 authorized to transact business in Louisiana.

2. An owner or operator may meet the requirements of this Section by passing a financial test or using the guarantee for liability coverage as specified in LAC 33:V.3715.F and G.

3. An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage as specified in LAC 33:V.3715.H.

4. An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage as specified in LAC 33:V.3715.I.

5. An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage as specified in LAC 33:V.3715.J.

6. An owner or operator may demonstrate the required liability coverage through use of combinations of financial test, insurance, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this Paragraph, the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

7. An owner or operator shall notify the administrative authority in writing within 30 days whenever:

a. a claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in LAC 33:V.3715.B.1-6; or

b. a Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage under LAC 33:V.3715.B.1-6; or

c. a final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under LAC 33:V.3715.B.1-6.

C. Request for Variance. If an owner or operator can demonstrate to the satisfaction of the administrative authority that the levels of financial responsibility required by LAC 33:V.3715.A and B are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the administrative authority. The request for a variance must be submitted to the administrative authority as part of the application under LAC 33:V.Chapter 3 for a facility that does not have a permit, or pursuant to the procedures for permit modification under LAC 33:V.Chapter 5 for a facility that has a permit. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the administrative authority's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The administrative authority may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the administrative authority to determine a level of financial responsibility other than that required by LAC 33:V.3715.A and B. Any request for a variance for a permitted facility will be treated as a request for a permit modification under LAC 33:V.321.

D. Adjustments by the Administrative Authority. If the administrative authority determines that the levels of financial responsibility required by LAC 33:V.3715.A or B are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of

facilities, the administrative authority may adjust the level of ncial responsibility required by LAC 33:V.3715.A and B may be necessary to protect human health and the environment. This adjusted level will be based on the administrative authority's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the administrative authority determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with LAC 33:V.3715.B. An owner or operator must furnish to the administrative authority, within a reasonable time, any information which the administrative authority requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustment of the level or type of coverage for a facility that has a permit will be treated as a permit modification under LAC 33:V.321.

E. Period of Coverage. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the administrative authority will notify the owner or operator in writing that he is no longer required by this Section to maintain liability coverage for that facility, unless the administrative authority has reason to believe that closure has not been in accordance with the approved closure plan.

F. Financial Test for Liability Coverage

1. An owner or operator may satisfy the requirements of this Section by demonstrating that he passes a financial test as specified in this Subsection. To pass this test the owner or operator must meet the criteria of either LAC 33:V.3715.F.1.a or b below.

a. The owner or operator must have:

i. tangible net worth greater than the sum of the amount of liability coverage to be demonstrated by this test plus $10 million; and

ii. assets located in the United States amounting to either at least 90 percent of his total assets or at least six times the sum of the amount of liability coverage and any other obligations covered by a financial test.

b. The owner or operator must have:

i. a current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

ii. tangible net worth greater than the sum of the amount of liability coverage to be demonstrated by this test plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the amount of liability coverage and any other obligations covered by a financial test.

2. The phrase amount of liability coverage as used in LAC 33:V.3715.F.1 refers to the annual aggregate amounts for which coverage is required under LAC 33:V.3715.A and B.

3. To demonstrate that he meets this test, the owner or operator must submit the following three items to the administrative authority:

a. a letter signed by the owner's or operator's chief financial officer and worded as specified in LAC 33:V.3719.G. If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by LAC 33:V.3707.E, 3707.F, 3711.E and 3711.F and liability coverage, he must submit the letter specified in LAC 33:V.3719.G to cover both forms of financial responsibility; a separate letter as specified in LAC 33:V.3719.F is not required;

b. a copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year;

c. a special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

i. he has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii. in connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

4. An owner or operator of a new facility must submit the items specified in LAC 33:V.3715.F.3 to the administrative authority at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

5. After the initial submission of items specified in LAC 33:V.3715.F.3, the owner or operator must send updated information to the administrative authority within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in LAC 33:V.3715.F.3.

6. If the owner or operator no longer meets the requirements of LAC 33:V.3715.F.1, he must obtain insurance, a letter of credit, a surety bond, a trust fund, or a guarantee for the entire amount of required liability coverage as specified in this Section. Evidence of liability coverage must be submitted to the administrative authority within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

7. The administrative authority may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see LAC 33:V.3715.F.3). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The administrative authority will evaluate other qualifications on an individual basis. Based on the application, the circumstances and the accessibility of the applicant's assets, the administrative authority may disallow the use of this test. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in this Part within 30 days after notification of disallowance.

~~8. The corporate guarantee authorized for use to demonstrate financial assurance for closure and/or post-closure may not be used to demonstrate financial assurance for liability coverage.~~

G. Guarantee for Liability Coverage. Subject to LAC 33:V.3715.G.2, an owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereinafter referred to as "guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in LAC 33:V.3715.F.1 through F.7. The wording of the guarantee must be identical to the wording specified in LAC 33:V.3719. A certified copy of the guarantee must accompany the items sent to the administrative authority as specified in LAC 33:V.3715.F.3. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee.

1. If the owner or operator fails to satisfy a judgement based on a determination of liability for bodily injury or property damage to third parties caused by sudden or non-sudden accidental occurrences (or both as the case may be), arising from the operation of facilities covered by this guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor will do so up to the limits of coverage.

2. In the case of corporations incorporated in the United States, a guarantee may be used to satisfy the requirements of this Section only if the attorney general or insurance commissioner of the state in which the guarantor is incorporated and the attorney general or insurance commissioner of Louisiana have submitted written statements to the department that a guarantee executed as described in this Section and LAC 33:V.3719.H.2 is a legally valid and enforceable obligation in that state.

3. In the case of corporations incorporated outside the United States, a guarantee may be used to satisfy the requirements of this Section only if the non-U.S. corporation has identified a registered agent for service of process in Louisiana and in the state in which it has its principal place of business, and the attorney general or insurance commissioner of Louisiana and the state in which the guarantor corporation has its principal place of business have submitted written statements to the department that a corporate guarantee executed as described in this Section and LAC 33:V.3719.H.2 is a legally valid and enforceable obligation in that state.

H. Letter of Credit for Liability Coverage

1. An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this Subsection and submitting a copy of the letter of credit to the administrative authority.

2. The financial institution issuing the letter of credit 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.

3. The wording of the letter of credit must be identical to the wording specified in LAC 33:V.3719.K.

4. An owner or operator who uses a letter of credit to satisfy the requirements of this Section may also establish a standby trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust will be deposited by the issuing institution into the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

5. The wording of the standby trust fund must be identical to the wording specified in LAC 33:V.3719.N.

I. Surety Bond for Liability Coverage

1. An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this Subsection and submitting a copy of the bond to the administrative authority.

2. The surety company issuing the bond must be among those listed as acceptable sureties on federal bonds in the most recent Circular 570 of the U.S. Department of the Treasury.

3. The wording of the surety bond must be identical to the wording specified in LAC 33:V.3719.L.

4. A surety bond may be used to satisfy the requirements of this section only if the attorney general or insurance commissioner of the state in which the surety is incorporated and the attorney general or insurance commissioner of

Louisiana have submitted a written statement to EPA that a surety bond executed as described in this Section and LAC 33:V.3719.L is a legally valid and enforceable obligation in that state.

J. Trust Fund for Liability Coverage

1. An owner or operator may satisfy the requirements of this Section by establishing a trust fund that conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the administrative authority.

2. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

3. The trust fund for liability coverage must be funded for the full amount of the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of this Section. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of the liability coverage to be provided, the owner or operator, by the anniversary date of the establishment of the fund, must either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in this Section to cover the difference. For purposes of this Paragraph, "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and/or non-sudden occurrences required to be provided by the owner or operator by this Section, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

4. The wording of the trust fund must be identical to the wording specified in LAC 33:V.3719.M.

K. Notwithstanding any other provision of LAC 33:V.Subpart 1, an owner or operator using liability insurance to satisfy the requirements of this Section may use, until October 16, 1982, a Hazardous Waste Facility Liability Endorsement or Certificate of Liability Insurance that does not certify that the insurer is licensed to transact the business of insurance, or eligible as an excess or surplus lines insurer, in one or more states.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:686 (July 1985), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 16:399 (May 1990), LR 18:723 (July 1992), repromulgated LR 19:486 (April 1993).

Subchapter E. Incapacity Regulations

§3717. Incapacity of Owners or Operators, Guarantors, or Financial Institutions

A. An owner or operator must notify the administrative authority by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in LAC 33:V.3707.F and 3711.F must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (see LAC 33:V.3719.H).

B. An owner or operator who fulfills the requirements of LAC 33:V.3707, 3711 or 3715 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

Subchapter F. Financial and Insurance Instruments

§3719. Wording of the Instruments

A. A trust agreement for a trust fund as specified in LAC 33:V.3707.A or 3711.A must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Trust Agreement

Trust Agreement, the "Agreement," entered into as of [date] by and between [name of the owner or operator], 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 an owner or operator of a hazardous waste management 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 owner or operator 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, Louisiana Department of Environmental Quality and any successor agency.

(d) The term "administrative authority" means the Secretary, or a person designated by him or her to act therefor.

Section 2. Identification of Facilities and Cost Estimates

This Agreement pertains to the facilities and cost estimated identified on attached Schedule A, on Schedule A, for each facility list the Hazardous Waste Facility Identification Number, name, address, and the 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 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 but 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 Post-closure Care

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 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 closure and 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 Comprising 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 part. 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 which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims, except that:

A. securities or other obligations of the Grantor, or any other owner or operator of the 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 in 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 of the 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, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in 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 depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary 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 such 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 all other proper charges and disbursements of the Trustee shall be paid from the fund.

Section 10. Annual Evaluation

The Trustee shall annually, at least thirty days prior to 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 sixty days prior to the anniversary date of establishment of the fund. The failure of the Grantor to object in writing to the Trustee within ninety 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 form 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 question 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 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 specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the administrative authority, and the present Trustee by certified mail ten days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this part 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 such persons as are designated in the attached Exhibit A or such other designees 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, signed by the administrative authority, and 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 a 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 ten days following the expiration of the thirty-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 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 directions 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 expenses reasonably incurred in its defense in the event 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 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:V.3719.A.1 as such regulations were constituted on the date first above written.

WITNESSES: GRANTOR:

By:

Its:_____

(SEAL)

TRUSTEE:

By:_____

Its:_____

(SEAL)

THUS DONE AND PASSED in my office in _____, on the ____ day of _____, 19_, 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

[Note: The following is an example of the certification of acknowledgement which must accompany the trust agreement for a trust fund as specified in LAC 33:V.3707.A.2 and 3711.A.2.]

STATE OF LOUISIANA

PARISH OF _____

BE IT KNOWN, that on this _____ day of _____, 19___, 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 names as such, together with said appearer and me, said authority, after due reading of the whole.

WITNESSES:

_____ _____

_____ _____ NOTARY PUBLIC

B. Payment Bond. A surety bond guaranteeing payment into a trust fund, as specified in LAC 33:V.3707.B, or 3711.B, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

FINANCIAL GUARANTEE BOND

Date bond executed: _____

Effective date: _____

Principal: [legal name and business address of owner or operator]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: _____

Surety(ies): [name(s) and business address(es)]

Hazardous Waste Facility Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond [indicate closure and post-closure amounts separately]: _____

Total penal sum of bond: $_____

Surety's bond number: _____

Know All Persons By These Presents, That we, the Principal and Surety(ies) 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 the surety(ies) 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 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, La. R.S. 30:2001, et seq., to have a permit in order to own or operate the hazardous waste management facility(ies) identified above; and

WHEREAS, the principal is required by law to provide financial assurance for closure or closure and post-closure care, as a condition of the permit; and

WHEREAS, said principal shall establish a standby trust fund as is required by LAC 33:V.Chapter 37 when a surdety* 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 a final order to begin final closure is issued by the secretary, or a court of competent jurisdiction,

OR, if the principal shall provide alternate financial assurance as specified in LAC 33:V.Chapter 37, and obtain written approval from the administrative authority of such assurance, within 90 days after the date notice of cancellation is received by both the principal and the administrative authority from the surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety(ies) 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(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the administrative authority.

The Surety(ies) hereby waives notification of 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(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(ies) hereunder exceed the amount of the penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the administrative authority, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of notice of cancellation by the Principal and the administrative authority, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies) and to the administrative authority, provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the administrative authority.

Principal and surety(ies) hereby agree to adjust the penal sum of the bond yearly in accordance with LAC 33:V.Chapter 37, and the conditions of the Hazardous 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(ies) 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(ies), 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:V.3719.B as such regulations were constituted 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 co-surety]

Bond Premium: $_____

C. Performance Bond. A surety bond guaranteeing performance of closure and/or post-closure care, as specified in LAC 33:V.3707.C or 3711.C must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted.

Performance Bond

Date bond executed: _____

Effective date: _____

Principal: [Legal name and business address of owner or operator]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: _____

Surety(ies): [Name(s) and business address(es)] _____

LHW/EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond [indicate closure and post-closure separately]: _____

Total penal sum of bond: $_____

Surety's bond number _____

Know All Persons By These Presents, That we, the Principal and Surety(ies) 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 the Surety(ies) 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 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, La. R.S. 30:2001, et seq., to have a permit in order to own or operate the hazardous waste management facility(ies) identified above; and

WHEREAS, the Principal is required by law to provide financial assurance for closure and 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;

NOW, 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 post-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 alternate financial assurance as specified in LAC 33:V.Chapter 37, and obtain the administrative authority's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the principal and 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:V.Chapter 37 or of its permit, for the facility for which this bond guarantees performances of closure, the surety(ies) 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 the Hazardous Waste Regulations or of its permit for the facility for which this bond guarantees performance of post-closure, the surety(ies) shall either perform post-closure in accordance with the post-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:V.Chapter 37, 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(ies) shall place funds in the amount guaranteed for the facility into the standby fund as directed by the administrative authority.

The Surety(ies) hereby waive(s) notification of amendments to closure plans, permits, applicable laws, statutes, rules, and regulations, and agree(s) 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 on 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(ies) hereunder exceed the amount of the penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the administrative authority, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of notice of cancellation by both the Principal and the administrative authority, 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(ies) receive(s) written authorization for termination of the bond by the administrative authority.

Principal and surety(ies) hereby agree to adjust the penal sum of the bond yearly in accordance with LAC 33:V.Chapter 37, and the conditions of the Hazardous 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(ies) 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(ies) 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(ies), and that the wording of this surety bond is identical to the wording specified in LAC 33:V.3719.C as such regulation was constituted on the date this bond was executed.

Principal

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate Seal]

Corporate Surety(ies)

[Name and address]

State of incorporation: _____

Liability limit: $_____

[Signature(s)]

[Name(s) and title(s)]

[Corporate Seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: $_____

D. Letter of Credit. A letter of credit, as specified in LAC 33:V.3707.D or 3711.D, must be worded as follows, except that instructions in brackets are to be replaced with relevant information and the brackets deleted.

IRREVOCABLE STANDBY LETTER OF CREDIT

Secretary
Louisiana Department of Environmental Quality
P.O. Box 82263
Baton Rouge, LA 70884-2263

Dear [Sir or Madam]:

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 [owner's or operator's name and address] for the closure and post-closure fund for its_____, facility at _____, 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 Secretary or his or her designated representative, together with;

2. a statement signed by the Secretary or his or her designated representative, declaring that the amount of the draft is payable into the standby trust fund pursuant to the Louisiana Environmental Quality Act, La. R.S. 30:2001, et seq.

This Letter of Credit is effective as of _____, 19__, and will expire on _____, 19__, but such expiration date will be automatically extended for a period of at least one year on the above expiration date [_____, 19__] and on each successive expiration date thereafter, unless, at least 120 days before the then current expiration date, we notify both you and [name of owner/operator] 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 you and [name of owner/operator], 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 owner/operator] in accordance with your instructions.

Except to the extent otherwise expressly agreed, the Uniform Customs and Practice for Documentary Letters of Credit (1974 Revision), International Chamber of Commerce Publication No. 290, 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:V.3719.D as such regulations were constituted on the date shown immediately below.

[Signature(s) and Titles of Official(s) of issuing institutions]

[Date]

E. A certificate of insurance, as specified in LAC 33:V.3707.E or 3711.E, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

Certificate of Insurance for Closure or Post-closure Care

Facilities Covered: [List for each facility: The Hazardous Waste Facility Identification Number, name, address, and the amount of insurance for closure and/or the amount for post-closure care (these amounts for all facilities covered 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" or "closure and post-closure care" or "post-closure care"] for the facilities identified above. The insurer further warrants that such policy conforms in all respects with the requirements of LAC 33:V.3707.E and 3711.E 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 wording of this certificate is identical to the wording specified in LAC 33:V.3719.E as such regulations were constituted on the date shown immediately below and that insurer is authorized to conduct insurance business in the state of Louisiana.

[Authorized signature for Insurer]

[Name of person signing][Title of person signing]

Signature of witness or notary: _____
[Date]

F. Closure Guarantee. A letter from the chief financial officer, as specified in LAC 33:V:3707.F.3 or 3711.F.3 must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

LETTER FROM CHIEF FINANCIAL OFFICER

etary
Louisiana Department of Environmental Quality
P.O. Box 82263
Baton Rouge, LA 70884-2263

Dear [Sir or Madam]:

I am the chief financial officer of [name and address of firm]. This letter is in support of this firm's use of the financial test to demonstrate financial assurance for closure and/or post-closure costs, as specified in LAC 33:V.Chapter 37.

[Fill out the following two paragraphs. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, and address.]

The firm identified above is the owner or operator of the following facilities for which financial assurance for closure and/or post-closure costs is being demonstrated through the financial test specified in LAC 33:V.Chapter 37:_____.

The firm identified above guarantees, through the guarantee specified in LAC 33:V.Chapter 37, financial assurance for closure and/or post-closure costs at the following facilities ned or operated by the following: _____. The m identified above is [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee - _____; or (3) engaged in the following substantial business relationship with the owner or operator _____, and receiving the following value in consideration of this guarantee _____]. [Attach a written description of the business relationship or a copy of the contract establishing each relationship to this letter].

[Fill out the following four paragraphs regarding facilities and associated cost estimates. If your firm has no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.]

1. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in LAC 33:V.Chapter 37. The current closure and/or post-closure cost estimates covered by the test are hown for each facility: _____

2. This firm guarantees, through the guarantee specified in LAC 33:V.Chapter 37, the closure or post-closure care of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: _____

3. In states other than Louisiana, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in LAC 33:V.Chapter 37. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: _____

4. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to the U.S. Environmental Protection Agency or to a state through the financial test or any other financial assurance mechanism specified in LAC 33:V.Chapter 37 and/or equivalent or substantially equivalent state mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: _____

[Fill out the following three paragraphs regarding facilities and associated assured costs. If your firm has no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and amount of assured costs.]

5. This firm is the owner or operator or guarantor of the following UIC facilities for which financial assurance for plugging and abandonment is required under 40 CFR Part 144 and is assured through a financial test. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:_____.

6. This firm is the owner or operator or guarantor of the following petroleum underground storage tank facilities for which financial assurance is required under 40 CFR Part 280 and is assured through a financial test. The amount of assurance required is shown for each facility: _____.

7. This firm is the owner or operator or guarantor of the following PCB commercial storage facilities for which financial assurance is required under 40 CFR Part 761 and is assured through a financial test. The amount of assurance required is 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 fiscal year, ended [date].

[Fill in Alternative I if the first criteria of LAC 33:V.3707.F.1 or 3711.F.1 or the first criteria of LAC 33:V.4403.E.1 or 4407.E.1 are used. Fill in Alternative II if

the second criteria of LAC 33:V.3707.F.1 or 3711.F.1 or the second criteria of LAC 33:V.4403.E.1 or 4407.E.1 are used.]

ALTERNATIVE I

1. Sum of current closure and post-closure estimates and other environmental costs to be assured [total of all cost estimates shown in the seven paragraphs above]: $_____

*2. Total liabilities [if any portion of the closure or post-closure cost estimates is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4]: $_____

*3. Tangible net worth: $_____

*4. Net worth: $_____

*5. The sum of net income plus depreciation, depletion, and amortization: $_____

*6. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.): $_____

	YES	NO
7. Is line 3 minus line 1 at least $10 million?	____	____
8. Is line 2 divided by line 4 less than 1.5?	____	____
9. Is line 5 divided by line 2 greater than 0.1?	____	____
*10. Is line 6 greater than six times line 1 (required only if less than 90 percent of firm's assets are located in the U.S.)?	____	____
11. Does the firm answer YES to *either* of question 6 or 8, and question 7 and 10?	____	____

ALTERNATIVE II

1. Sum of current closure and post-closure cost estimates and other environmental costs to be assured [total of all cost estimates shown in the seven paragraphs above]

$_____

2. Current bond rating of most recent issuances for 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 post-closure cost estimated is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line]: $_____

*6. Total assets in U.S. [required only if less than 90% of firm's assets are located in the U.S.]: $_____

	YES	NO
7. Is line 5 minus line 1 at least $10 million?	____	____
*8. Is line 6 greater than six times line 1, (required only if less than 90 percent of firm's assets are located in the U.S.)?	____	____
9. * Are at least 90% of firm's assets located in the U.S.? If not, complete line 10.	____	____
10. * Is line 6 at least six times line 1?	____	____

I hereby certify that the wording of this letter is identical to the wording specified in LAC 33:V.3719.F as such regulations were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]

G. Liability Coverage Guarantee. A letter from the chief financial officer, as specified in LAC 33:V.3715.F or 4411, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

Secretary
Louisiana Department of Environmental Quality
P.O. Box 82263
Baton Rouge, LA 70884-2263

Dear [Sir or Madam]:

I am the chief financial officer of [firm's name and address]. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage [insert "and closure and/or post-closure care" if applicable] as specified in LAC 33:V.Chapter 37.

[Fill out the following paragraph regarding facilities and liability coverage. If there are no facilities that belong in a particular paragraph, write "none" in the space indicated. For each facility, include its EPA Identification Number, name, and address.]

The firm identified above is the owner or operator of the following facilities for which liability coverage for [insert "sudden " or "non-sudden" or "both sudden and non-sudden"] accidental occurrences is being demonstrated through the financial test specified in LAC 33:V.Chapter 37.

The firm identified above guarantees, through the guarantee specified in LAC 33:V.Chapter 37, liability coverage for [insert "sudden" or "non-sudden" or "both sudden and non-sudden"] accidental occurrences at the following facilities owned and operated by the following: _____ The firm identified above is [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the

nt corporation of the owner or operator, and receiving the wing value in consideration of this guarantee _____; or (3) engaged in the following substantial business relationship with the owner or operator _____, and receiving the following value in consideration of this guarantee _____]. [Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter].

[If you are using the financial test to demonstrate coverage of both liability and closure and post-closure care, fill in the following four paragraphs regarding facilities and associated closure and post-closure cost estimates. If there are no facilities that belong in a particular paragraph, write "none" in the space indicated. For each facility, include its EPA Identification Number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.]

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care or liability coverage is demonstrated through the financial test specified in LAC 33:V.Chapters 37 and 43. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

_____

2. The firm identified above guarantees, through the guarantee specified in LAC 33:V.Chapters 37 and 43, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility:

_____

3. In states other than Louisiana, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in LAC 33:V.Chapters 37 and 43. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

_____

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to the U.S. Environmental Protection Agency or to a state through the financial test or any other financial assurance mechanism in LAC 33:V.Chapters 37 and 43 or equivalent or substantially equivalent state mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility:

_____

[Fill out the following three paragraphs regarding facilities and associated assured costs. If your firm has no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and amount of assured costs.]

5. This firm is the owner or operator or guarantor of the following UIC facilities for which financial assurance for plugging and abandonment is required under applicable regulations of the Louisiana Department of Natural Resources and is assured through a financial test. The current closure cost estimates as required by LDNR are shown for each facility:

_____

6. This firm is the owner or operator or guarantor of the following petroleum underground storage tank facilities for which financial assurance is required under 40 CFR Part 280 and is assured through a financial test. The amount of assurance required is shown for each facility:

_____

7. This firm is the owner or operator or guarantor of the following PCB commercial storage facilities for which financial assurance is required under 40 CFR Part 761 and is assured through a financial test. The amount of assurance required is 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 under LAC 33:V.Chapters 37 and 43.]

PART A. LIABILITY COVERAGE FOR SUDDEN AND NON-SUDDEN OCCURRENCES

[Fill in Alternative I if the first criteria of LAC 33:V.3707.F.1 or 4411.F.1 are used. Fill in Alternative II if the second criteria of LAC 33:V.3707.F.1 or 4411.F.1 are used.]

ALTERNATIVE I

1. Sum of required sudden and non-sudden liability coverage: $_____

*2. Tangible net worth: $_____

*3. Total assets in the U.S. (required only if less than 90 percent of the firm's assets are located in the U.S.):

$_____

YES NO

4. Is line 2 minus line 1 at least $10 million?

___ ___

*5. Is line 3 greater than six times line 1 (required only if less than 90 percent of firm's assets are located in the U.S.)?

___ ___

6. Does the firm answer YES to both questions 4 and 5?

___ ___

ALTERNATIVE II

1. Amount of annual aggregate liability coverage to be demonstrated: $_____

2. Current bond rating of most recent issuance 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 minus line 1 at least $10 million?

___ ___

*8. Is line 6 greater than six times line 1 (required only if less than 90 percent of firm's assets are located in the U.S.)?

___ ___

[Fill in Part B if you are using the financial test to demonstrate assurance of both liability coverage and closure or post-closure care.]

PART B. CLOSURE OR POST-CLOSURE CARE AND LIABILITY COVERAGE

[Fill in Alternative I if the first criteria of LAC 33:V.3707.F.1, 3711.F.1, and 3715.F.1 or if the first criteria of LAC 33:V.4403.E.1 or 4407.E.1 and 4411.F.1 are used. Fill in Alternative II if the second criteria of LAC 33:V.3707.F.1, 3711.F.1, and 3715.F.1 or if the second criteria of LAC 33:4403.E.1 or 4407.E.1 and 4411.F.1 are used.]

ALTERNATIVE I

1. Sum of current closure and post-closure cost estimates and other environmental costs to be assured (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 or post-closure cost estimates is included in your total liabilities, 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. The sum of net income plus depreciation, depletion, and amortization. $_____

*8. Total assets in the U.S. (required only if less than 90 percent of firm's assets are located in the U.S.).

$_____

YES NO

9. Is line 5 minus line 3 at least $10 million?

___ ___

10. Is line 4 divided by line 6 less than 1.5?

___ ___

11. Is line 7 divided by line 4 greater than 0.1?

___ ___

*12. Is line 8 greater than six times line 3 (required only if less than 90 percent of firm's assets are located in the U.S.)?

___ ___

13. Does the firm answer YES to either question 10 or 11, *and* questions 9 and 12?

___ ___

ALTERNATIVE II

1. Sum of current closure and post-closure cost estimates and other environmental costs to be assured (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 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 or post-closure cost estimates is included in "total liabilities" on your financial statements you may add that portion to this line): $_____

*8. Total assets in the U.S. (required only if less than 90 percent of assets are located in the U.S.): $_____

YES NO

9. Is line 7 minus line 3 at least $10 million?

___ ___

*10. Is line 8 greater than six times line 1 (required only if less than 90 percent of firm's assets are located in the U.S.)?

___ ___

ereby certify that the wording of this letter is identical to wording specified in LAC 33:V.3719.G as such regulations were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]

H. Corporate Guarantees

1. A corporate guarantee, as specified in LAC 33:V.3707.F or 3711.F or 4403.E. or 4407.E must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the bracket deleted.

CORPORATE GUARANTEE FOR CLOSURE 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], herein referred to as guarantor, to the Louisiana Department of Environmental Quality, obligee, on behalf of [owner or operator] of [business address], which is [one of the following: "our subsidiary"; "a subsidiary of ame and address of common parent corporation), of which uarantor is a subsidiary"; or "an entity with which guarantor has a substantial business relationship, as defined in LAC 33:V.3703.H. or 4399"].

Recitals:

a. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in LAC 33:V.3707.F, 3711.F, 4403.E, and 4407.E.

b. [Owner or operator] owns or operates the following hazardous waste management facility(ies) covered by this guarantee: [List for each facility: EPA Identification Number, name, and address. Indicate for each whether guarantee is for closure, post-closure care, or both.]

c. "Closure plans" and "post-closure plans" as used below refer to the plans maintained as required by LAC 33:V.Chapters 35 and 43 for the closure and post-closure care of facilities as identified above.

d. For value received from [owner or operator], guarantor guarantees to the Louisiana Department of Environmental Quality that in the event that [owner or operator] fails to perform [insert "closure," "post-closure care," or "closure and post-closure care"] of the above acility(ies) in accordance with the closure or post-closure plans and other permit or interim status requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in LAC 33:V.Chapter 37 or 43, as applicable, in the name of [owner or operator] in the amount of the current closure or post-closure cost estimates as specified in LAC 33:V.Chapter 37 or 43.

e. 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 [owner or operator] that he intends to provide alternative financial assurance as specified in LAC 33:V.Chapter 37 or 43, as applicable, in the name of [owner or operator]. Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless [owner or operator] has done so.

f. 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.

g. 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 closure or post-closure care, he shall establish alternate financial assurance as specified in LAC 33:V.Chapter 37 or 43, as applicable, in the name of [owner or operator] unless [owner or operator] has done so.

h. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the closure or post-closure plan, amendment or modification of the permit, the extension or reduction of the time of performance of closure or post-closure, or any other modification or alteration of an obligation of the owner or operator pursuant to the LAC 33:V.Chapter 37 or 43.

i. Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable financial assurance requirements of LAC 33:V.Chapter 37 or 43 for the above-listed facilities, except as provided in this agreement. [Insert the following language if the guarantor is a direct or higher-tier corporate parent, or a firm whose parent corporation is also the parent corporation of the owner or operator]: Guarantor may cancel this guarantee by sending notice by certified mail to the administrative authority and to [owner or operator], provided that this guarantee may not be canceled unless and until [the owner or operator] obtains, and the administrative authority approve(s), alternate closure and/or post-closure care coverage complying with LAC 33:V.3707, 3711, 4403, and 4407.

[Insert the following language if the guarantor is a firm qualifying as a guarantor due to its "substantial business relationship" with its owner or operator]:

Guarantor may cancel this guarantee 120 days following the receipt of notification, through certified mail, by the administrative authority, and by the owner or operator.

j. Guarantor agrees that if [owner or operator] fails to provide alternate financial assurance as specified in LAC 33:V.Chapter 37 or 43, as applicable, and obtain written approval of such assurance from the administrative authority within 90 days after a notice of cancellation by the guarantor is received by the administrative authority from guarantor, guarantor shall provide such alternative financial assurance in the name of [owner or operator].

k. Guarantor expressly waives notice of acceptance of this guarantee by the administrative authority or by [owner or operator]. Guarantor also 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:V.3719.H.1 as such regulations were constituted on the date first above written.

Effective dates: _____

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Thus sworn and signed before me on this the _____ day of ___, 19__.

_____

Notary Public

2. A guarantee, as specified in LAC 33:V.3715.G or 4411.G, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

GUARANTEE FOR LIABILITY COVERAGE

Guarantee made this [date] by [name of guaranteeing entity], a business corporation organized under the laws of [if incorporated within the United States insert "the state of ___" and insert name of state; if incorporated outside the United States insert the name of the country in which incorporated, the principal place of business within the United States, and the name and address of the registered agent in the state of the principal place of business], herein referred to as guarantor. This guarantee is made on behalf of [owner or operator] of [business address], which is [one of the following: "our subsidiary"; "a subsidiary of (name and address of common parent corporation), of which guarantor is a subsidiary"; or "an entity with which guarantor has a substantial business relationship, as defined in LAC 33:V.3703 or 4399"], to any and all third parties who have sustained or may sustain bodily injury or property damage caused by [sudden and/or non-sudden] accidental occurrences arising from operation of the facility(ies) covered by this guarantee.

Recitals

a. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in LAC 33:V.3715.G and 4411.G.

b. [Owner or operator] owns or operates the following hazardous waste management facility(ies) covered by this guarantee: [List for each facility: EPA identification number, name, and address; and if guarantor is incorporated outside the United States list the name and address of the guarantor's registered agent in each state and in Louisiana.] This corporate guarantee satisfies RCRA third-party liability requirements for [insert "sudden" or "non-sudden" or "both sudden and non-sudden"] accidental occurrences in above-named owner or operator facilities for coverage in the amount of [insert dollar amount] for each occurrence and [insert dollar amount] annual aggregate.

c. For value received from [owner or operator], guarantor guarantees to any and all third parties who have sustained or may sustain bodily injury or property damage caused by [sudden and/or nonsudden] accidental occurrences arising from operations of the facility(ies) covered by this guarantee that in the event that [owner or operator] 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/or nonsudden] 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 limits of coverage identified above.

d. Exclusions. This guarantee does not apply to:

i. Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert owner or operator] would be obligated to pay in the absence of the contract or agreement.

ii. Any obligation of the owner or operator under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

iii. Bodily injury to:

(a). an employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator]; or

(b). the spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of, employment by [insert owner or operator].

This exclusion applies:

(i). whether [insert owner or operator] may be liable as an employer or in any other capacity; and

(ii). to any obligation to share damages with or by another person who must pay damages because of the injury to persons identified in subclauses (a) and (b).

iv. Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft.

v. Property damage to:

(a). any property owned, rented, or occupied by [insert owner or operator];

(b). premises that are sold, given away, or abandoned by [insert owner or operator] if the property damage arises out of any part of those premises;

(c). property loaned to [insert owner or operator];

(d). personal property in the care, custody, or control of [insert owner or operator];

(e). that particular part of real property on which [insert owner or operator] or any contractors or subcontractors working directly or indirectly on behalf of [insert owner or operator] are performing operations, if the property damage arises out of these operations.

e. 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 [owner or operator] that he intends to provide alternate liability coverage as specified in LAC 33:V.3715 and 4411, as applicable, in the name of [owner or operator]. Within 120 days after the end of such fiscal year, the guarantor shall establish such liability coverage unless [owner or operator] has done so.

f. 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.

g. 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, he shall establish alternate liability coverage as specified in LAC 33:V.3715 or 4411 in the name of [owner or operator], unless [owner or operator] has done so.

h. Guarantor reserves the right to modify this agreement to take into account amendment or modification of the liability requirements set by LAC:33:V.3715 and 4411, provided that such modification shall become effective only if the administrative authority does not disapprove the modification within 30 days of receipt of notification of the modification.

i. Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable requirements of LAC 33:V.3715 and 4411 for the above-listed facility(ies), except as provided in Subparagraph j of this agreement.

j. [Insert the following language if the guarantor is a direct or higher-tier corporate parent, or a firm whose parent corporation is also the parent corporation of the owner or operator]:

Guarantor may terminate this guarantee by sending notice by certified mail to the administrative authority and to [owner or operator], provided that this guarantee may not be terminated unless and until the [owner or operator] obtains, and the administrative authority approves, alternate liability coverage complying with LAC 33:V.3715 and/or 4411.

[Insert the following language if the guarantor is a firm qualifying as a guarantor due to its "substantial business relationship" with the owner or operator]:

Guarantor may terminate this guarantee 120 days following receipt of notification, through certified mail, by the administrative authority and by [the owner or operator].

k. Guarantor hereby expressly waives notice of acceptance of this guarantee by any party.

l. Guarantor agrees that this guarantee is in addition to and does not affect any other responsibility or liability of the guarantor with respect to the covered facilities.

m. The guarantor shall satisfy a third-party liability claim only on receipt of one of the following documents:

i. Certification from the principal and the third-party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Certification of Valid Claim

The undersigned, as parties [insert principal] and [insert name and address of third-party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or non-sudden] accidental occurrence arising from operating [principal's] hazardous waste treatment, storage, or disposal facility should be paid in the amount of $( ).

[Signatures]

Principal

[Notary] [Date]

[Signatures]

[Claimant(s)]

[Notary] [Date]

ii. A valid final court order establishing a judgement against the principal for bodily injury or property damage caused by sudden or non-sudden accidental occurrences arising

from the operation of the principal's facility or group of facilities.

n. In the event of combination of this guarantee with another mechanism to meet liability requirements, this guarantee will be considered [insert "primary" or "excess"] coverage.

I hereby certify that the wording of this guarantee is identical to the wording specified in LAC 33:V.3719.H.2 as such regulations were constituted on the date shown immediately below.

[Name of guarantor]

[Authorized signature of guarantor]

[Name of person signing]

[Title of person signing]

[Signature of witness or notary]

I. Liability Endorsement

1. A hazardous waste facility liability endorsement as required in LAC 33:V.3715 or 4411 must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

HAZARDOUS WASTE FACILITY

LIABILITY ENDORSEMENT

a. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the insured's obligation to demonstrate financial responsibility under LAC 33:V.3715.F or 4411. The coverage applies to [EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "non-sudden accidental occurrences," or "sudden and non-sudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for non-sudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs.

b. 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 clauses i through v of this Subparagraph are hereby amended to conform with clauses i through v.

i. Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligations under the policy to which this endorsement is attached.

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 LAC 33:V.3715.F or 4411.

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 this endorsement, whether by the insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the administrative authority.

v. Any other termination of this endorsement will be effective only upon written notice and only after the expiration of thirty days after a copy of such written notice is received by the administrative authority.

2. Attached to and forming part of policy no. ___ issued by [name of insurer], herein called the insurer, of [address of insurer] to [name of insured] of [address] this ____ day of _____, 19__.

3. I hereby certify that the wording of this endorsement is identical to the wording specified in LAC 33:V.3719.I as such regulation was constituted on the date first above written, 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 authorized to conduct business in the state of Louisiana.

[Signature of Authorized Representative of Insurer]

[Type name]

[Title, Authorized Representative of [Name of Insurer]]

[Address of Representative]

J. Certificate of Liability Insurance. A certificate of liability insurance as required in LAC 33:V.3715 or 4411 must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

HAZARDOUS WASTE FACILITY CERTIFICATE OF

LIABILITY INSURANCE

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], (the "insured"), of [address of insured] in connection with the insured's obligation to demonstrate financial responsibility under LAC 33:V.3715 or 4411. The coverage applies at [list EPA identification number, name, and address for each facility] for [insert "sudden accidental occurrences," "non-sudden accidental occurrences," or "sudden and non-sudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities,

indicate which facilities are insured for sudden accidental occurrences, which are insured for non-sudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of "each occurrence" and "annual aggregate" limits of the insurer's liability], exclusive of legal defense costs. The coverage is provided under 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 obligation 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:V.3715.F or 4411.

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 the insurance, whether by the insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, will be effective only upon written notice and only after the expiration 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 only after the expiration of 30 days after a copy of such written notice is received by the administrative authority.

I hereby certify that the wording of this instrument is identical to the wording specified in LAC 33:V.3719.J as such regulation was constituted on the date this certificate was issued, as indicated below, and that the insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess of surplus lines insurer, in one or more states, and is authorized to conduct insurance business in the state of Louisiana.

[Signature of authorized representative of insurer]

[Type name]

[Title], Authorized representative of [name of insurer]

[Address of representative]

DATE OF ISSUANCE: _____.

K. Letter of Credit. A letter of credit, as specified in LAC 33:V.3715 or 4411, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

Irrevocable Standby Letter of Credit

Secretary
Louisiana Department of Environmental Quality
P.O. Box 82263
Baton Rouge, Louisiana 70884-2263

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No._____ in the favor of ["any and all third-party liability claimants" or insert name of trustee of the standby trust fund], at the request and for the account of [owner or operator's name and address] for third-party liability awards or settlements up to [in words] U.S. dollars $_____ per occurrence and the annual aggregate amount of [in words] U.S. dollars, for sudden accidental occurrences and/or for third-party liability awards or settlements up to the amount of [in words] U.S. dollars $_____ per occurrence, and the annual aggregate amount of [in words] U.S. dollars $_____ for non-sudden accidental occurrences available upon presentation of a sight draft bearing reference to this letter of credit No._____, and [insert the following language if the letter of credit is being used without a standby trust fund:]

1. A signed certificate reading as follows:

Certificate of Valid Claim

The undersigned, as parties [insert principal] and [insert name and address of third-party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or non-sudden] accidental occurrence arising from operations of [principal's] hazardous waste treatment, storage, or disposal facility should be paid in the amount of $_____. We hereby certify that the claim does not apply to any of the following:

a. Bodily injury or property damage for which [insert principal] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert principal] would be obligated to pay in the absence of the contract or agreement.

b. Any obligation of [insert principal] under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

c. Bodily injury to:

i. an employee of [insert principal] arising from, and in the course of, employment by [insert principal]; or

ii. the spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert principal].

This exclusion applies:

(a). whether [insert principal] may be liable as an employer or in any other capacity; and

(b). to any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in clauses i or ii above.

d. Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft.

e. Property damage to:

i. any property owned, rented, or occupied by [insert principal];

ii. premises that are sold, given away, or abandoned by [insert principal] if the property damage arises out of any part of those premises;

iii. property loaned to [insert principal];

iv. personal property in the care, custody, or control of [insert principal];

v. that particular part of real property on which [insert principal] or any contractors or subcontractors working directly or indirectly on behalf of [insert principal] are performing operations, if the property damage arises out of these operations.

[Signatures]

Grantor

[Signatures]

Claimant(s)

2. Or, as an alternative to the Certificate of Valid Claim, a valid final court order establishing a judgment against the grantor for bodily injury or property damage caused by sudden or non-sudden accidental occurrences arising from the operation of the grantor's facility or group of facilities.

This letter of credit is effective as of [date] and shall expire on [date at least one year later], but such expiration date shall be automatically extended for a period of [at least one year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify you, the administrative authority, and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us.

[Insert the following language if a standby trust fund is not being used: "In the event that this letter of credit is used in combination with another mechanism for liability coverage, this letter of credit shall be considered [insert "primary" or "excess" coverage]."

We certify that the wording of this letter of credit is identical to the wording specified in LAC 33:V.3719.K as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution [Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits published by the International Chamber of Commerce" or "the Uniform Commercial Code"].

L. Surety Bond. A surety bond, as specified in LAC 33:V.3715 or 4411, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

Payment Bond

Surety Bond No. [insert number]

Parties [insert name and address of owner or operator], principal, incorporated in [insert state of incorporation] of [insert city and state of principal place of business], and [insert name and address of surety company(ies)], surety company(ies), of [insert surety(ies) place of business].

EPA identification number, name, and address for each facility guaranteed by this bond:

	Sudden Accidental Occurrences	Non-sudden Accidental Occurrences
Penal Sum per Occurrence	[insert amount]	[insert amount]
Annual Aggregate	[insert amount]	[insert amount]

Purpose: This is an agreement between the surety(ies) and the principal under which the surety(ies), its (their) successors and assignees, agree to be responsible for the payment of claims against the principal for bodily injury and/or property damage to third parties caused by ["sudden" and/or "non-sudden"] accidental occurrences arising from operations of the facility or group of facilities in the sums prescribed herein, subject to the governing provisions and the following conditions.

1. Governing Provisions

a. Section 3004 of the Resource Conservation and Recovery Act of 1976, as amended.

b. Rules and regulations of the U.S. Environmental Protection Agency (EPA), particularly 40 CFR 264.147 or 265.147 (if applicable).

c. Rules and regulations of the Louisiana Department of Environmental Quality, particularly LAC 33:V.3715 and 4411, as applicable.

2. Conditions

a. The principal is subject to the applicable governing provisions that require the principal to have and maintain liability coverage for bodily injury and property damage to third parties caused by ["sudden" and/or "non-sudden"] accidental occurrences arising from operations of the facility

or group of facilities. Such obligation does not apply to any of following:

i. Bodily injury or property damage for which [insert principal] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert principal] would be obligated to pay in the absence of the contract or agreement.

ii. Any obligation of [insert principal] under a workers' compensation, disability benefits, or unemployment compensation law or similar law.

iii. Bodily injury to:

(a). an employee of [insert principal] arising from, and in the course of, employment by [insert principal]; or

(b). the spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert principal]. This exclusion applies:

(i). whether [insert principal] may be liable as an employer or in any other capacity; and

(ii). to any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in subclauses (a) and (b) above.

iv. Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft.

v. Property damage to:

(a). any property owned, rented, or occupied by [insert principal];

(b). premises that are sold, given away, or abandoned by [insert principal] if the property damage arises out of any part of those premises;

(c). property loaned to [insert principal];

(d). personal property in the care, custody, or control of [insert principal];

(e). that particular part of real property on which [insert principal] or any contractors or subcontractors working directly or indirectly on behalf of [insert principal] are performing operations, if the property damage arises out of these operations.

b. This bond assures that the principal will satisfy valid third-party liability claims, as described in condition a.

c. If the principal fails to satisfy a valid third-party liability claim, as described above, the surety(ies) become(s) liable on this bond obligation.

d. The surety(ies) shall satisfy a third-party liability claim only upon the receipt of one of the following documents:

i. Certification from the principal and the third-party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Certification of Valid Claim

The undersigned, as parties [insert name of principal] and [insert name and address of third-party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or non-sudden] accidental occurrence arising from operating [principal's] hazardous waste treatment, storage, or disposal facility should be paid in the amount of $[ ].

[Signature]

Principal

[Notary] Date

[Signature(s)]

Claimant(s)

[Notary] Date

ii. A valid final court order establishing a judgment against the principal for bodily injury or property damage caused by sudden or non-sudden accidental occurrences arising from the operation of the principal's facility or group of facilities.

e. In the event of combination of this bond with another mechanism for liability coverage, this bond will be considered [insert "primary" or "excess"] coverage.

f. 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. In no event shall the obligation of the surety(ies) hereunder exceed the amount of said annual aggregate penal sum, provided that the surety(ies) furnish(es) notice to the administrative authority forthwith of all claims filed and payments made by the surety(ies) under this bond.

g. The surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the principal and the administrative authority, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the principal and the administative* authority, as evidenced by the return receipt.

h. The principal may terminate this bond by sending written notice to the surety(ies) and to the administrative authority.

i. The surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules, and regulations and agree(s) that no such amendment shall in any way alleviate its (their) obligation on this bond.

j. This bond is effective from [insert date] (12:01 a.m., standard time, at the address of the principal as stated herein) and shall continue in force until terminated as described above.

In Witness Whereof, the principal and surety(ies) have executed this bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the principal and surety(ies) and that the wording of this surety bond is identical to the wording specified in LAC 33:V.3719, as such regulations were constituted on the date this bond was executed.

PRINCIPAL

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate Seal]

CORPORATE SURETY[IES]

[Name and address]

State of incorporation:

Liability Limit: $

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for surety above.]

Bond premium: $

M. Trust Agreement

1. A trust agreement, as specified in LAC 33:V.3715 and 4411, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

Trust Agreement

Trust Agreement, the "Agreement," entered into as of [date] by and between [name of the owner or operator] 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"], the "trustee."

Whereas, the United States Environmental Protection Agency, "EPA," an agency of the United States Government, has established certain regulations applicable to the grantor, requiring that an owner or operator of a hazardous waste management facility or group of facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental and/or non-sudden accidental occurrences arising from operations of the facility or group of facilities.

Whereas, the grantor has elected to establish a trust to assure all or part of such financial responsibility for the facilities 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 owner or operator 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.

Section 2. Identification of Facilities. This agreement pertains to the facilities identified on attached schedule A [on schedule A, for each facility list the EPA identification number, name, and address of the facility(ies) and the amount of liability coverage, or portions thereof, if more than one instrument affords combined coverage as demonstrated by this Agreement].

Section 3. Establishment of Fund. The grantor and the trustee hereby establish a trust fund, hereinafter the "fund," for the benefit of any and all third parties injured or damaged by [sudden and/or non-sudden] accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of [up to $1 million] per occurrence and [up to $2 million] annual aggregate for sudden accidental occurrences and [up to $3 million] per occurrence and [up to $6 million] annual aggregate for non-sudden occurrences, except that the fund is not established for the benefit of third parties for the following:

a. Bodily injury or property damage for which [insert grantor] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert grantor] would be obligated to pay in the absence of the contract or agreement.

b. Any obligation of [insert grantor] under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

c. Bodily injury to:

i. an employee of [insert grantor] arising from, and in the course of, employment by [insert grantor]; or

ii. the spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert grantor].

This exclusion applies:

(a). whether [insert grantor] may be liable as an employer or in any other capacity; and

(b). to any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in clauses i and ii above.

d. Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft.

e. Property damage to:

i. any property owned, rented, or occupied by [insert grantor];

ii. premises that are sold, given away, or abandoned by [insert grantor] if the property damage arises out of any part of those premises;

iii. property loaned to [insert grantor];

iv. personal property in the care, custody, or control of [insert grantor];

v. that particular part of real property on which [insert grantor] or any contractors or subcontractors working directly or indirectly on behalf of [insert grantor] are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the fund shall be considered [insert "primary" or "excess"] coverage.

The fund is established initially as consisting of the property, which is acceptable to the trustee, described in Schedule B attached hereto. 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 EPA.

Section 4. Payment for Bodily Injury or Property Damage. The trustee shall satisfy a third-party liability claim by making payments from the fund only upon receipt of one of the following documents.

a. Certification from the grantor and the third-party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Certification of Valid Claim

The undersigned, as parties [insert grantor] and [insert name and address of third-party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or non-sudden] accidental occurrence arising from operating [grantor's] hazardous waste treatment, storage, or disposal facility should be paid in the amount of $[ ].

[Signatures]

Grantor

[Signatures]

Claimant(s)

b. A valid final court order establishing a judgment against the grantor for bodily injury or property damage caused by sudden or non-sudden accidental occurrences arising from the operation of the grantor's facility or group of facilities.

Section 5. Payments Comprising 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, 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 circumstance then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims, except that

a. securities or other obligations of the grantor, or any other owner or operator of the 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 in 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 of the 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. 81a-1 et seq., including one which may be created,

managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the trustee. The trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions 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 depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary 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 such 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.

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 all other proper charges and disbursements of the trustee shall be paid from the fund.

Section 10. Annual Valuations. 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 question 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 specify the date on which it assumes administration of the trust in a writing sent to the grantor, the administrative authority, and the present trustee by certified mail 10 days before such change becomes effective. 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 such persons as are designated in the attached Exhibit A or such other designees as the grantor may designate by amendments 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, signed by the administrative authority, or his or her designee, and 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 a termination of the authority of any person to act on behalf of the grantor or the 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 the administrative authority, except as provided for herein.

Section 15. Notice of Nonpayment. If a payment for bodily injury or property damage is made under Section 4 of this

trust, the trustee shall notify the grantor of such payment and amount(s) thereof within five working days. The grantor shall, on or before the anniversary date of the establishment of the Fund following such notice, either make payments to the trustee in amounts sufficient to cause the trust to return to its value immediately prior to the payment of claims under Section 4, or shall provide written proof to the trustee that other financial assurance for liability coverage has been obtained equalling the amount necessary to return the trust to its value prior to the payment of claims. If the grantor does not either make payments to the trustee or provide the trustee with such proof, the trustee shall within 10 working days after the anniversary date of the establishment of the fund provide a written notice of nonpayment to the administrative authority.

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.

The administrative authority will agree to termination of the trust when the owner or operator substitutes alternate financial assurance as specified in this LAC 33:V.Chapter 37 or 44.

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 directions 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 expenses reasonably incurred in its defense in the event 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 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:V.3719 as such regulations were constituted on the date first above written.

[Signature of Grantor]

[Title]

Attest:

[Title]

[Seal]

[Signature of Trustee]

Attest:

[Title]

[Seal]

2. The following is an example of the certification of acknowledgement which must accompany the trust agreement for a trust fund as specified in LAC 33:V.3715 or 4411. State requirements may differ on the proper content of this acknowledgement.

State of Louisiana

Parish of

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that she/he signed her/his name thereto by like order.

Witness:

_____

_____

_____

THUS DONE AND SIGNED before me this _____ day of _____, _____, in _____.

_____

NOTARY PUBLIC

N. Standby Trust Agreement

1. A standby trust agreement, as specified in LAC 33:V.3715.H. or 4411.H, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

Standby Trust Agreement

Trust Agreement, the "agreement," entered into as of [date] by and between [name of the owner or operator] a [name of a state] [insert "corporation," "partnership," "association," or "proprietorship"], the "grantor," and [name of corporate

trustee], [insert, "incorporated in the state of _____" or "a national bank"], the "trustee."

Whereas the United States Environmental Protection Agency, "EPA," an agency of the United States Government, has established certain regulations applicable to the grantor, requiring that an owner or operator of a hazardous waste management facility or group of facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental and/or non-sudden accidental occurrences arising from operations of the facility or group of facilities.

Whereas, the grantor has elected to establish a standby trust into which the proceeds from a letter of credit may be deposited to assume all or part of such financial responsibility for the facilities 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 owner or operator 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.

Section 2. Identification of Facilities. This agreement pertains to the facilities identified on attached Schedule A [on Schedule A, for each facility list the EPA identification number, name, and address of the facility(ies) and the amount of liability coverage, or portions thereof, if more than one instrument affords combined coverage as demonstrated by this agreement].

Section 3. Establishment of Fund. The grantor and the trustee hereby establish a standby trust fund, hereafter the "fund," for the benefit of any and all third parties injured or damaged by [sudden and/or non-sudden] accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of _____[up to $1 million] per occurrence and _____[up to $2 million] annual aggregate for sudden accidental occurrences, and _____[up to $3 million] per occurrence and _____[up to $6 million] annual aggregate for non-sudden occurrences, except that the Fund is not established for the benefit of third parties for the following:

a. Bodily injury or property damage for which [insert grantor] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert grantor] would be obligated to pay in the absence of the contract or agreement.

b. Any obligation of [insert grantor] under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

c. Bodily injury to:

i. an employee of [insert grantor] arising from, and in the course of, employment by [insert grantor]; or

ii. the spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert grantor].

This exclusion applies:

(a). whether [insert grantor] may be liable as an employer or in any other capacity, and

(b). to any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in clauses i and ii above.

d. Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft.

e. Property damage to:

i. any property owned, rented, or occupied by [insert grantor];

ii. premises that are sold, given away, or abandoned by [insert grantor] if the property damage arises out of any part of those premises;

iii. property loaned to [insert grantor];

iv. personal property in the care, custody, or control of [insert grantor];

v. that particular part of real property on which [insert grantor] or any contractors or subcontractors working directly or indirectly on behalf of [insert grantor] are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the fund shall be considered [insert "primary" or "excess"] coverage.

The fund is established initially as consisting of the proceeds of the letter of credit deposited into the fund. Such proceeds 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 EPA.

Section 4. Payment for Bodily Injury or Property Damage. The trustee shall satisfy a third-party liability claim by drawing on the letter of credit described in Schedule B and

making payments from the Fund only upon receipt of one e following documents:

a. Certification from the grantor and the third-party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Certification of Valid Claim

The undersigned, as parties [insert grantor] and [insert name and address of third-party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or non-sudden] accidental occurrence arising from operating [grantor's] hazardous waste treatment, storage, or disposal facility should be paid in the amount of $[_____].

[Signatures]

Grantor

[Signatures]

Claimant(s)

b. A valid final court order establishing a judgment against the grantor for bodily injury or property damage caused by sudden or non-sudden accidental occurrences arising m the operation of the grantor's facility or group of acilities.

Section 5. Payments Comprising the Fund. Payments made to the trustee for the Fund shall consist of the proceeds from the letter of credit drawn upon by the trustee in accordance with the requirements of LAC 33:V.3719.K and Section 4 of this Agreement.

Section 6. Trustee Management. The trustee shall invest and reinvest the 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 which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims, except that:

a. securities or other obligations of the grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, s amended, 15 U.S.C. 80a-2(a), shall not be acquired or eld, 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 a state government; and

c. the trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for payment of interest thereon.

Section 7. Commingling and Investment. The trustee is expressly authorized in 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 of the 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, underwritten, or to which investment advice is rendered or the shares of which are sold by the trustee. The trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the trustee by the other provisions of this Agreement or by law, and 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 or 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 depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited herein 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 such 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.

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 all other proper charges and disbursements to the trustee shall be paid from the fund.

Section 10. Advice of Counsel. The trustee may from time to time consult with counsel, who may be counsel to the grantor, with respect to any question 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 11. 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 12. 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 specify the date on which it assumes administration of the trust in a writing sent to the grantor, the administrative authority, and the present trustee by certified mail 10 days before such change becomes effective. 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 13. Instructions to the Trustee. All orders, requests, certifications of valid claims, and instructions to the trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the grantor may designate by amendments to Exhibit A. The trustee shall be fully protected in acting without inquiry in accordance with the grantor's 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 a termination of the authority of any person to act on behalf of the grantor or the 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 the administrative authority, except as provided for herein.

Section 14. Amendment of Agreement. This agreement may be amended by an instrument in writing executed by the grantor, the trustee, and the administrative authority if the grantor ceases to exist.

Section 15. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 14, 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 paid to the grantor.

The administrative authority will agree to termination of the trust when the owner or operator substitutes alternative financial assurances as specified in this LAC 33:V.Chapter 37 or 44.

Section 16. 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 directions by the grantor and 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 expenses reasonably incurred in its defense in the event the grantor fails to provide such defense.

Section 17. Choice of Law. This agreement shall be administered, construed, and enforced according to the laws of the state of Louisiana.

Section 18. 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 of 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 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:V.3719.N as such regulations were constituted on the date first above written.

[Signature of Grantor]

[Title]

Attest:

[Title]

[Seal]

[Signature of Trustee]

Attest:

[Title]

[Seal]

2. The following is an example of the certification of knowledgement which must accompany the trust agreement a standby trust fund as specified in LAC 33:V.3715.H or 4411.H.

State of Louisiana

Parish of

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

Witness:

_____

_____

_____

THUS DONE AND SIGNED before me this _____ day of _____, _____, in _____.

_____

NOTARY PUBLIC

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:686 (July 1985), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 16:47 (January 1990), LR 18:723 (July 1992), LR 21:266 (March 1995).

* As appeared in the published rule.

Chapter 39. Small Quantity Generators

§3901. Applicability

Small quantity generators are subject to all the requirements of this Chapter and Chapter 11 except for those exclusions listed in this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:237 (April 1987), LR 20:1109 (October 1994).

§3903. Quantitative Limit

A generator is a small quantity generator if he generates less than an average of 100 kilograms of hazardous waste per calendar month except as specified in LAC 33:V.3911. If the quantitative limit set forth in this Section is exceeded, the generator must renotify the administrative authority of his change in status and remain in that category for the next calendar year. At no time shall a small quantity generator generate over 1000 kilograms in a calendar month.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:237 (April 1987), repromulgated LR 18:1256 (November 1992), amended LR 20:1109 (October 1994).

§3907. Recycle

A. The generator must notify the administrative authority of his on-site reuse/recycle activities in accordance with LAC 33:V.4103.

B. Hazardous waste that is recycled and that is described in LAC 33:V.4105.B and C.4 is not included in the quantity determinations referenced in this Chapter. Hazardous waste that is subject to the requirements of LAC 33:V.4113 and 4115, 4139, and 4143 inclusive is included in the quantity determination of LAC 33:V.Chapters 1, 31, 39, 41, and 49 and is subject to the requirements of LAC 33:V.Subpart 1.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, in LR 10:200 (March 1984), amended in LR 11:1139 (December 1985), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

§3911. Acutely Hazardous Wastes

If a generator generates acutely hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acutely hazardous waste are subject to full regulation (LAC 33:V.Subpart 1):

A. a total of one kilogram of acutely hazardous wastes listed in LAC 33:V.4901.B, C, or E;

B. a total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acutely hazardous wastes listed in LAC 33:V.4901.B, C, or E.

(Comment: "full regulation" means those regulations applicable to generators of greater than 100 kilograms of non-acutely hazardous waste in a calendar month.)

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:220 (March 1990), LR 20:1109 (October 1994).

§3913. Accumulation Time

A small quantity generator may accumulate hazardous waste on-site. At no time is a small quantity generator allowed to accumulate more than a total of 1000 kilograms of his hazardous waste on-site. At no time is a small quantity

generator allowed to accumulate his acutely hazardous wastes in quantities greater than set forth in LAC 33:V.3911. At no time is the small quantity generator allowed to store the material on-site longer than 365 days.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:237 (April 1987), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

§3915. Requirements

The small quantity generator must:

A. Comply with the manifest requirements in LAC 33:V.1107;

B. Ensure delivery to an off-site storage, treatment or disposal facility, which, if located in the United States, is:

1. permitted under these regulations;

2. in interim status under these regulations;

3. authorized to manage hazardous waste by a state with a hazardous waste management program approved by the U.S. EPA; or

4. a facility which:

a. legitimately uses or re-uses, or legitimately recycles or reclaims, its waste; or

b. treats its waste prior to legitimate use or re-use or legitimate recycling or reclamation.

C. All of the following will be required:

1. the date on which each accumulation period began shall be clearly marked and visible for inspection, as specified in LAC 33:V.1109.E.1.d;

2. while hazardous waste are being accumulated on-site, each container shall be marked clearly with the words "HAZARDOUS WASTE", as specified in LAC 33:V.1109.E.1.;

3. all hazardous waste being stored on-site in containers or tanks prior to direct shipment to a TSD facility shall be regulated by LAC 33:V.Chapters 19 or 21. A security system shall be provided to insure that site ingress and egress by the public is controlled and that employees are protected from hazards to health resulting from contact with extremely hazardous operations;

4. the owner or operator shall inspect the facility to detect deterioration, malfunctions, operator errors, and discharges which may cause or lead to the following:

a. a release of hazardous waste—a release of hazardous waste constituents into the environment;

b. a threat to human health—the owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment;

5. the owner or operator shall be required to submit an annual report for all hazardous waste shipped off-site. The annual report is due by March 1 of each calendar year covering the period of January 1 to December 31 of the previous year. The report will include the generator ID, the type of waste, the amount of waste, and the disposition of the waste;

6. a training program shall be developed and documented for all personnel whose duties may involve hazardous waste management or emergency response. This training must be a program of classroom instruction or on the job training and must be directed by a person trained in hazardous waste management procedures. Records of this training must be kept on-site. At a minimum, this program must:

a. teach facility personnel hazardous waste management procedures relevant to the positions in which they are employed;

b. ensure that personnel are able to respond effectively to emergencies by familiarizing them with procedures and equipment; and

c. be reviewed on an annual basis.

7. a small quantity generator is excluded from the specific contingency plan requirements under LAC 33:V.1117. However, the small quantity generator must have written emergency procedures which, at a minimum, must include:

a. emergency phone numbers; and

b. spill cleanup procedures.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:237 (April 1987), LR 16:220 (March 1990), repromulgated LR 18:1256 (November 1992), amended LR 20:1000 (September 1994), LR 20:1109 (October 1994).

Chapter 40. Used Oil

401. Definitions

Terms that are defined in LAC 33:V.109 have the same meanings when used in this Chapter.

Aboveground Tank—a tank used to store or process used oil that is not an underground tank as defined in LAC 33:V.109.

Container—any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

Do-it-yourselfer (DIY) Used Oil Collection Center—any site or facility that accepts/aggregates and stores used oil collected only from household do-it-yourselfers.

Existing Tank—a tank that is used for the storage or processing of used oil and that is in operation or for which installation commenced on or prior to the effective date of the authorized used oil program. Installation will be considered to have commenced if the owner or operator has obtained all approvals or permits necessary to begin installation of the tank and if either a continuous on-site installation program has begun or the owner or operator has entered into contractual obligations which cannot be canceled or modified without substantial loss for installation of the tank to be completed within a reasonable time.

Household Do-it-yourselfer Used Oil—oil that is derived from households, such as used oil generated by individuals through the maintenance of their personal vehicles.

Household Do-it-yourselfer Used Oil Generator—an individual who generates household do-it-yourselfer used oil.

New Tank—a tank that will be used to store or process used oil and for which installation commenced after the effective date of the authorized used oil program.

Petroleum Refining Facility—an establishment primarily engaged in producing gasoline, kerosine, distillate fuel oils, and lubricants through fractionation, straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking, or other processes (i.e. facilities classified as SIC 2911).

Processing—chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used-oil-derived product. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation, and re-refining.

Re-refining Distillation Bottoms—the heavy fraction produced by vacuum distillation of filtered and dehydrated used oil. The composition of still bottoms varies with column operation and feedstock.

Tank—any stationary device designed to contain an accumulation of used oil which is constructed primarily of nonearthen materials, (e.g., wood, concrete, steel, plastic) which provides structural support.

Used Oil—any oil that has been refined from crude oil or any synthetic oil that has been used and, as a result of such use, is contaminated by physical or chemical impurities.

Used Oil Aggregation Point—any site or facility that accepts, aggregates, and/or stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point from which used oil is transported to the aggregation point in shipments of no more than 55 gallons. Used oil aggregation points may also accept used oil from household do-it-yourselfers.

Used Oil Burner—a facility where used oil not meeting the specification requirements in LAC 33:V.4005 is burned for energy recovery in devices identified in LAC 33:V.4063.

Used Oil Collection Center—any site or facility that is registered, licensed, permitted, and/or recognized to manage used oil and accepts/aggregates and stores used oil collected from used oil generators regulated under LAC 33:V.Chapter 40.Subchapter B which bring used oil to the collection center in shipments of no more than 55 gallons under the provisions of LAC 33:V.4017. Used oil collection centers may also accept used oil from household do-it-yourselfers.

Used Oil Fuel Marketer—any person who conducts either of the following activities:

1. directs a shipment of off-specification used oil from their facility to a used oil burner; or

2. first claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in LAC 33:V.4005.

Used Oil Generator—any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.

Used Oil Processor/Re-refiner—a facility that processes used oil.

Used Oil Transfer Facility—any transportation-related facility, including loading docks, parking areas, storage areas and other areas, where shipments of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation or prior to an activity performed in accordance with LAC 33:V.4009.B.2. Transfer facilities that store used oil for more than 35 days are subject to regulation under LAC 33:V.Chapter 40.Subchapter E.

Used Oil Transporter—any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil-derived products or used oil fuel.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

Subchapter A. Materials Regulated as Used Oil

§4003. Applicability

This Section identifies those materials which are subject to regulation as used oil under this Chapter. LAC 33:V.4003 also identifies some materials that are not subject to regulation as used oil under this Chapter and indicates whether these materials may be subject to regulation as hazardous waste under LAC 33:V.Subpart 1.

A. Used Oil. Used oil is to be recycled unless a used oil handler disposes of it or sends it for disposal. Except as provided in LAC 33:V.4005, the regulations of LAC 33:V.Chapter 40 apply to used oil and to materials identified in LAC 33:V.4003 as being subject to regulation as used oil, whether or not the used oil or material exhibits any characteristics of hazardous waste identified in LAC 33:V.4903.

B. Mixtures of Used Oil and Hazardous Waste

1. Listed Hazardous Waste

a. Mixtures of used oil and hazardous waste that is listed in LAC 33:V.4901 are subject to regulation as hazardous waste under LAC 33:V.Subpart 1, rather than as used oil under LAC 33:V.Chapter 40.

b. Rebuttable Presumption for Used Oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in LAC 33:V.4901. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from LAC 33:V.4901.Appendix A to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in LAC 33:V.3105.Table 1).

i. The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins if they are processed through a tolling arrangement as described in LAC 33:V.4017.C to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed.

ii. The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units in which the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

2. Characteristic Hazardous Waste. Mixtures of used oil and hazardous waste that solely exhibits one or more of the hazardous waste characteristic identified in LAC 33:V.4903 and mixtures of used oil and hazardous waste that is listed in LAC 33:V.4901 solely because it exhibits one or more of the characteristics of hazardous waste identified in LAC 33:V.4903 are subject to:

a. regulation as hazardous waste under LAC 33:V.Subpart 1 rather than as used oil under LAC 33:V.Chapter 40 if the resultant mixture exhibits any characteristics of hazardous waste identified in LAC 33:V.4903, except as provided in LAC 33:V.4003.B.2.c;

b. regulation as used oil under LAC 33:V.Chapter 40 if the resultant mixture does not exhibit any characteristics of hazardous waste identified under LAC 33:V.4903, except as specified in LAC 33:V.4003.B.2.c; or

c. regulation as used oil under LAC 33:V.Chapter 40 if the mixture is of used oil and a waste which is hazardous solely because it exhibits the characteristic of ignitability (e.g., mineral spirits), provided the mixture does not exhibit the characteristic of ignitability under LAC 33:V.4903.

C. Materials Containing or Otherwise Contaminated with Used Oil

1. Except as provided in LAC 33:V.4003.C.2, materials containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material:

a. are not used oil and thus not subject to LAC 33:V.Chapter 40; and

b. are subject to the hazardous waste regulations of LAC 33:V.Subpart 1, if applicable.

2. Materials containing or otherwise contaminated with used oil that are burned for energy recovery are subject to regulation as used oil under LAC 33:V.Chapter 40.

3. Used oil drained or removed from materials containing or otherwise contaminated with used oil is subject to regulation as used oil under LAC 33:V.Chapter 40.

D. Mixtures of Used Oil with Products

1. Except as provided in LAC 33:V.4003.D.2, mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under LAC 33:V.Chapter 40.

2. Mixtures of used oil and diesel fuel mixed on-site by the generator of the used oil for use in the generator's own vehicles are not subject to LAC 33:V.Chapter 40 once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to the requirements of LAC 33:V.Chapter 40.Subchapter B.

E. Materials Derived from Used Oil

1. Materials that are reclaimed from used oil that are used beneficially and are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants) are:

a. not used oil and, thus, are not subject to LAC 33:V.Chapter 40; and

b. not solid wastes and, thus, are not subject to the hazardous waste regulations of LAC 33:V.Subpart 1 as provided in LAC 33:V.105.D.

2. Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under LAC 33:V.Chapter 40.

3. Except as provided in LAC 33:V.4003.E.4, materials derived from used oil that are disposed of or used in a manner constituting disposal are:

a. not used oil and, thus, are not subject to LAC 33:V.Chapter 40; and

b. solid wastes and, thus, are subject to the hazardous waste regulations of LAC 33:V.Subpart 1 if the materials are listed or identified as hazardous waste.

4. Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to LAC 33:V.Chapter 40.

F. Wastewater. Wastewater, the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act and LAC 33:IX (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil is not subject to the requirements of this Chapter. For purposes of LAC 33:V.4003.F, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases or the used oil is recovered from wastewaters.

G. Used Oil Introduced into Crude Oil or a Petroleum Refining Facility

1. Used oil mixed with crude oil or natural gas liquids (e.g., in a production separator or crude oil stock tank) for insertion into a crude oil pipeline is exempt from the requirements of LAC 33:V.Chapter 40. The used oil is subject to the requirements of LAC 33:V.Chapter 40 prior to the mixing of used oil with crude oil or natural gas liquids.

2. Mixtures of used oil and crude oil or natural gas liquids containing less than 1 percent used oil that are being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking are exempt from the requirements of LAC 33:V.Chapter 40.

3. Used oil that is inserted into the petroleum refining facility process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from the requirements of LAC 33:V.Chapter 40 provided that the used oil constitutes less than 1 percent of the crude oil feed to any petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of LAC 33:V.Chapter 40.

4. Except as provided in LAC 33:V.4003.G.5, used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from the requirements of LAC 33:V.Chapter 40 only if the used oil meets the specification of LAC 33:V.4005. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of LAC 33:V.Chapter 40.

5. Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility process is exempt from the requirements of LAC 33:V.Chapter 40. This exemption does not extend to used oil which is intentionally introduced into a hydrocarbon recovery system (e.g., by pouring collected used oil into the wastewater treatment system).

6. Tank bottoms from stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids are exempt from the requirements of LAC 33:V.Chapter 40.

H. Used Oil on Vessels. Used oil produced on vessels from normal shipboard operations is not subject to this Chapter until it is transported ashore.

I. Used Oil Containing PCBs. In addition to the requirements of LAC 33:V.Chapter 40, marketers and burners of used oil who market used oil containing any quantifiable level of PCBs are subject to the requirements of 40 CFR 761.20(e).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4005. Used Oil Specifications

Used oil burned for energy recovery and any fuel produced from used oil by processing, blending, or other treatment is subject to regulation under this Chapter unless it is shown not to exceed any of the allowable levels of the constituents and properties in the specifications shown in LAC 33:V.4005.Table 1. Once used oil that is to be burned for energy recovery has been shown not to exceed any specifications and the person making that showing complies with LAC 33:V.4081, 4083, and 4085.B, the used oil is no longer subject to this Chapter.

Table 1

Used Oil Not Exceeding Any Specification Level is Not Subject to this Chapter When Burned for Energy Recovery[1]

Constituent/property level	Allowable
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100°F minimum
Total halogens	4,000 ppm maximum[2]

ENDNOTE: [1]The specification does not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see LAC 33:V.4003.B).

ENDNOTE: [2]Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under LAC 33:V.4003.B.1. Such used oil is subject to LAC 33:V.Chapter 30 rather than LAC 33:V.Chapter 40 when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

Note: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4007. Prohibitions

A. Surface Impoundment Prohibition. Used oil shall not be managed in surface impoundments or waste piles unless the units are subject to regulation under LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27-29, 31-33, 35, 37, and 43.

B. Use as a Dust Suppressant. The use of used oil as a dust suppressant is prohibited.

C. Burning in Particular Units. Off-specification used oil fuel may be burned for energy recovery in only the following devices:

1. industrial furnaces identified in LAC 33:V.109;

2. boilers as defined in LAC 33:V.109 that are identified as follows:

a. industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes;

b. utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale; or

c. used oil-fired space heaters provided that the burner meets the provisions of LAC 33:V.4015.

3. hazardous waste incinerators subject to regulation under LAC 33:V.Chapter 31 and Chapter 43.Subchapter N.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

Subchapter B. Standards for Used Oil Generators

§4009. Applicability

A. General. Except as provided in LAC 33:V.4009.A.1-4, this Subchapter applies to all used oil generators.

1. Household Do-it-yourselfer Used Oil Generators. Household do-it-yourselfer used oil generators are not subject to regulation under LAC 33:V.Chapter 40.

2. Vessels. Vessels at sea or at port are not subject to LAC 33:V.Chapter 40.Subchapter B. For purposes of this Subchapter, used oil produced on vessels from normal shipboard operations is considered to be generated at the time it is transported ashore. The owner or operator of the vessel and the person(s) removing or accepting used oil from the vessel are co-generators of the used oil and are both responsible for managing the waste in compliance with this Subchapter once the used oil is transported ashore. The co-genenerators may decide among them which party will fulfill the requirements of this Subchapter.

3. Diesel Fuel. Mixtures of used oil and diesel fuel mixed by the generator of the used oil for use in the generator's own vehicles are not subject to LAC 33:V.Chapter 40 once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil fuel is subject to the requirements of this Subchapter.

4. Farmers. Farmers who generate an average of 25 gallons per month or less of used oil from vehicles or machinery used on the farm in a calendar year are not subject to the requirements of LAC 33:V.Chapter 40.

B. Other Applicable Provisions. Used oil generators who conduct the following activities are subject to the requirements of other applicable provisions of LAC 33:V.Chapter 40 as indicated in LAC 33:V.4009.B.1-5:

1. generators who transport used oil, except under the self-transport provisions of LAC 33:V.4017.A and B, must also comply with LAC 33:V.Chapter 40.Subchapter D;

2. generators who process or re-refine used oil must also comply with LAC 33:V.Chapter 40.Subchapter E, except as provided in LAC 33:V.4009.B.2.b. Generators who perform the following activities are not processors provided that the

...ed oil is generated on-site and is not being sent off-site to a ...er of on- or off-specification used oil fuel:

a. filtering, cleaning, or otherwise reconditioning used oil before returning it for reuse by the generator;

b. separating used oil from wastewater generated on-site to make the wastewater acceptable for discharge or reuse pursuant to section 402 or section 307(b) of the Clean Water Act, LAC 33:IX, or applicable regulations governing the management or discharge of wastewater;

c. using oil mist collectors to remove small droplets of used oil from in-plant air to make plant air suitable for continued recirculation;

d. draining or otherwise removing used oil from materials containing or otherwise contaminated with used oil in order to remove excessive oil to the extent possible in accordance with LAC 33:V.4003.C; or

e. filtering, separating, or otherwise reconditioning used oil before burning it in a space heater pursuant to LAC 33:V.4015;

3. generators who burn off-specification used oil for energy recovery, except under the on-site space heater provisions of LAC 33:V.4015, must also comply with LAC 33:V.Chapter 40.Subchapter F;

4. generators who direct shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in LAC 33:V.4005 must also comply with LAC 33:V.Chapter 40.Subchapter G; and

5. generators who dispose of used oil, including the use of used oil as a dust suppressant, must also comply with LAC 33:V.Chapter 40.Subchapter H.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4011. Hazardous Waste Mixing

A. Mixtures of used oil and hazardous waste must be managed in accordance with LAC 33:V.4003.B.

B. The rebuttable presumption for used oil of LAC 33:V.4003.B.1.b applies to used oil managed by generators. Under the rebuttable presumption for used oil of LAC 33:V.4003.B.1.b, used oil containing greater than 1,000 ppm total halogens is presumed to be a hazardous waste and, thus, must be managed as hazardous waste and not as used oil ...nless the presumption is rebutted. However, the rebuttable ...presumption does not apply to certain metalworking oils/fluids and certain used oils removed from refrigeration units.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4013. Used Oil Storage

Used oil generators are subject to all applicable Spill Prevention, Control, and Countermeasures (40 CFR part 112) in addition to the requirements of this Subchapter. Used oil generators are also subject to the Underground Storage Tank (LAC 33:XI) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subchapter.

A. Storage Units. Used oil generators shall not store used oil in units other than tanks, containers, or units subject to regulation under LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27-29, 31-33, 35, 37, and 43.

B. Condition of Units. Containers and aboveground tanks used to store used oil at generator facilities must:

1. be in good condition (no severe rusting, apparent structural defects or deterioration); and

2. not be leaking (no visible leaks).

C. Labels

1. Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

2. Fill pipes used to transfer used oil into underground storage tanks at generator facilities must be labeled or marked clearly with the words "Used Oil."

D. Response to Releases. Upon detection of a release of used oil to the environment which is not subject to the requirements of LAC 33:XI.715 and which has occurred after the effective date of the authorized used oil program, a generator must perform the following cleanup steps:

1. stop the release;

2. contain the released used oil;

3. clean up and properly manage the released used oil and other materials; and

4. if necessary to prevent future releases, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

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§4015. On-site Burning in Space Heaters

Generators may burn used oil in used oil-fired space heaters provided that:

A. the heater burns only used oil that the owner or operator generates or used oil received from household do-it-yourself used oil generators;

B. the heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour; and

C. the combustion gases from the heater are vented to the ambient air.

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§4017. Off-site Shipments

Except as provided in LAC 33:V.4017.A-C, generators must ensure that their used oil is transported only by transporters who have obtained EPA identification numbers.

A. Self-transportation of Small Amounts to Approved Collection Centers. Generators may transport, without an EPA identification number, used oil that is generated at the generator's site and used oil collected from household do-it-yourselfers to a used oil collection center provided that:

1. the generator transports the used oil in a vehicle owned by the generator or owned by an employee of the generator;

2. the generator transports no more than 55 gallons of used oil at any one time; and

3. the generator transports the used oil to a used oil collection center that is registered, licensed, permitted, or recognized to manage used oil.

B. Self-transportation of Small Amounts to Aggregation Points Owned by the Generator. Generators may transport, without an EPA identification number, used oil that is generated at the generator's site to an aggregation point provided that:

1. the generator transports the used oil in a vehicle owned by the generator or owned by an employee of the generator;

2. the generator transports no more than 55 gallons of used oil at any one time; and

3. the generator transports the used oil to an aggregation point that is owned and/or operated by the same generator.

C. Tolling Arrangements. Used oil generators may arrange for used oil to be transported by a transporter who does not have an EPA identification number if the used oil is reclaimed under a contractual agreement according to which reclaimed oil is returned by the processor/re-refiner to the generator for use as a lubricant, cutting oil, or coolant. The contract (known as a "tolling arrangement") must indicate:

1. the type of used oil and the frequency of shipments;

2. that the vehicle used to transport the used oil to the processing/re-refining facility and to deliver recycled used oil back to the generator is owned and operated by the used oil processor/re-refiner; and

3. that reclaimed oil will be returned to the generator.

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Subchapter C. Standards for Used Oil Collection Centers and Aggregation Points

§4019. Do-it-yourselfer Used Oil Collection Centers

A. Applicability. This Section applies to owners or operators of all do-it-yourselfer (DIY) used oil collection centers.

B. DIY Used Oil Collection Center Requirements. Owners or operators of all DIY used oil collection centers must comply with the generator standards in LAC 33:V.Chapter 40.Subchapter B and any applicable requirements set forth in LAC 33:VII.

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§4021. Used Oil Collection Centers

A. Applicability. This Section applies to owners or operators of used oil collection centers. A used oil collection center is any site or facility that accepts/aggregates and stores used oil collected from used oil generators regulated under LAC 33:V.Chapter 40.Subchapter B who bring used oil to the collection center in shipments of no more than 55 gallons under the provisions of LAC 33:V.4017.A. Used oil collection centers may also accept used oil from household do-it-yourselfers.

B. Used Oil Collection Center Requirements. Owners or operators of all used oil collection centers must:

1. comply with the generator standards in LAC 33:V.Chapter 40.Subchapter B and any applicable requirements set forth in LAC 33:VII; and

2. be registered, licensed, permitted, and/or recognized to manage used oil.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4023. Used Oil Aggregation Points Owned by the Generator

A. Applicability. This Section applies to owners or operators of all used oil aggregation points. A used oil aggregation point is any site or facility that accepts, aggregates, and/or stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point from which used oil is transported to the aggregation point in shipments of no more than 55 gallons under the provisions of LAC 33:V.4017.B. Used oil aggregation points may also accept used oil from household do-it-yourselfers.

B. Used Oil Aggregation Point Requirements. Owners or operators of all used oil aggregation points must comply with the generator standards in LAC 33:V.Chapter 40.Subchapter B and any applicable requirements set forth in LAC 33:VII.

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Subchapter D. Standards for Used Oil Transporter and Transfer Facilities

§4025. Applicability

A. General. Except as provided in LAC 33:V.4025.A.1-4, this Subchapter applies to all used oil transporters.

1. This Subchapter does not apply to on-site transportation.

2. This Subchapter does not apply to generators who transport shipments of used oil totalling 55 gallons or less from the generator to a used oil collection center as specified in LAC 33:V.4017.A.

3. This Subchapter does not apply to generators who transport shipments of used oil totalling 55 gallons or less from the generator to a used oil aggregation point owned or operated by the same generator as specified in LAC 33:V.4017.B.

4. This Subchapter does not apply to transportation of used oil from household do-it-yourselfers to a regulated used oil generator, collection center, aggregation point, processor/re-refiner, or burner subject to the requirements of LAC 33:V.Chapter 40. Except as provided in LAC 33:V.4025.A.1-3, this Subchapter does, however, apply to transportation of collected household do-it-yourselfer used oil from regulated used oil generators, collection centers, aggregation points, or other facilities where household do-it-yourselfer used oil is collected.

B. Imports and Exports. Transporters who import used oil from abroad or export used oil outside of the United States are subject to the requirements of this Subchapter from the time the used oil enters and until the time it exits the United States.

C. Trucks Used to Transport Hazardous Waste. Unless trucks previously used to transport hazardous waste are emptied as described in LAC 33:V.109.*Empty Container* prior to transporting used oil, the used oil is considered to have been mixed with the hazardous waste and must be managed as hazardous waste unless, under the provisions of LAC 33:V.4003.B, the hazardous waste/used oil mixture is determined not to be hazardous waste.

D. Other Applicable Provisions. Used oil transporters who conduct the following activities are also subject to other applicable provisions of this Chapter as indicated in LAC 33:V.4025.D.1-5:

1. transporters who generate used oil must also comply with LAC 33:V.Chapter 40.Subchapter B;

2. transporters who process or re-refine used oil, except as provided in LAC 33:V.4027, must also comply with LAC 33:V.Chapter 40.Subchapter E;

3. transporters who burn off-specification used oil for energy recovery must also comply with LAC 33:V.Chapter 40.Subchapter F;

4. transporters who direct shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in LAC 33:V.4005 must also comply with LAC 33:V.Chapter 40.Subchapter G; and

5. transporters who dispose of used oil must also comply with LAC 33:V.Chapter 40.Subchapter H.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4027. Restrictions on Transporters Who Are Not Also Processors or Re-refiners

A. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation. However, except as provided in LAC 33:V.4027.B, used oil transporters may not process used oil unless they also comply with the requirements for processors/re-refiners in LAC 33:V.Chapter 40.Subchapter E.

B. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil-derived products unless they also comply with the processor/re-refiner requirements in LAC 33:V.Chapter 40.Subchapter E.

~~C. Transporters of used oil that is removed from oil-bearing electrical transformers and turbines and filtered by the transporter or at a transfer facility prior to being returned to its original use are not subject to the processor/re-refiner requirements in LAC 33:V.Chapter 40.Subchapter E.~~

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§4029. Notification

A. Identification Numbers. Used oil transporters who have not previously complied with the notification requirements of LAC 33:V.Chapter 40 must comply with these requirements and obtain an EPA identification number.

B. Mechanics of Notification. A used oil transporter who has not received an EPA identification number may obtain one by notifying the administrative authority of their used oil activity by submitting a completed Louisiana Notification of Hazardous Waste Activity Form (HW-1).

C. Upon promulgation of this Chapter, used oil transporters and transfer facilities who have previously notified must renotify the administrative authority of used oil activity.

D. Used oil transporters and transfer facilities must notify the administrative authority within seven business days if any of the information submitted in the application for the identification number changes.

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§4031. Used Oil Transportation

A. Deliveries. A used oil transporter must deliver all used oil received to:

1. another used oil transporter, provided that the transporter has obtained an EPA identification number;

2. a used oil processing/re-refining facility which has obtained an EPA identification number;

3. an off-specification used oil burner facility which has obtained an EPA identification number; or

4. an on-specification used oil burner facility.

B. DOT Requirements. Used oil transporters must comply with all applicable requirements under the U.S. Department of Transportation regulations in 49 CFR parts 171-180. Persons transporting used oil that meets the definition of a hazardous material in 49 CFR 171.8 must comply with all applicable regulations in 49 CFR parts 171-180.

C. Used Oil Discharges

1. In the event of a discharge of used oil during transportation, the transporter must take appropriate immediate action to protect human health and the environment (e.g., notify local authorities, dike the discharge area, etc.).

2. If a discharge of used oil occurs during transportation and an official acting within the scope of official responsibilities determines that immediate removal of the used oil is necessary to protect human health or the environment, that official may authorize the removal of the used oil by transporters who do not have EPA identification numbers.

3. An air, rail, highway, or water transporter who has discharged used oil must:

a. give notice, if required by 49 CFR 171.15, to the National Response Center (800/424-8802 or 202/426-2675); and

b. report in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590.

4. A water transporter who has discharged used oil must give notice as required by 33 CFR 153.203.

5. A transporter must clean up any used oil discharge that occurs during transportation or take such action as may be required or approved by federal, state, or local officials so that the used oil discharge no longer presents a hazard to human health or the environment.

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§4033. Rebuttable Presumption for Used Oil

A. To ensure that used oil is not a hazardous waste under the rebuttable presumption of LAC 33:V.4003.B.1.b, the used oil transporter must determine whether the total halogen content of used oil being transported or stored at a transfer facility is above or below 1,000 ppm.

B. The transporter must make this determination by:

1. testing the used oil; or

2. applying knowledge of the halogen content of the used oil in light of the materials or processes used.

C. If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste which is listed in LAC 33:V.4901. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from LAC 33:V.4901.Appendix A to show that the used oil does not contain significant concentrations of halogenated hazardous constituents which are listed in LAC 33:V.3105.Table 1).

1. The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins if they are processed, through a tolling arrangement, as described in LAC 33:V.4017.C, to reclaim metalworking oils/

ds. The presumption does apply to metalworking oils/ s if such oils/fluids are recycled in any other manner or disposed.

2. The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units if the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

D. Record Retention. Records of analyses conducted or information used to comply with LAC 33:V.4033.A-C must be maintained by the transporter for at least three years.

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§4035. Used Oil Storage at Transfer Facilities

Used oil transporters are subject to all applicable spill prevention, control, and countermeasures (40 CFR Part 112) in addition to the requirements of this Subchapter. Used oil transporters are also subject to the Underground Storage Tanks (LAC 33:XI) standards for used oil stored in underground nks, whether or not the used oil exhibits any characteristics hazardous waste, in addition to the requirements of this Subchapter. Used oil transfer facility status is contingent upon approval of the administrative authority.

A. Applicability. This Section applies to used oil transfer facilities. Used oil transfer facilities are transportation-related facilities, including loading docks, parking areas, storage areas, and other areas, where shipments of used oil are held for more than 24 hours during the normal course of transportation and not longer than 35 days. Transfer facilities that store used oil for more than 35 days are subject to regulation under LAC 33:V.Chapter 40.Subchapter E.

B. Storage Units. Owners or operators of used oil transfer facilities may not store used oil in units other than tanks, containers, or units subject to regulation under LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27-29, 31-33, 35, 37, and 43.

C. Condition of Units. Containers and aboveground tanks used to store used oil at transfer facilities must:

1. be in good condition (no severe rusting, apparent structural defects or deterioration); and

2. not be leaking (no visible leaks).

D. Secondary Containment for Containers. Containers sed to store used oil at transfer facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dikes, berms, or retaining walls; or

c. an equivalent secondary containment system.

2. The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil which is released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

E. Secondary Containment for Existing Aboveground Tanks. Existing aboveground tanks used to store used oil at transfer facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or

c. an equivalent secondary containment system.

2. The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil which is released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

F. Secondary Containment for New Aboveground Tanks. New aboveground tanks used to store used oil at transfer facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

c. an equivalent secondary containment system.

2. The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil which is released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

G. Labels

1. Containers and aboveground tanks used to store used oil at transfer facilities must be labeled or marked clearly with the words "Used Oil."

2. Fill pipes used to transfer used oil into underground storage tanks at transfer facilities must be labeled or marked clearly with the words "Used Oil."

H. Response to Releases. Upon detection of a release of used oil to the environment which is not subject to the

requirements of LAC 33:XI.715 and which occurred after the effective date of the authorized used oil program, the owner/operator of a transfer facility must perform the following cleanup steps:

1. stop the release;

2. contain the released used oil;

3. clean up and manage properly the released used oil and other materials; and

4. if necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

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§4037. Tracking

A. Acceptance. Used oil transporters must keep a record of each used oil shipment accepted for transport. This record shall be in the form of a used oil reuse/recycle manifest obtained from the department. Records for each shipment must include:

1. the name and address of the generator, transporter, or processor/re-refiner who provided the used oil for transport;

2. the EPA identification number (if applicable) of the generator, transporter, or processor/re-refiner who provided the used oil for transport;

3. the quantity of used oil accepted;

4. the date of acceptance; and

5. except as provided in LAC 33:V.4037.A.5.b, the signature, dated upon receipt of the used oil, of a representative of the generator, transporter, or processor/re-refiner who provided the used oil for transport. Intermediate rail transporters are not required to sign the record of acceptance.

B. Deliveries. Used oil transporters must keep a record of each shipment of used oil that is delivered to another used oil transporter or to a used oil burner, processor/re-refiner, or disposal facility. This record shall be in the form of a used oil reuse/recycle manifest obtained from the department. Records of each delivery must include:

1. the name and address of the receiving facility or transporter;

2. the EPA identification number of the receiving facility or transporter;

3. the quantity of used oil delivered;

4. the date of delivery;

5. except as provided in LAC 33:V.4037.A.5.b, the signature, dated upon receipt of the used oil, of a representative of the receiving facility or transporter. Intermediate rail transporters are not required to sign the record of delivery.

C. Exports of Used Oil. Used oil transporters must maintain the records described in LAC 33:V.4037.B.1-4 for each shipment of used oil exported to any foreign country.

D. Record Retention. The records described in LAC 33:V.4037.A-C must be maintained for at least three years.

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§4039. Management of Residues

Transporters who generate residues from the storage or transport of used oil must manage the residues as specified in LAC 33:V.4003.E.

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Subchapter E. Standards for Used Oil Processors and Re-Refiners

§4041. Applicability

A. The requirements of this Subchapter apply to owners and operators of facilities that process used oil. The requirements of this Subchapter do not apply to:

1. transporters that conduct incidental processing operations that occur during the normal course of transportation as provided in LAC 33:V.4027; or

2. burners that conduct incidental processing operations that occur during the normal course of used oil management prior to burning as provided in LAC 33:V.4063.B.

B. Other Applicable Provisions. Used oil processors/re-refiners who conduct the following activities are also subject to the requirements of other applicable provisions of this Chapter as indicated in LAC 33:V.4041.B.1-5:

1. processors/re-refiners who generate used oil must also comply with LAC 33:V.Chapter 40.Subchapter B;

2. processors/re-refiners who transport used oil must also comply with LAC 33:V.Chapter 40.Subchapter D;

3. except as provided in LAC 33:V.4041.B.3.a and b, processors/re-refiners who burn off-specification used oil for energy recovery must also comply with LAC 33:V.Chapter 40.Subchapter F. Processors/re-refiners burning used oil for energy recovery under the following conditions are not subject to LAC 33:V.Chapter 40.Subchapter F:

a. the used oil is burned in an on-site space heater that ets the requirements of LAC 33:V.4015; or

b. the used oil is burned for purposes of processing used oil which is considered burning incidentally to used oil processing;

4. processors/re-refiners who direct shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in LAC 33:V.4005 must also comply with LAC 33:V.Chapter 40.Subchapter G; and

5. processors/re-refiners who dispose of used oil must also comply with LAC 33:V.Chapter 40.Subchapter H.

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§4043. Notification

A. Identification Numbers. Used oil processors and re-refiners who have not previously complied with the notification requirements of LAC 33:V.Chapter 40 must comply with these requirements and obtain an EPA identification number.

B. Mechanics of Notification. A used oil processor or re-refiner who has not received an EPA identification number may obtain one by notifying the administrative authority of their used oil activity by submitting a completed Louisiana Notification of Hazardous Waste Activity Form (HW-1).

C. Upon promulgation of this chapter, used oil processors and re-refiners who have previously notified must renotify the administrative authority of used oil activity.

D. Used oil processors and re-refiners must notify the administrative authority within seven business days if any of the information submitted in the application for the identification number changes.

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§4045. General Facility Standards

A. Preparedness and Prevention. Owners and operators of used oil processing and re-refining facilities must comply with the following requirements:

1. Maintenance and Operation of Facility. Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned release of used oil to air, soil, or surface water which could threaten human health or the environment;

2. Required Equipment. All facilities must be equipped with the following, unless none of the hazards posed by used oil handled at the facility could require a particular kind of equipment specified in LAC 33:V.4045.A.2.a-d:

a. an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

b. a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or emergency response teams;

c. portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

d. water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems;

3. Testing and Maintenance of Equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to ensure its proper operation in time of emergency;

4. Access to Communications or Alarm System

a. Whenever used oil is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in LAC 33:V.4045.A.2;

b. If there is ever just one employee on the premises while the facility is operating, the employee must have immediate access to a communication device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required in LAC 33:V.4045.A.2;

5. Required Aisle Space. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes; and

6. Arrangements with Local Authorities

a. The owner or operator must attempt to make the following arrangements, as appropriate for the type of used oil handled at the facility and the potential need for the services of these organizations:

i. to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of used oil handled at the facility and associated

hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

ii. to designate primary emergency authority to a specific police and a specific fire department for those instances when multiple departments might respond to an emergency and to make further agreements with any other departments to provide support to the primary emergency authority;

iii. to make agreements with emergency response teams, emergency response contractors, and equipment suppliers; and

iv. to familiarize local hospitals with the properties of used oil handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility;

b. Where local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

B. Contingency Plan and Emergency Procedures. Owners and operators of used oil processing and re-refining facilities must comply with the following requirements:

1. Purpose and Implementation of Contingency Plan

a. Each owner or operator must have a contingency plan for the facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned release of used oil to air, soil, or surface water;

b. The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of used oil which could threaten human health or the environment;

2. Content of Contingency Plan

a. The contingency plan must describe the actions facility personnel must take to comply with LAC 33:V.4045.B.1 and 6 in response to fires, explosions, or any unplanned release of used oil to air, soil, or surface water at the facility;

b. If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR chapter 1 part 112, or 40 CFR chapter V part 1510, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate used oil management provisions that are sufficient to comply with the requirements of this Chapter;

c. The plan must describe arrangements agreed to by local police departments, fire departments, emergency response teams, emergency response contractors, equipment suppliers, and hospitals to coordinate emergency services in accordance with LAC 33:V.4045.A.6;

d. The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator (see LAC 33:V.4045.B.5) and this list must be kept up-to-date. Where more than one person is listed, one must be named as primary emergency coordinator and the others must be listed in the order in which they will assume responsibility as alternates;

e. The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, internal and external communications and alarm systems, and decontamination equipment), where this equipment may be required. This list must be kept up-to-date. In addition, the plan must include the location and a physical description of each item on the list and a brief outline of its capabilities;

f. The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of used oil or fires);

3. Copies of Contingency Plan. A copy of the contingency plan and all revisions to the plan must be:

a. maintained at the facility; and

b. submitted to all local police departments, fire departments, emergency response teams, and hospitals that may be called upon to provide emergency services;

4. Amendment of Contingency Plan. The contingency plan must be reviewed and immediately amended, if necessary, whenever:

a. applicable regulations are revised;

b. the plan fails in an emergency;

c. the facility changes its design, construction, operation, maintenance, or other circumstances in such a way that materially increases the potential for fires, explosions, or releases of used oil or changes the response necessary in an emergency;

d. the list of emergency coordinators changes; or

e. the list of emergency equipment changes;

5. Emergency Coordinator. At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristic of used oil handled, the location of all records within the facility, and facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

Note: The emergency coordinator's responsibilities are ...e fully spelled out in LAC 33:V.4045.B.6. Applicable ...ponsibilities for the emergency coordinator vary, depending on factors such as the type and variety of used oil handled by the facility and the type and complexity of the facility; and

6. Emergency Procedures

a. Whenever there is an imminent or actual emergency situation, the emergency coordinator (or the designee when the emergency coordinator is on call) must immediately:

i. activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

ii. notify appropriate local agencies that have designated response roles, if their help is needed.

b. Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and the real extent of any released materials. He may do this by observation, review of facility records of manifests and, if necessary, chemical analyses.

c. Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the ...lease, fire, or explosion (e.g., the effects of any toxic, ...itating, or asphyxiating gases that are generated or the effects of any hazardous surface water run-offs from water containing chemical agents used to control fire and heat-induced explosions).

d. If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, then he must report his findings as follows:

i. if his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

ii. he must immediately notify the state official designated as the on-scene coordinator for the geographical area. The report must include:

(a). name and telephone number of reporter;

(b). name and address of facility;

(c). time and type of incident (e.g., release, fire);

(d). name and quantity of material(s) involved, to the extent known;

(e). the extent of injuries, if any; and

(f). the possible hazards to human health or the environment outside the facility.

e. During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other used oil or hazardous waste at the facility. These measures must include, where applicable, stopping processes and operation, collecting and containing released used oil, and removing or isolating containers.

f. If the facility stops operation in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

g. Immediately after an emergency, the emergency coordinator must provide for recycling, storing, or disposing of recovered used oil, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

h. The emergency coordinator must ensure that, in the affected area(s) of the facility:

i. no waste or used oil that may be incompatible with the released material is recycled, treated, stored, or disposed of until cleanup procedures are completed;

ii. all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed; and

iii. the owner or operator must notify the administrative authority and appropriate local authorities that the facility is in compliance with LAC 33:V.4045.B.h.i and ii before operations are resumed in the affected area(s) of the facility.

i. The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report about the incident to the administrative authority. The report must include:

i. name, address, and telephone number of the owner or operator;

ii. name, address, and telephone number of the facility;

iii. date, time, and type of incident (e.g., fire, explosion);

iv. name and quantity of material(s) involved;

v. the extent of injuries, if any;

vi. an assessment of actual or potential hazards to human health or the environment, where this is applicable; and

vii. estimated quantity and disposition of recovered material that resulted from the incident.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4047. Rebuttable Presumption for Used Oil

A. To ensure that used oil managed at a processing/re-refining facility is not hazardous waste under the rebuttable presumption of LAC 33:V.4003.B.1.b, the owner or operator of a used oil processing/re-refining facility must determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.

B. The owner or operator must make this determination by:

1. testing the used oil; or

2. applying knowledge of the halogen content of the used oil in light of the materials or processes used.

C. If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste which is listed in LAC 33:V.4901. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from LAC 33:V.4901.Appendix A to show that the used oil does not contain significant concentrations of halogenated hazardous constituents which are listed in LAC 33:V.3105.Table 1).

1. The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed.

2. The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4049. Used Oil Management

Used oil processors/re-refiners are subject to all applicable Spill Prevention, Control, and Countermeasures (40 CFR part 112) in addition to the requirements of this Subchapter. Used oil processors/re-refiners are also subject to the Underground Storage Tank (LAC 33:XI) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subchapter.

A. Management Units. Used oil processors/re-refiners may not store used oil in units other than tanks, containers, or units subject to regulation under LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27-29, 31-33, 35, 37, and 43.

B. Condition of Units. Containers and aboveground tanks used to store or process used oil at processing and re-refining facilities must:

1. be in good condition (no severe rusting, apparent structural defects or deterioration); and

2. not be leaking (no visible leaks).

C. Secondary Containment for Containers. Containers used to store or process used oil at processing and re-refining facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

c. an equivalent secondary containment system.

2. The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

D. Secondary Containment for Existing Aboveground Tanks. Existing aboveground tanks used to store or process used oil at processing and re-refining facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or

c. an equivalent secondary containment system.

2. The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

E. Secondary Containment for New Aboveground Tanks. New aboveground tanks used to store or process used oil at processing and re-refining facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

c. an equivalent secondary containment system.

2. The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

F. Labels

1. Containers and aboveground tanks used to store or process used oil at processing and re-refining facilities must be labeled or marked clearly with the words "Used Oil."

2. Fill pipes used to transfer used oil into underground storage tanks at processing and re-refining facilities must be labeled or marked clearly with the words "Used Oil."

G. Response to Releases. Upon detection of a release of used oil to the environment not subject to the requirements of LAC 33:XI.715 which has occurred after the effective date of the authorized used oil program, an owner/operator must perform the following cleanup steps:

1. stop the release;

2. contain the released used oil;

3. clean up and manage properly the released used oil and other materials; and

4. if necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

H. Closure

1. Aboveground Tanks. Owners and operators who store or process used oil in aboveground tanks must comply with the following requirements:

a. at closure of a tank system, the owner or operator must remove or decontaminate used oil residues in tanks, contaminated containment system components, contaminated soils, and structures and equipment contaminated with used oil, and manage them as hazardous waste, unless the materials are not hazardous waste under LAC 33:V.Subpart 1; and

b. if the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in LAC 33:V.4049.H.1.a, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to hazardous waste landfills (LAC 33:V.4501).

2. Containers. Owners and operators who store used oil in containers must comply with the following requirements:

a. at closure, containers holding used oils or residues of used oil must be removed from the site; and

b. the owner or operator must remove or decontaminate used oil residues, contaminated containment system components, contaminated soils, and structures and equipment contaminated with used oil and manage them as hazardous waste, unless the materials are not hazardous waste under LAC 33:V.Chapters 1, 31, 41, and 49.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4051. Analysis Plan

Owners or operators of used oil processing and re-refining facilities must develop and follow a written analysis plan describing the procedures that will be used to comply with the analysis requirements of LAC 33:V.4047 and, if applicable, LAC 33:V.4081. The owner or operator must keep the plan at the facility.

A. Rebuttable Presumption for Used Oil in LAC 33:V.4047. At minimum, the plan must specify the following:

1. whether sample analyses or knowledge of the halogen content of the used oil will be used to make this determination;

2. if sample analyses are used to make this determination:

a. the sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:

i. one of the sampling methods in LAC 33:V.4901.Appendix D; or

ii. a method shown to be equivalent under LAC 33:V.105.H and I;

b. the frequency of sampling to be performed and whether the analysis will be performed on-site or off-site; and

c. the methods used to analyze used oil for the parameters specified in LAC 33:V.4047; and

3. the type of information that will be used to determine the halogen content of the used oil.

B. On-specification Used Oil Fuel in LAC 33:V.4081. At a minimum, the plan must specify the following if LAC 33:V.4081 is applicable:

1. whether sample analyses or other information will be used to make this determination;

2. if sample analyses are used to make this determination:

a. the sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:

i. one of the sampling methods in LAC 33:V.4901.Appendix D; or

ii. a method shown to be equivalent under LAC 33:V.105.H and I;

b. whether used oil will be sampled and analyzed prior to or after any processing/re-refining;

c. the frequency of sampling to be performed and whether the analysis will be performed on-site or off-site; and

d. the methods used to analyze used oil for the parameters specified in LAC 33:V.4081; and

3. the type of information that will be used to make the on-specification used oil fuel determination.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4053. Tracking

A. Acceptance. Used oil processors/re-refiners must keep a record of each used oil shipment accepted for processing/re-refining. These records shall take the form of a used oil reuse/recycle manifest obtained from the department. Records for each shipment must include the following information:

1. the name and address of the transporter who delivered the used oil to the processor/re-refiner;

2. the name and address of the generator or processor/re-refiner from whom the used oil was sent for processing/re-refining;

3. the EPA identification number of the transporter who delivered the used oil to the processor/re-refiner;

4. the EPA identification number (if applicable) of the generator or processor/re-refiner from whom the used oil was sent for processing/re-refining;

5. the quantity of used oil accepted; and

6. the date of acceptance.

B. Delivery. Used oil processor/re-refiners must keep a record of each shipment of used oil that is shipped to a used oil burner, processor/re-refiner, or disposal facility. These records shall take the form of a used oil reuse/recycle manifest obtained from the department. Records for each shipment must include the following information:

1. the name and address of the transporter who delivers the used oil to the burner, processor/re-refiner, or disposal facility;

2. the name and address of the burner, processor/re-refiner, or disposal facility who will receive the used oil;

3. the EPA identification number of the transporter who delivers the used oil to the burner, processor/re-refiner, or disposal facility;

4. the EPA identification number of the burner, processor/re-refiner, or disposal facility who will receive the used oil;

5. the quantity of used oil shipped; and

6. the date of shipment.

C. Record Retention. The records described in LAC 33:V.4053.A and B must be maintained for at least three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), LR 21:267 (March 1995).

§4055. Operating Record and Reporting

A. Operating Record

1. The owner or operator must keep a written operating record at the facility.

2. The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

a. records and results of used oil analyses performed as described in the analysis plan required under LAC 33:V.4051; and

b. summary reports and details of all incidents that require implementation of the contingency plan as specified in LAC 33:V.4045.B.

B. Reporting. A used oil processor/re-refiner must report to the administrative authority, in the form of a letter, on a biennial basis (by March 1 of each even-numbered year), the following information concerning used oil activities during the previous calendar year:

1. the EPA identification number, name, and address of the processor/re-refiner;

2. the calendar year covered by the report; and

3. the quantities of used oil accepted for processing/re-refining and the manner in which the used oil is processed/re-refined, including the specific processes employed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4057. Off-site Shipments of Used Oil

Used oil processors/re-refiners who initiate shipments of used oil off-site must ship this oil using a used oil transporter who has obtained an EPA identification number.

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§4059. Management of Residues

Owners and operators who generate residues from the storage, processing, or re-refining of used oil must manage the residues as specified in LAC 33:V.4003.E.

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Subchapter F. Standards for Used Oil Burners Which Burn Off-specification Used Oil for Energy Recovery

§4061. Applicability

A. General. The requirements of this Subchapter apply to used oil burners except as specified in LAC 33:V.4061.A.1 and 2. A used oil burner is a facility where used oil not meeting the specification requirements in LAC 33:V.4005 is burned for energy recovery in devices identified in LAC 33:V.4063.A. Facilities burning used oil for energy recovery under the following conditions are not subject to LAC 33:V.Chapter 40.Subchapter F:

1. the used oil is burned by the generator in an on-site space heater under the provisions of LAC 33:V.4015; or

2. the used oil is burned by a processor/re-refiner for purposes of processing used oil, which is considered burning incidentally to used oil processing.

B. Other Applicable Provisions. Used oil burners who conduct the following activities are also subject to the requirements of other applicable provisions of this Chapter as indicated below:

1. burners who generate used oil must also comply with LAC 33:V.Chapter 40.Subchapter B;

2. burners who transport used oil must also comply with LAC 33:V.Chapter 40.Subchapter D;

3. burners who process or re-refine used oil must also comply with LAC 33:V.Chapter 40.Subchapter E, except as provided in LAC 33:V.4063.B;

4. burners who direct shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in LAC 33:V.4005 must also comply with LAC 33:V.Chapter 40.Subchapter G; and

5. burners who dispose of used oil must comply with Chapter 40.Subchapter H.

C. Specification Fuel. This Subchapter does not apply to persons burning used oil that meets the used oil fuel specification of LAC 33:V.4005, provided that the burner complies with the requirements of LAC 33:V.Chapter 40.Subchapter G.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4063. Restrictions on Burning

A. Off-specification used oil fuel may be burned for energy recovery only in the following devices:

1. industrial furnaces identified in LAC 33:V.4003;

2. boilers, as defined in LAC 33:V.4003, that are identified as follows:

a. industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes;

b. utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale; or

c. used oil-fired space heaters provided that the burner meets the provisions of LAC 33:V.4015; or

3. hazardous waste incinerators subject to regulation under LAC 33:V.Chapter 31 or LAC 33:V.Chapter 43.Subchapter N.

B. With the following exception, used oil burners may not process used oil unless they also comply with the requirements of LAC 33:V.Chapter 40.Subchapter E. Used oil burners may aggregate off-specification used oil with virgin oil or on-specification used oil for purposes of burning, but may not aggregate for purposes of producing on-specification used oil.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4065. Notification

A. Identification Numbers. Used oil burners which have not previously complied with the notification requirements of this Chapter must comply with these requirements and obtain an EPA identification number.

B. Mechanics of Notification. A used oil burner who has not received an EPA identification number may obtain one by notifying the administrative authority of their used oil activity by submitting a completed Louisiana Notification of Hazardous Waste Activity Form (HW-1).

C. Upon promulgation of this Chapter, used oil burners which burn off-specification used oil for energy recovery and have previously notified must renotify the administrative authority of this used oil activity.

D. A used oil burner must notify the administrative authority within seven business days if any of the information

submitted in the application for the identification number changes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), LR 21:267 (March 1995).

§4067. Rebuttable Presumption for Used Oil

A. To ensure that used oil managed at a used oil burner facility is not hazardous waste under the rebuttable presumption of LAC 33:V.4003.B.1.b, a used oil burner must determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.

B. The used oil burner must determine if the used oil contains above or below 1,000 ppm total halogens by:

1. testing the used oil;

2. applying knowledge of the halogen content of the used oil in light of the materials or processes used; or

3. if the used oil has been received from a processor/refiner subject to regulation under LAC 33:V.Chapter 40.Subchapter E, using information provided by the processor/re-refiner.

C. If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste which is listed in LAC 33:V.4901. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from LAC 33:V.4901.Appendix A to show that the used oil does not contain significant concentrations of halogenated hazardous constituents which are listed in LAC 33:V.3105.Table 1).

1. The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins if they are processed, through a tolling arrangement as described in LAC 33:V.4017.C to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed.

2. The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

D. Record Retention. Records of analyses conducted or information used to comply with LAC 33:V.4067.A-C must be maintained by the burner for at least three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4069. Used Oil Storage

Used oil burners are subject to all applicable Spill Prevention, Control, and Countermeasures (40 CFR part 112) in addition to the requirements of this Subchapter. Used oil burners are also subject to the Underground Storage Tank (LAC 33:XI) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subchapter.

A. Storage Units. Used oil burners may not store used oil in units other than tanks, containers, or units subject to regulation under LAC 33:V.Chapters 9, 15, 17, 19, 21, 23, 25, 27-29, 31-33, 35, 37, and 43.

B. Condition of Units. Containers and aboveground tanks used to store oil at burner facilities must:

1. be in good condition (no severe rusting, apparent structural defects or deterioration); and

2. not be leaking (no visible leaks).

C. Secondary Containment for Containers. Containers used to store used oil at burner facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dike, berm, or retaining wall.

2. The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

D. Secondary Containment for Existing Aboveground Tanks. Existing aboveground tanks used to store used oil at burner facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or

c. an equivalent secondary containment system.

2. The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from

migrating out of the system to the soil, groundwater, or face water.

E. Secondary Containment For New Aboveground Tanks. New aboveground tanks used to store used oil at burner facilities must be equipped with a secondary containment system.

1. The secondary containment system must consist of, at a minimum:

a. dikes, berms, or retaining walls; and

b. a floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

c. an equivalent secondary containment system.

2. The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

F. Labels

1. Containers and aboveground tanks used to store used oil at burner facilities must be labeled or marked clearly with the words "Used Oil."

2. Fill pipes used to transfer used oil into underground orage tanks at burner facilities must be labeled or marked clearly with the words "Used Oil."

G. Response to Releases. Upon detection of a release of used oil to the environment not subject to the requirements of LAC 33:XI.715 which has occurred after the effective date of the authorized used oil program for the state in which the release is located, a burner must perform the following cleanup steps:

1. stop the release;

2. contain the released used oil;

3. clean up and manage properly the released used oil and other materials; and

4. if necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4071. Tracking

A. Acceptance. Used oil burners must keep a record of each used oil shipment accepted for burning. These records shall take the form of a used oil reuse/recycle manifest obtained from the department. Records for each shipment must include the following information:

1. the name and address of the transporter who delivered the used oil to the burner;

2. the name and address of the generator or processor/re-refiner from whom the used oil was sent to the burner;

3. the EPA identification number of the transporter who delivered the used oil to the burner;

4. the EPA identification number (if applicable) of the generator or processor/re-refiner from whom the used oil was sent to the burner;

5. the quantity of used oil accepted; and

6. the date of acceptance.

B. Record Retention. The records described in LAC 33:V.4071.A must be maintained for at least three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), LR 21:267 (March 1995).

§4073. Notices

A. Certification. Before a burner accepts the first shipment of off-specification used oil fuel from a generator, transporter, or processor/re-refiner, the burner must provide to the generator, transporter, or processor/re-refiner a one-time written and signed notice certifying that:

1. the burner has notified the administrative authority stating the location and general description of his used oil management activities; and

2. the burner will burn the used oil only in an industrial furnace or boiler identified in LAC 33:V.4063.A.

B. Certification Retention. The certification described in LAC 33:V.4073.A must be maintained for three years from the date the burner last receives shipment of off-specification used oil from that generator, transporter, or processor/re-refiner.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4075. Management of Residues

Burners who generate residues from the storage or burning of used oil must manage the residues as specified in LAC 33:V.4003.E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

Subchapter G. Standards for Used Oil Fuel Marketers

§4077. Applicability

A. Any person who conducts either of the following activities is subject to the requirements of this Subchapter:

1. directs a shipment of off-specification used oil from their facility to a used oil burner; or

2. first claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in LAC 33:V.4005.

B. The following persons are not marketers subject to this Subchapter:

1. used oil generators and transporters who transport used oil received only from generators, unless the generator or transporter directs a shipment of off-specification used oil from their facility to a used oil burner. Processors/re-refiners who burn some used oil fuel for purposes of processing are considered to be burning incidentally to processing. Thus, generators and transporters who direct shipments of off-specification used oil to processor/re-refiners who incidently burn used oil are not marketers subject to this Subchapter; and

2. persons who direct shipments of on-specification used oil and who are not the first person to claim the oil meets the used oil fuel specifications of LAC 33:V.4005.

C. Any person subject to the requirements of this Subchapter must also comply with one of the following:

1. LAC 33:V.Chapter 40.Subchapter B;

2. LAC 33:V.Chapter 40.Subchapter D;

3. LAC 33:V.Chapter 40.Subchapter E; or

4. LAC 33:V.Chapter 40.Subchapter F.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4079. Prohibitions

A used oil fuel marketer may initiate a shipment of off-specification used oil only to a used oil burner who:

A. has an EPA identification number; and

B. burns the used oil in an industrial furnace or boiler identified in LAC 33:V.4063.A.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4081. On-specification Used Oil Fuel

A. Analysis of Used Oil Fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of LAC 33:V.4005 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.

B. Record Retention. A generator, transporter, processor/re-refiner, or burner who first claims that used oil that is to be burned for energy recovery meets the specifications for used oil fuel under LAC 33:V.4005, must keep copies of analyses of the used oil (or other information used to make the determination) for three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4083. Notification

A. Identification Numbers. A used oil fuel marketer subject to the requirements of this Subchapter who has not previously complied with the notification requirements of this Chapter must comply with these requirements and obtain an EPA identification number.

B. A marketer who has not received an EPA identification number may obtain one by notifying the administrative authority of their used oil activity by submitting a completed Louisiana Notification of Hazardous Waste Activity Form (HW-1) EPA Form 8700-12.

C. Upon promulgation of this Chapter, used oil fuel marketers who have previously notified must renotify the administrative authority of used oil activity.

D. A generator must notify the administrative authority within seven days if any of the information submitted in the application for the identification number changes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4085. Tracking

A. Off-specification Used Oil Delivery. Any used oil marketer who directs a shipment of off-specification used oil to a burner must keep a record of each shipment of used oil to that used oil burner. These records shall take the form of a used oil reuse/recycle manifest obtained from the department. Records for each shipment must include the following information:

1. the name and address of the transporter who delivers the used oil to the burner;

2. the name and address of the burner who receives the d oil;

3. the EPA identification number of the transporter who delivers the used oil to the burner;

4. the EPA identification number of the burner;

5. the quantity of used oil shipped; and

6. the date of shipment.

B. On-specification Used Oil Delivery. A generator, transporter, processor/re-refiner, or burner who first claims the used oil that is to be burned for energy recovery meets the fuel specifications under LAC 33:V.4005 must keep a record of each shipment of used oil to an on-specification used oil burner. This record shall be in the form of a used oil reuse/recycle manifest obtained from the department. Records for each shipment must include the following information:

1. the name and address of the facility receiving the shipment;

2. the quantity of used oil fuel delivered;

3. the date of shipment or delivery; and

4. a cross-reference to the record of used oil analysis or other information used to make the determination that the oil eets the specification as required under LAC 33:V.4081.A.

C. Record Retention. The records described in LAC 33:V.4085.A and B must be maintained for at least three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), LR 21:267 (March 1995).

§4087. Notices

A. Certification. Before a used oil generator, transporter, or processor/re-refiner directs the first shipment of off-specification used oil fuel to a burner, he must obtain a one-time notice written and signed by the burner certifying that:

1. the burner has notified the administrative authority stating the location and general description of his used oil management activities; and

2. the burner will burn the off-specification used oil only in an industrial furnace or boiler identified in LAC 33:V.4063.A.

B. Certification Retention. The certification described in AC 33:V.4087.A must be maintained for three years from date the last shipment of off-specification used oil is shipped to the burner.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

Subchapter H. Standards for Disposal of Used Oil and Use as a Dust Suppressant

§4089. Applicability

The requirements of this Subchapter apply to all used oils that cannot be recycled and are therefore being disposed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4091. Disposal

A. Disposal of Hazardous Used Oils. Used oils that are identified as a hazardous waste and cannot be recycled in accordance with this Chapter must be managed in accordance with the hazardous waste management requirements of LAC 33:V.Subpart 1.

B. Disposal of Nonhazardous Used Oils. Used oils that are not hazardous wastes and cannot be recycled under this Chapter must be disposed in accordance with the requirements of LAC 33:VII.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4093. Use as a Dust Suppressant

The use of used oil as a dust suppressant is prohibited.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), LR 21:267 (March 1995).

Chapter 41. Recyclable Materials

§4101. Applicability

A. Hazardous wastes that are recycled will be known as "recyclable materials."

B. A recyclable material is subject to the regulations in this Chapter and other sections as specifically referred to herein.

C. A material which is used for a purpose for which it is manufactured or produced is not a recyclable material for purposes of this Chapter.

D. Upon transport of a recyclable material from the generation site and out of the direct control of the generator, the owner of the recyclable material shall notify the administrative authority within 24 hours of any determination

that the material shall not be used, reused, or recycled. Following such a determination the recyclable material is no longer considered a recyclable material and is fully subject to all requirements of these regulations.

E. Upon determination by the generator that any material held for use, reuse, or recycle is to be discarded, such material shall no longer be considered a recyclable material and shall be handled as otherwise required in these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985).

§4103. Notification

All operators of facilities which generate, transport, treat, store, or utilize or recycle a recyclable material that have not previously notified shall notify the department within 90 days of promulgation of these rules and regulations that they are engaged in activities involving a recyclable material as defined in LAC 33:V.109. For notification, the operator may obtain notification forms from the department.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985).

§4105. Requirements for Recyclable Material

Recyclable materials are subject to additional regulation as follows:

A. Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of Subchapter A (Group I) of this Chapter except for the materials listed in Subsections B and C of this Section. Hazardous wastes that are recycled will be known as "recyclable materials."

B. The following recyclable materials (Group II) are subject to the requirements of Subchapter B of this Chapter and all applicable provisions as provided in Subchapter B of this Chapter:

1. industrial ethyl alcohol that is reclaimed ~~except that,~~ unless otherwise provided in an international agreement:

~~a. a person initiating a shipment for reclamation in a~~ foreign country, and any intermediary arranging for the shipment, must comply with the requirements applicable to a primary exporter in LAC 33:V.1113.D, 1113.G, and 1113.H, export such materials only upon consent of the receiving country and in conformance with the Louisiana State Acknowledgment of Consent as defined in LAC 33:V.1113, ~~and provide a copy of the Louisiana State Acknowledgment of Consent to the shipment to the transporter transporting the~~ shipment for export;

b. transporters transporting a shipment for export may not accept a shipment if he knows the shipment does not conform to the Louisiana State Acknowledgment of Consent, must ensure that a copy of the Louisiana State Acknowledgment of Consent accompanies the shipment and must ensure that it is delivered to the facility designated by the ~~person initiating the shipment.~~

2. used batteries (or used battery cells) returned to a battery manufacturer for regeneration;

~~3. [Reserved]~~

4. scrap metal;

5. sludges exhibiting a characteristic of hazardous waste which are reclaimed;

6. by-products exhibiting a characteristic of hazardous waste which are reclaimed; or

7. all other recyclable materials specifically exempt from the requirements of Subchapters A and C of this Chapter which would otherwise meet the definition of hazardous waste;

8. fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining production, and transportation practices;

9. oil reclaimed from hazardous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility;

10. hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under LAC 33:V.4147.A.5 and so long as no other hazardous wastes are used to produce the hazardous waste fuel;

11. hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under LAC 33:V.4147.A.5;

12. oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under LAC 33:V.4147.A.5;

13. petroleum coke produced from petroleum refinery hazardous wastes containing oil at the same facility at which such wastes were generated, unless the resulting coke product

exceeds one or more of the characteristics of hazardous waste LAC 33:V.4903;

14. wastes described in LAC 33:V.4105.B.1-14 which are used or reused on-site or stored at the generation site prior to such use or reuse on-site are exempt from these regulations except that on-site storage shall be in an environmentally sound manner.

C. The following recyclable materials (Group III) are only subject to the requirements of LAC 33:V.Chapter 41.Subchapter C, Chapter 30 and all applicable provisions as provided in LAC 33:V.Chapters 1, 3, 5, 7, 27, 31, and 43:

1. recyclable materials used in a manner constituting disposal;

2. hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under LAC 33:V.Chapters 31 or 43, Subchapter N;

3. recyclable materials from which precious metals are reclaimed; and

4. spent lead-acid batteries that are being reclaimed.

D. The recyclable materials listed in Subsection D.1 of this Section are subject to all requirements and provisions of Subsection D.2 of this Section:

1. Any hazardous waste-derived product produced by any commercial hazardous waste incineration facility that accepts hazardous waste or hazardous waste products for a fee, or any commercial recycling or resource recovery facility that recycles hazardous waste to produce aggregates and that accepts hazardous wastes or hazardous waste products for a fee, provided that such derived product is:

a. inherently waste-like,

b. accumulated speculatively,

c. used as a fuel, or

d. used in a manner constituting disposal.

2. Recycling facilities and other entities receiving, handling, shipping, or selling the derived product from the point of production to the ultimate use of the product shall maintain for a period of three years from the date of transaction such records as needed to furnish the following information to the department upon request:

a. The name and location of each entity receiving the hazardous waste-derived product. This is to include the names, business addresses, telephone numbers, and functions of all brokers, wholesalers, middlemen, interim purchasers, and all other parties involved in any and all transactions relating to the derived product from the point of production by the recycler to the product's ultimate use.

b. The date of each shipment, the physical state and description of the hazardous waste-derived product shipped, and the total quantity of the product shipped by units of weight. If the weight is unknown, the volume and estimated weight should be provided.

c. Copies of analytical results.

d. All financial documents necessary to verify all transactions and/or transfers involving the derived product, including:

i. individual sales invoices to verify the sales price of each financial transaction;

ii. state or federal tax documents or other official receipts to verify total quarterly sales of the derived product by the recycler; and

iii. all other documents necessary to verify any type of financial transaction involving transfer of the product, including such arrangements as donations, tax credits, producer paying shipping charges, or producer paying another party to receive the product.

E. Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to the requirements of LAC 33:V.Subpart 1, but is regulated under LAC 33:V.Chapter 40. Used oil that is recycled includes any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed.

AUTHORITY NOTE: Promulgated in accordance with RS 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 16:219 (March 1990), LR 17:362 (April 1991), repromulgated LR 18:1256 (November 1992), amended LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§4107. Spills

A. Any spill of recyclable material which could possibly endanger human health or adversely affect the environment shall be reported to the department as provided in the "Notification Regulations and Procedures for Unauthorized Discharges and Spills." (See LAC 33:I.Chapter 39.)

B. If a spill occurs on the site of a generator or a reuse-recycle facility that handles recyclable materials and that spill could endanger the public health or affect the environment offsite, the department and the Department of Public Safety have the authority to enter the site and investigate the spill.

C. Owners of the spilled material are considered to be generators for the purposes of these regulations. In an emergency situation, all reporting and manifest requirements of these rules and regulations for generators may be suspended. However, the owners of the material must submit

a full report on the spill, including location of spill, type of material spilled, cause of spill, amount of spilled material, damages incurred, and how the spilled material was cleaned up, transported, and disposed of. This report shall be forwarded to the department no later than 20 days following the spill.

D. Whenever a spill of recyclable material occurs that requires immediate removal to protect human health or the environment, the transporter shall immediately notify the department as required by the "Notification Regulations and Procedures for Unauthorized Discharges and Spills." (See LAC 33:I.Chapter 39.)

E. The generator, transporter, reuse facility, recycle facility, or user shall clean up all of the spilled material or take such action as may be required pursuant to the Emergency Response System so that the spilled material no longer presents a hazard to human health or the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985).

§4109. Violations

A. No person shall accept any recyclable material unless delivered with a properly completed manifest as required by Subchapters A and C of this Chapter or under an Emergency Action Authorization pursuant to LAC 33:V.701.

B. No person shall dispose of a recyclable material except by bonafide use, reuse, recycling, or reclamation or by treatment, storage, or disposal as a hazardous waste in accordance with these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 17:366 (April 1991).

Subchapter A. Special Requirements for Group I Recyclable Materials

§4111. Applicability

Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities except for the materials listed in LAC 33:V.4105.B and C of this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985).

§4113. Generator, Transporter, and Notification Requirements

Generators and transporters of recyclable materials are subject to the applicable requirements of LAC 33:V.Chapters 11 and 13 and the notification requirements of LAC 33:V.105 except as provided in LAC 33:V.4105.B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985).

§4115. Owners and Operators of Facilities that Store or Recycle Recyclable Materials

A. Owners and operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of LAC 33:V.Chapters 3, 5, 9, 15, 19, 21, ~~22,~~ 23, 29, 33, 35, 37, and Subchapters A-K of LAC 33:V.Chapter 43 and the notification requirements under LAC 33:V.105.A, except as provided in LAC 33:V.4105.A. (The recycling process itself is exempt from regulations except as provided in LAC 33:V.4115.C.)

B. Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in LAC 33:V.4105.A:

1. notification requirements under LAC 33:V.105.A;

2. LAC 33:V.905 and 907 (dealing with the use of manifest and manifest discrepancies); and

3. LAC 33:V.4115.C.

~~C. Owners or operators subject to RCRA permitting~~ requirements with hazardous waste management ~~units~~ that recycle hazardous wastes ~~are subject~~ to the requirements of LAC 33:V.Chapter 17 and Subchapters Q-R of LAC ~~33:V.Chapter 43.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 15:378 (May 1989), LR 16:220 (March 1990), LR 17:658 (July 1991), LR 18:1256 (November 1992).

~~Subchapter B. Special Requirements for~~ Group II Recyclable Materials

§4117. Applicability

The requirements of ~~this Subchapter~~ and all applicable provisions as provided in this Subchapter apply to industrial ethyl alcohol that is reclaimed; sludges and by products exhibiting a characteristic of a hazardous waste which are ~~reclaimed. The following wastes are exempt from regulations:~~

A. scrap metal;

B. fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices;

C. oil reclaimed from hazardous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility;

D. coke from the iron and steel industry that contains hazardous waste from the iron and steel production process;

E. wastes described in LAC 33:V.4105.B.1-14 which are used or reused on-site or stored at the generator site prior to such use or reuse on-site are exempt from these regulations except that on-site storage shall be in an environmentally sound manner;

F. used batteries (or used battery cells) returned to a battery manufacturer for regeneration except for storage requirements under LAC 33:V.4119;

G. used oil that exhibits one or more of the characteristics of hazardous waste but is recycled in some manner other than being burned for energy recovery.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 12:320 (May 1986), LR 13:237 (April 1987), LR 13:433 (August 1987), LR 20:1000 (September 1994).

§4119. Storage

Except waste exempt in LAC 33:V.4117 all storage of recyclable materials described in LAC 33:V.4117 shall be in containers or tanks meeting the applicable standards of LAC 33:V.2103, 2105, 2107, 2109.A, 2111, and 2113, LAC 33:V.1903.A through D, 1905, 1907, and 1909 where practical except as otherwise specified in Subchapters A and C of this Chapter. Used batteries or used battery cells returned for manufacturer regeneration may be stored on pallets provided such storage contains the contents of the batteries or battery cells and is protective of human health and the environment. When it is impractical to store a recyclable material in containers or tanks, or in the manner described for used batteries or used battery cells, alternate storage acceptable to the administrative authority shall be provided by the owner of the material. The storage of all recyclable materials described in LAC 33:V.4117 must be in a manner which will prevent any release of the materials or constituents that would endanger the public health or the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 13:237 (April 1987).

§4121. Manifest Forms and Shipping Documents

A. Manifest forms containing the information required by this Chapter shall be used for all off-site shipments, except by pipeline, of recyclable material described in LAC 33:V.4117. The manifest form must be obtained from the department.

B. Recyclable materials described in LAC 33:V.4117 may be collected and manifested on a trip ticket listing with the manifesting requirements fulfilled by the transporter. The listing shall show the identification of the transporter and reuse facility with a listing of the waste collected by identification, quantity, and source, on a form available from or approved by the administrative authority.

C. Failure to utilize a manifest form for shipments of recyclable materials shall be a violation of LAC 33:V.Subpart 1.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 17:366 (April 1991), LR 18:1256 (November 1992).

§4123. Manifest Document Flow

A. The generator initiates the manifest by filling out his or her portion and providing the name, address, telephone number, and active EPA identification number of each transporter, and the name, address, telephone number, and active EPA identification number of the recycling facility that will receive the recyclable material. After the initial transporter signs and dates the manifest accepting the recyclable material, the generator retains one copy for his or her files, mails a copy to the administrative authority of the state where the waste was generated, and the original and remaining copies accompany the recyclable material shipment.

B. The transporter secures the signature of the operator of the facility that will receive the recyclable material upon delivery of the recyclable material. The transporter retains one copy for his or her files and gives the original and remaining copies to the facility operator.

C. The facility operator fills out his or her portion, retains a copy for his or her files, submits the original to the department no later than seven days thereafter, and sends all remaining copies to the generator and other appropriate parties no later than seven days after delivery of the recyclable material.

D. If a recycle facility refuses to accept a recyclable material for use, the facility operator must notify the department immediately and provide the following information:

1. name of the person reporting the refusal and phone number for that person;

2. name and address of the transporter;

3. name and address of the generator;

4. name and address of the recycle facility operator;

5. date, time, and place of the refusal;

6. description of the incident; and

7. classification, name, and amount of recyclable material, to the extent available.

E. The signing of the manifest by the generator, transporter, or facility operator certifies that to the best of his knowledge his portion of the manifest is accurately and correctly filled out. The generator further certifies that the material is properly packaged, marked and labeled and is in the proper container for transportation.

F. The generator, transporter, and facility operator are required to report to the department any irregularities between the materials actually received and the materials described on the manifest, or any other irregularities, within five days.

G. For rail shipments, the generator may comply with the requirements of LAC 33:V.1107.D.4 and 5.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 17:366 (April 1991).

§4125. Procedures Governing the Generator's Portion of the Manifest System

A. Generators of recyclable material shall use a manifest form as required by LAC 33:V.4121.

B. In naming a recyclable material, a generator shall use the nomenclature for the material which otherwise would be required under these regulations if the material were subject to regulations under LAC 33:V.Chapter 11. Such description of the material shall be used on the material manifest and in all reports on the material required under this Chapter.

C. A single manifest may be used for multiple loads of recyclable material, provided that:

1. all loads of recyclable material are shipped on the same day from the same location by the same transporter to the same facility;

2. all loads are accompanied by a copy of the manifest and emergency information as required by LAC 33:V.4125;

3. the recyclable material in all loads has the same shipping description and hazard class;

4. the total quantity of each load is specified and is initialed by the generator and transporter; and

5. the operator of the transport vehicle for each load is listed on the manifest.

D. Generators must provide a Chem-Card or similar emergency card or a statement concerning the hazardous nature of the material and general guidelines for an emergency situation involving the recyclable material to accompany the manifest on shipments and loads.

E. In naming a recyclable material, a generator shall:

1. use the proper Department of Transportation (DOT) shipping name (identified in 49 CFR 172);

2. if the DOT proper shipping name is "NOT OTHERWISE SPECIFIED" (NOS), then the classification system of LAC 33:V.105.B shall be used after the DOT proper shipping name, "NOS".

F. If the recyclable material is to be transported out-of-state, the generator will be responsible for receiving the completed, signed manifest from the out-of-state facility.

G. Generators must obtain written confirmation of the acceptability of the type of recyclable material from the operator of the facility where the material will be used or stored prior to use, before shipping the recyclable material.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 17:367 (April 1991), LR 18:1256 (November 1992).

§4127. Procedures Governing the Transporter's Portion of the Manifest System

A. Transporters will pick up and ship only those recyclable materials which are properly prepared for shipment, are accompanied by a properly completed manifest, and appear to be the recyclable material described on the manifest.

B. Transporters who pick up recyclable material from generators exempted by LAC 33:V.105.B are responsible for the generator manifest requirements of this Section. Transporters may use a single manifest for shipments containing recyclable material from several generators if all generators are listed; all recyclable materials are accurately described, the materials transported in the same shipment are compatible, and the material is labeled as required in this Section by transportation regulations for hazardous materials promulgated by the Louisiana Department of Public Safety.

C. If the facility rejects a shipment of recyclable material, the transporter shall return it to the generator, notify the department of the action immediately, and give reasons to his best understanding why the material was rejected.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

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

Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985).

§4129. Procedures Governing the Portion of the Manifest System for the Recycle Facility

A. The operator of a facility accepting out-of-state recyclable materials is responsible for all the requirements of this Section, including requiring the generator to initiate a manifest.

B. Only those recyclable materials which are properly manifested and properly shipped are to be accepted by the operator of the facility.

C. If the operator of the facility rejects any recyclable material he is to notify the department immediately and give reasons for the rejection.

D. The operator of any facility that uses or stores a reusable material will assume all the responsibilities of a generator established by these regulations for any recyclable material transported from his facility to another facility, except for material rejected under LAC 33:V.4127.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985).

§4131. Recordkeeping

A. Generators, transporters, storers and recyclers that handle recyclable materials shall maintain the required manifests, annual reports and exception reports for a period of three years.

B. An annual report shall be submitted by generators, storers and recyclers of recyclable materials and recycle facilities. The reports shall be submitted by March 1 after the end of the calendar year and shall include:

1. materials handled;

2. quantities;

3. physical state; and

4. for the recyclers, the final utilization or disposition of the recyclable materials.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 12:320 (May 1986), LR 17:367 (April 1991).

§4133. Personnel Training

All generators, storers and recyclers shall institute a personnel training program covering all portions of the facility that handle recyclable material.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 12:320 (May 1986).

§4135. Contingency Plan

Each generator, storer and recycler shall prepare a contingency plan, outlining steps to be taken in the case of spills, fires, releases and other emergency situations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 12:320 (May 1986).

Subchapter C. Special Requirements for Group III Recyclable Materials

§4137. Applicability

Except as provided in LAC 33:V.4105.B, the following recyclable materials are subject to the requirements of this Subchapter and to all other applicable provisions unless otherwise stated:

A. recyclable material used in a manner constituting disposal;

B. hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under LAC 33.V.Chapter 31 or Subchapter N of LAC 33:V.Chapter 43;

C. recyclable materials from which precious metals are reclaimed;

D. spent lead-acid batteries that are being reclaimed;

E. used oil that exhibits one or more of the characteristics of hazardous waste and is burned for energy recovery in boilers and industrial furnaces that are not regulated under LAC 33:V.Chapter 31 or Chapter 43.Subchapter N.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 12:320 (May 1986), LR 13:433 (August 1987), LR 20:1000 (September 1994).

§4139. Recyclable Materials Used in a Manner Constituting Disposal

A. Applicability

1. The regulations of this Section apply to recyclable materials that are applied to or placed on the land without being mixed with any other substance(s) or after being mixed or combined with any other substance(s). These materials will be referred to throughout this Section as "materials used in a manner that constitutes disposal."

2. Except for the requirements of LAC 33:V:4105.D, products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if:

a. the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means;

b. such products meet the applicable treatment standards in LAC 33:V.Chapter 22, Subchapter B (or applicable prohibition levels in LAC 33:V.2209 or 2213, where no treatment standards have been established) for each recyclable material (i.e., hazardous waste constituent) that they contain; and

c. the product does not exhibit a characteristic of a hazardous waste as specified in LAC 33:V.4903.

3. Zinc-containing fertilizers using hazardous waste K061 that are produced for the general public's use are not presently subject to regulation.

4. Commercial fertilizers that are produced for the general public's use that contain recyclable materials also are not presently subject to regulation provided they meet these same treatment standards or prohibition levels for each recyclable material that they contain.

B. General Requirements

1. Generators and transporters are subject to all the requirements of LAC 33.V.Chapters 11 and 13, and LAC 33:V.105.A of these regulations.

2. Owners and operators of facilities that store recyclable materials that are to be used in a manner that constitutes disposal but who are not the ultimate users of the materials are regulated under all applicable provisions of LAC 33:V.Chapters 5, 9, 15, 19, 21, 23, 33, 35, 37, Subchapters A—K of LAC 33:V.Chapter 43 and LAC 33:V.105.A.

3. Owners and operators of facilities that use recyclable materials in a manner that constitutes disposal are regulated under all applicable provisions of LAC 33:V.Chapters 1, 3, 5, 7, 9, 15, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37; Subchapters A-M of LAC 33:V.Chapter 43; and the notification requirement under section 3010 of RCRA. (These requirements do not apply to products which contain these recyclable materials under the provisions of LAC 33:V.4139.A.2.)

4. The use of waste or used oil or other material that is contaminated with dioxin or any other hazardous waste (other than a waste identified solely on the basis of ignitability) for dust suppression or road treatment is prohibited.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 15:378 (May 1989), LR 16:220 (March 1990), LR 17:367 (April 1991), LR 17:658 (July 1991), LR 20:1000 (September 1994).

§4143. Recyclable Materials Utilized for Precious Metal Recovery

A. Applicability. The regulations of this Section apply to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, and any combination of these.

B. Requirements for Persons who Generate, Transport, or Store Recyclable Materials. Persons who generate, transport, or store recyclable materials that are regulated under this Section are subject to the following requirements:

1. notification requirements under LAC 33:V.105.A;

2. generators must manifest all loads in accordance with LAC 33:V.1107;

3. transporters must manifest all loads in accordance with LAC 33:V.1307 and 1309;

4. persons who store must manifest all loads in accordance with LAC 33:V.905 and 907;

5. generators are subject to the requirements of Subchapter B of this Chapter.

C. Requirements for Persons who Store Recycled Materials. Persons who store recycled materials regulated under this Section must keep the following records to document that they are not accumulating these materials speculatively:

1. records showing the volume of these materials stored at the beginning of the calendar year;

2. the amount of these materials generated or received during the calendar year; and

3. the amount of materials remaining at the end of the calendar year.

D. Recyclable materials that are regulated under LAC 33:V.4111 that are accumulated speculatively are subject to all applicable provisions of these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985).

§4145. Spent Lead-Acid Batteries Being Reclaimed

A. Applicability. The regulations of this Section apply to persons who reclaim spent lead-acid batteries that are recyclable materials ("spent batteries"). Persons who generate, transport, or collect spent batteries, or who store spent batteries but do not reclaim them are not subject to these regulations.

B. General Requirements. Owners or operators of facilities that store spent batteries before reclaiming them are subject to following requirements:

1. notification requirements under LAC 33:V.105.A;

2. all applicable provisions in LAC 33:V.Chapters 1 and 9 (but not including LAC 33:V.903 or 905), 15 (but not including 1519), 19, 21, 23, 29, 33, 35, 37 and 43;

3. all applicable provisions of LAC 33:V.Chapters 3 and 5.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 13:237 (April 1987).

~~§4145. Spent Lead-Acid Batteries Being Reclaimed~~

~~A. Applicability. The regulations of this Section apply to persons who reclaim spent lead-acid batteries that are recyclable materials ("spent batteries"). Persons who generate, transport, or collect spent batteries, or who store spent batteries but do not reclaim them are not subject to these regulations.~~

~~B. General Requirements. Owners or operators of facilities that store spent batteries before reclaiming them are subject to following requirements:~~

~~1. notification requirements under LAC 33:V.105.A;~~

~~2. all applicable provisions in LAC 33:V.Chapters 1 and 9 (but not including LAC 33:V.903 or 905), 15 (but not including 1519), 19, 21, 23, 29, 33, 35, 37 and 43;~~

~~3. all applicable provisions of LAC 33:V.Chapters 3 and 5.~~

~~AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.~~

~~HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 13:237 (April 1987).~~

Chapter 43. Interim Status

§4301. Purpose and Applicability

A. The purpose of interim status is to allow existing facilities to operate in an appropriate and responsible manner during the period of time required to process and review permit application or until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled. Interim status facilities must, when required by the administrative authority, submit a permit application in compliance with the requirements of these regulations. Failure to submit an application is a violation of interim status and will result in revocation of a facility's interim status designation. Once revoked the facility will be treated as an unpermitted facility and appropriate legal action will be taken.

B. Any person who owns or operates an "existing HWM facility" or a facility in existence on the effective date of statutory or regulatory amendments under the act that render the facility subject to the requirement to have an RCRA permit shall have interim status and shall be treated as having been issued a permit to the extent he or she has:

1. complied with the requirements of Section 3010(a) of RCRA pertaining to notification of hazardous waste activity;

[Comment: Some existing facilities may not be required to file a notification under Section 3010(a) of RCRA. These facilities may qualify for interim status by meeting LAC 33:V.4301.B.2.]

2. complied with the requirements of LAC 33:V.Chapter 5.Subchapter A governing submission of Part I applications;

C. Hazardous waste management facilities with interim status are treated as a facility with an interim permit until a final determination is made on the entire permit application, except as provided under LAC 33:V.Chapter 26.

D. Facilities having interim status are subject to all applicable federal and state laws and regulations, including these regulations.

E. Interim status facilities must comply with LAC 33:V.Chapters 1, 3, 5, 9, 39, 41, 43, and 49. ~~The requirements of this Chapter apply to owners or operators of all facilities which treat, store, or dispose of hazardous waste referred to in LAC 33:V.Chapter 22.~~

F. Interim status is not available to any facility that has been previously denied a permit for the treatment, storage or disposal of hazardous waste or for which authority to operate has been previously terminated.

G. EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027 must not be managed at facilities subject to regulation under LAC 33:V.4301-4547 unless:

1. The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

2. The waste is stored in tanks or containers;

3. The waste is stored or treated in waste piles that meet the requirements of LAC 33:V.2301.C as well as all other applicable requirements of LAC 33:V.Chapter 43.Subchapter K;

4. The waste is burned in incinerators that are certified pursuant to the standards and procedures in LAC 33:V.4522; or

5. The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in LAC 33:V.4534.

H. Failure to qualify for interim status. If the department has reason to believe upon examination of a Part I application that it fails to meet the requirements of these regulations, it shall notify the owner or operator in writing of the apparent deficiency. Such notice shall specify the grounds for the department's belief that the application is deficient. The owner or operator shall have 30 days from receipt to respond to such a notification and to explain or cure the alleged deficiency in his Part I application. If, after such notification and opportunity for response, the department determines that the application is deficient, it may take appropriate enforcement action.

I. Requirements for interim status — LAC 33:V.Chapter 1, 3, 5, 39, 41, and 49 — also apply to interim status facilities.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:84 (February 1987), LR 16:220 (March 1990), LR 17:362 (April 1991), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§4302. Operation during Interim Status

A. During the interim status period the facility shall not:

1. treat, store, or dispose of hazardous waste not specified in Part I of the permit application;

2. employ processes not specified in Part I of the permit application; or

3. exceed the design capacities specified in Part I of the permit application.

B. Interim status standards. During interim status, owners or operators shall comply with the interim status standards at LAC 33:V.Chapter 43.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 20:1000 (September 1994).

§4303. Changes During Interim Status

A. Except as provided in LAC 33:V.4303.B, the owner or operator of an interim status facility may make the following changes at the facility:

1. Treatment, storage, or disposal of new hazardous wastes not previously identified in Part I of the permit application (and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the hazardous wastes on the effective date of the listing or identification) if the owner or operator submits a revised Part I permit application prior to such treatment, storage, or disposal.

2. Increases in the design capacity of processes used at the facility if the owner or operator submits a revised Part I permit application prior to such a change (along with a justification explaining the need for the change) and the administrative authority approves the changes because:

a. there is a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities, or

b. the change is necessary to comply with a federal, state, or local requirement.

3. Changes in the processes for the treatment, storage, or disposal of hazardous waste or addition of processes if the owner or operator submits a revised Part I permit application prior to such change (along with a justification explaining the need for the change) and the administrative authority approves the change because:

a. the change is necessary to prevent a threat to human health and the environment because of an emergency situation, or

b. the change is necessary to comply with a federal, state, or local requirement.

4. Changes in the ownership or operational control of a facility if the new owner or operator submits a revised Part I permit application no later than 90 days prior to the scheduled change. When a transfer of operational control of a facility occurs, the old owner or operator shall comply with the requirements of LAC 33:V.Chapter 43, Subchapter G (Financial Requirements), until the new owner or operator has demonstrated to the administrative authority that he is complying with the requirements of LAC 33:V.Chapter 43, Subchapter G. The new owner or operator must demonstrate compliance with LAC 33:V.Chapter 43, Subchapter G, requirements within six months of the date of the change in ownership or operational control of the facility. Upon demonstration to the administrative authority by the new owner or operator of compliance with LAC 33:V.Chapter 43, Subchapter G, the administrative authority shall notify the old owner or operator in writing that he or she no longer needs to comply with LAC 33:V.Chapter 43, Subchapter G, as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.

5. Changes made in accordance with an interim status corrective action order issued by EPA under section 3008(h) of RCRA or other federal authority, or by a court in a judicial action brought by EPA. Changes under this Paragraph are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

6. Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste if the owner or operator submits a revised Part I permit application on or before the date on which the unit becomes subject to the new requirements.

B. Except as specifically allowed under this Section, changes listed under LAC 33:V.4303.A may not be made if

they amount to reconstruction of the hazardous waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds 50 percent of the capital cost of a comparable entirely new hazardous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

1. changes made solely for the purposes of complying with the requirements of LAC 33:V.4437 for tanks and ancillary equipment;

2. if necessary to comply with federal, state, or local requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of replacement surface impoundments that satisfy the standards of LAC 33:V.Chapters 15, 19, 21, or 29;

3. changes that are necessary to allow owners or operators to continue handling newly listed or identified hazardous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification;

4. changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan;

5. changes necessary to comply with an interim status corrective action order issued by EPA under Section 3008(h) RCRA or other federal authority, or by a court in a judicial proceeding brought by EPA, provided that such changes are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility;

6. Changes to treat or store, in tanks, containers, or containment buildings, hazardous wastes subject to land disposal prohibitions imposed by LAC 33:V.Chapter 22, provided that such changes are made solely for the purpose of complying with LAC 33:V.Chapter 22.

7. Addition of newly regulated units under LAC 33:V.4303.A.6.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 15:378 (May 1989), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 17:658 (July 1991), LR 18:1375 (December 1992), LR 21:266 (March 1995).

§4305. Termination of Interim Status

Interim status terminates when:

A. For owners or operators of each land disposal facility which achieved interim status prior to November 8, 1984, on November 8, 1985, unless:

1. the owner or operator submits a Part II application for a permit for such facility prior to that date; and

2. the owner or operator certifies that such facility is in compliance with all applicable groundwater monitoring and financial responsibility requirements.

B. For owners or operators of each land disposal facility which is in existence on the effective date of statutory or regulatory amendments under the Act that render the facility subject to the requirement to have a RCRA permit and which is granted interim status, 12 months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility:

1. submits a Part II application for a RCRA permit for such facility before the date 12 months after the date on which the facility first becomes subject to such permit requirement; and

2. certifies that such facility is in compliance with all applicable ground-water monitoring and financial responsibility requirements.

C. For owners and operators of each incinerator facility which has achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1989, unless the owner or operator of the facility submits a Part II application for a RCRA permit for an incinerator facility by November 8, 1986.

D. For owners or operators of any facility (other that a land disposal or an incinerator facility) which achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1992, unless the owner or operator of the facility submits a Part II application for a RCRA permit for the facility by November 8, 1988.

E. For owners or operators of any land disposal unit that is granted authority to operate under LAC 33:V.4303.A.1, A.2, or A.3, on the date 12 months after the effective date of such requirement, unless the owner or operator certifies that such unit is in compliance with all applicable groundwater monitoring and financial responsibility requirements.

F. One of the following occurs:

1. final administrative disposition of a permit application is made, or

2. interim status is terminated as provided in LAC 33:V.303.E.4.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 16:614 (July 1990), LR 20:1000 (September 1994), LR 20:1109 (October 1994).

Subchapter A. General Facility Standards

§4307. Applicability

The regulations of this Subchapter apply to owners and operators of all hazardous waste facilities except as LAC 33:V.105.D provides otherwise.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4309. Identification Number

Every facility owner or operator must apply to EPA for an EPA identification number in accordance with the EPA notification procedures.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4311. Required Notices

Interim status facilities must comply with LAC 33:V.1527.A and F, and 1531.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§4313. General Waste Analysis

A. Before an owner or operator treats, stores, or disposes of any hazardous wastes or nonhazardous wastes, if applicable, under LAC 33:V.4383.D, he must obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, the analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with LAC 33:V.Chapters 22 and 43.

B. The analysis may include data developed under LAC 33:V.Chapters 1, 31, 39, 41, 49 and existing published or documented data about the hazardous waste or about waste generated from similar processes.

[Comment: For example, the facility's records of analyses performed on the waste before the effective date of these regulations or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility may be included in the data base required to comply with LAC 33:V.4313.A. The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part of the information required by LAC 33:V.4313.A, except as otherwise specified in LAC 33:V.2247.A and G. If the generator does not supply the information and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this Section.]

C. The analysis must be repeated as necessary to ensure that it is accurate and up-to-date. At a minimum, the analysis must be repeated:

1. when the owner or operator is notified or has reason to believe that the process or operation generating the hazardous wastes or nonhazardous wastes, if applicable, under LAC 33:V.4383.D has changed; and

2. for off-site facilities, when the results of the inspection required in LAC 33:V.4313.D indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

D. The owner or operator of an off-site facility must inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

E. The owner or operator must develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with LAC 33:V.4313.A-D. He must keep this plan at the facility. At a minimum, the plan must specify:

1. the parameters for which each hazardous waste or nonhazardous waste, if applicable, under LAC 33:V.4383.D will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with LAC 33:V.4313.A-D;

2. the test methods which will be used to test for these parameters;

3. the sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:

a. one of the sampling methods described in LAC 33:V.4901.Appendix D; or

b. an equivalent sampling method [Note: See LAC 33:V.105.H for related discussion.]

4. the frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up-to-date;

5. for off-site facilities, the waste analyses that hazardous waste generators have agreed to supply;

6. the methods that will be used to meet the additional waste analysis requirements for specific waste management methods as specified in LAC 33:V.Chapters 22 and 43, where applicable; and

7. for surface impoundments exempted from land disposal restrictions under LAC 33:V.2237.A, the procedures and schedule for:

a. the sampling of impoundment contents;

b. the analysis of test data; and

c. the annual removal of residues which are not delisted under LAC 33:V.105.M or which exhibit a characteristic of hazardous waste and either:

i. do not meet applicable treatment standards of LAC 33:V.Chapter 22.Subchapter B; or

ii. where no treatment standards have been established;

(a). such residues are prohibited from land disposal under LAC 33:V.2213 or RCRA section 3004(d); or

(b). such residues are prohibited from land disposal under LAC 33:V.Chapter 22.

F. For off-site facilities, the waste analysis plan required in LAC 33:V.4313.E must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

1. the procedures which will be used to determine the identity of each movement of waste managed at the facility;

2. the sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling; and

3. the procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:1057 (December 1990), LR 21:266 (March 1995).

§4315. Security

A. The owner or operator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, unless:

1. physical contact with the waste, structures, or equipment with the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility, and

2. disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, will not cause a violation of the requirements of this Part.

B. Unless exempt under LAC 33:V.4315.A.1 and A.2, a facility must have:

1. a 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or

2. a barrier and a means to control entry as follows:

a. an artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff), which completely surrounds the active portion of a facility; and

b. a means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).

C. The requirements of LAC 33:V.4315.B are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and a means to control entry, which complies with the requirements of LAC 33:V.4315.B.1 or B.2.

D. Unless exempt under LAC 33:V.4315.A.1 and A.2, a sign with the legend, "Danger—Unauthorized Personnel Keep Out," must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend must be written in English and in any other language predominant in the area surrounding the facility and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger—Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4317. General Inspection Requirements

A. The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to release of hazardous waste constituents to the environment or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

B. The owner or operator must develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

1. He must keep this schedule at the facility.

2. The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

3. The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in LAC 33:V.4425, 4437, 4440, 4455, 4470, 4485, 4502, 4519, 4529, 4541, 4555, 4565, 4567, and 4577, where applicable.

C. The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

D. The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

§4319. Personnel Training

Interim status facilities must comply with LAC 33:V.1515.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4320. Construction Quality Assurance Program

A. CQA Program

1. A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with LAC 33:V.4462.A, 4476, and 4512.A. The program must ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a registered professional engineer.

2. The CQA program must address the following physical components, where applicable:

a. foundations;

b. dikes;

c. low-permeability soil liners;

d. geomembranes (flexible membrane liners);

e. leachate collection and removal systems and leak detection systems; and

f. final cover systems.

B. Written CQA Plan. Before construction begins on a unit subject to the CQA program under LAC 33:V.4320.A, the owner or operator must develop a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include:

1. identification of applicable units and a description of how they will be constructed;

2. identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications; and

3. a description of inspection and sampling activities for all unit components identified in LAC 33:V.4320.A.2, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover sampling size and locations, frequency of testing, data evaluation procedures, acceptance and rejection criteria for construction materials, plans for implementing corrective measures, and data or other information to be recorded and retained in the operating record under LAC 33:V.4357.

C. Contents of Program

1. The CQA program must include observations, inspections, tests, and measurements sufficient to ensure:

a. structural stability and integrity of all components of the unit identified in LAC 33:V.4320.A.2;

b. proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices and proper installation of all components (e.g., pipes) according to design specifications; and

c. conformity of all materials used with design and other material specifications under LAC 33:V.2303, 2503, and 2903.

2. The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full-scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of LAC

33:V.2303.C.1, 2503.L.1, and 2903.J.1 in the field. Compliance with the hydraulic conductivity requirements must be verified by using in situ testing on the constructed test fill. The test fill requirement is waived where data are sufficient to show that a constructed soil liner meets the hydraulic conductivity requirements of LAC 33:V.2303.C.1, 2503.L.1, and 2903.J.1 in the field.

D. Certification. The owner or operator of units subject to LAC 33:V.4320 must submit to the administrative authority by certified mail or hand delivery, at least 30 days prior to receiving waste, a certification signed by the CQA officer that the CQA plan has been successfully carried out and that the unit meets the requirements of LAC 33:V.4462.A, 4476, or 4512.A. The owner or operator may receive waste in the unit after 30 days from the administrative authority's receipt of the CQA certification unless the administrative authority determines in writing that the construction is not acceptable, or extends the review period for a maximum of 30 more days, or seeks additional information from the owner or operator during this period. Documentation supporting the CQA officer's certification must be furnished to the administrative authority upon request.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4321. General Requirements for Ignitable, Reactive, or Incompatible Wastes

A. Interim status facilities must comply with LAC 33:V.1517.A, C, D, E, and F.

B. The treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

1. generate extreme heat or pressure, fire or explosion, or violent reaction;

2. produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

3. produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

4. damage the structural integrity of the device or facility containing the waste; or

5. through any like methods threaten human health or the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4322. Location Standards

The placement of any hazardous waste in a salt dome, salt bed formation, underground mine, or cave is prohibited.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990).

Subchapter B. Preparedness and Prevention

§4323. Applicability

Interim status facilities must comply with LAC 33:V.1511.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4325. Maintenance and Operation of Facility

Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4327. Required Equipment

Interim status facilities must comply with LAC 33:V.1511.C.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4329. Testing and Maintenance of Equipment

Interim status facilities must comply with LAC 33:V.1511.D.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4331. Access to Communications or Alarm Systems

Interim status facilities must comply with LAC 33:V.1511.E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4333. Required Aisle Space

Interim status facilities must comply with LAC 33:V.1511.F.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4335. Arrangements With Local Authorities

Interim status facilities must comply with LAC 33:V.1511.G.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

Subchapter C. Contingency Plan and Emergency Procedures

§4337. Applicability

The regulations of this Subchapter apply to owners and operators of all hazardous waste facilities except as provided in LAC 33:V.105.D.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4339. Purpose and Implementation of Contingency Plan

Interim status facilities must comply with LAC 33:V.1513.A.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§4341. Content of Contingency Plan

Interim status facilities must comply with LAC 33:V.1513.B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quantity, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§4343. Copies of Contingency Plan

Interim status facilities must comply with LAC 33:V.1513.C.2.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§4345. Amendment of Contingency Plan

The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

A. applicable regulations are revised;

B. the plan fails in an emergency;

C. the facility changes—in its design, construction, operation, maintenance, or other circumstances—in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

D. the list of emergency coordinators changes; or

E. the list of emergency equipment changes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4347. Emergency Coordinator

Interim status facilities must comply with LAC 33:V.1513.E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4349. Emergency Procedures

Interim status facilities must comply with LAC 33:V.1513.F.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March, 1984).

Subchapter D. Manifest System, Recordkeeping, and Reporting

§4351. Applicability

The regulations in this Subchapter apply to owners and operators of both on-site and off-site facilities, except as LAC 33:V.105.D provides otherwise. LAC 33:V.4353, 4355, and

4363 do not apply to owners and operators of on-site facilities do not receive any hazardous waste from off-site sources.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4353. Use of the Manifest System

Interim status facilities must comply with LAC 33:V.Chapter 9.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:367 (April 1991).

§4355. Manifest Discrepancies

Interim status facilities must comply with LAC 33:V.Chapter 9.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 17:367 April 1991).

§4357. Operating Record

A. The owner or operator must keep a written operating record at his facility.

B. The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

1. a description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal at the facility as required by LAC 33:V.1529.B;

2. the location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest;

3. records and results of waste analyses and trial tests performed as specified in LAC 33:V.2237.A, 2245, 4313, 4445, 4453, 4467, 4481, 4507, 4515, 4527, 4539, 4557, and 4587;

4. summary reports and details of all incidents that require implementing the contingency plan as specified in LAC 33:V.1513.F.10;

5. records and results of inspections as required by LAC 33:V.1509.D (except these data need be kept only three years);

6. monitoring, testing, or analytical data, and corrective action where required by LAC 33:V.Chapter 43.Subchapter E, 4320 4367, 4375, 4437, 4440, 4449, 4451, 4455, 4470, 4472, 4474, 4483, 4485, 4489.D.1, 4497, 4498, 4502, 4519, 4529, 4557, 4559, 4587, and 4589;

7. all closure cost estimates under LAC 33:V.4401 and, for disposal facilities, all post-closure cost estimates under LAC 33:V.4405;

~~8. records of the quantities (and date of placement) for~~ each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal prohibition granted pursuant to LAC 33:V.2239, monitoring data required pursuant to a petition under LAC 33:V.2241 or 2242 or a certification under LAC 33:V.2235, and the applicable notice required of a generator under LAC 33:V.2245;

9. for an off-site treatment facility, a copy of the notice and the certification and demonstration, if applicable required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247;

10. for an on-site treatment facility, the information contained in the notice (except the manifest number) and the certification and demonstration, if applicable, required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247;

11. for an off-site land disposal facility, a copy of the notice and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility under LAC 33:V.2235, 2245, or 2247;

12. for an on-site land disposal facility, the information contained in the notice (except the manifest number) and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility under LAC 33:V.2235, 2245, or 2247;

13. for an off-site storage facility, a copy of the notice and the certification and demonstration, if applicable. required of the generator or the owner or operator under LAC 33:V.2235, 2245, or 2247;

14. for an on-site storage facility, the information contained in the notice (except the manifest number) and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility ~~under LAC 33:V.2235, 2245, or 2247.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 15:378 (May 1989), LR 16 220 (March

1990), LR 17:658 (July 1991), LR 18:723 (July 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§4359. Availability, Retention and Disposition of Records

Interim status facilities must comply with LAC 33:V.1529.C.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4361. Annual Report

Interim status facilities must comply with LAC 33:V.1529.D.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4363. Unmanifested Waste Report

Interim status facilities must comply with LAC 33:V.909.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4365. Additional Reports

In addition to submitting the biennial report and unmanifested waste reports described in LAC 33:V.4361 and 4363, the owner or operator must also report to the administrative authority:

A. releases, fires, and explosions as specified in LAC 33:V.1513.F.10;

B. groundwater contamination and monitoring data as specified in LAC 33:V.4373 and 4375;

C. facility closure as specified in LAC 33:V.4387; and

D. as otherwise required by LAC 33:V.Chapter 43, Subchapters Q and R.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 17:658 (July 1991).

Subchapter E. Groundwater Monitoring

§4367. Applicability

Facilities that have interim status must comply with this Subchapter in lieu of LAC 33:V.Chapter 33.

A. The owner or operator of a surface impoundment, landfill, or land treatment facility, which is used to manage hazardous waste, must implement a groundwater monitoring program capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility, except as LAC 33:V.105.C and D provide otherwise.

B. Except as LAC 33:V.4367.C and D provide otherwise, the owner or operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of LAC 33:V.4369 and must comply with LAC 33:V.4371, 4373, and 4375. This groundwater monitoring program must be carried out during the active life of the facility, and for disposal facilities, during the post-closure care period as well.

C. If an owner or operator assumes (or knows) that groundwater monitoring of indicator parameters, in accordance with LAC 33:V.4369 and 4371, would show statistically significant increases (or decreases in the case of pH) when evaluated under LAC 33:V.4373.B, he may, install, operate, and maintain an alternate groundwater monitoring system (other than the one described in LAC 33:V.4371 and 4373. If the owner or operator decides to use an alternate groundwater monitoring system he must:

1. submit to the administrative authority a specific plan, certified by a qualified geologist or geotechnical engineer, which satisfies the requirements of LAC 33:V.4373.G, for an alternate groundwater monitoring system;

2. initiate the determinations specified in LAC 33:V.4373.H;

3. prepare and submit a written report in accordance with LAC 33:V.4373.I;

4. continue to make the determinations specified in LAC 33:V.4373.H on a quarterly basis until final closure of the facility; and

5. comply with the recordkeeping and report requirements in LAC 33:V.4375.B.

D. The groundwater monitoring requirements of this Subchapter may be waived with respect to any surface impoundment that is used to neutralize wastes which are hazardous solely because they exhibit the corrosivity characteristic under LAC 33:V.4903.B or listed as hazardous wastes in LAC 33:V.4901 only for the reason that they are corrosive and the surface impoundment contains no other hazardous wastes, if the owner or operator can demonstrate that there is no potential for migration of hazardous wastes from the impoundment. The demonstration must establish, based upon consideration of the characteristics of the wastes and the impoundment that the corrosive wastes will be neutralized to the extent that they no longer meet the corrosivity characteristic before they can migrate out of the impoundment. The demonstration must be in writing and must be certified by a qualified professional and must be approved by the administrative authority.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4369. Groundwater Monitoring System

A. A groundwater monitoring system must be capable of yielding groundwater samples for analysis and must consist of:

1. monitoring wells (at least one) installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the waste management area. Their number, locations, and depths must be sufficient to yield groundwater samples that are:

a. representative of background groundwater quality in the uppermost aquifer near the facility; and

b. not affected by the facility; and

2. monitoring wells (at least three) installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the waste management area. Their number, locations, and depths must ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous waste constituents that migrate from the waste management area to the uppermost aquifer.

3. the facility owner or operator may demonstrate that an alternate hydraulically downgradient monitoring well location will meet the criteria outlined below. The demonstration must be in writing and kept at the facility. The demonstration must be certified by a qualified groundwater scientist and establish that:

a. an existing physical obstacle prevents monitoring well installation at the hydraulically downgradient limit of the waste management area;

b. the selected alternate downgradient location is as close to the limit of the waste management area as practical; and

c. the location ensures detection that, given the alternate location, is as early as possible of any statistically significant amounts of hazardous waste or hazardous waste constituents that migrate from the waste management area to the uppermost aquifer.

d. lateral expansion, new, or replacement units are not eligible for an alternate downgradient location under this Paragraph.

B. Separate monitoring systems for each waste management component of a facility are not required provided that provisions for sampling upgradient and downgradient water quality will detect any discharge from the waste management area.

1. In the case of a facility consisting of only one surface impoundment, landfill, or land treatment area, the waste management area is described by the waste boundary (perimeter).

2. In the case of a facility consisting of more than one surface impoundment, landfill, or land treatment area, the waste management area is described by an imaginary boundary line which circumscribes the several waste management components.

C. All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must be screened or perforated, and packed with gravel or sand where necessary, to enable sample collection at depths where appropriate aquifer flow zones exist. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed with a suitable material (e.g., cement grout or bentonite slurry) to prevent contamination of samples and the groundwater.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 21:266 (March 1995).

§4371. Sampling and Analysis

A. The owner or operator must obtain and analyze samples from the installed groundwater monitoring system. The owner or operator must develop and follow a groundwater sampling and analysis plan. He must keep this plan at the facility. The plan must be approved by the administrative authority and must include procedures and techniques for:

1. sample collection;

2. sample preservation and shipment;

3. analytical procedures; and

4. chain of custody control.

[Comment: See "Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities," EPA-530/SW-611, August 1977 and "Methods for Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March 1979 for discussions of sampling and analysis procedures.]

B. The owner or operator must determine the concentration or value of the following parameters in groundwater samples in accordance with LAC 33:V.4371.C and D:

1. parameters characterizing the suitability of the groundwater as a drinking water supply, as follows:

Parameter	Maximum level (mg/l unless otherwise stated)
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Fluoride	1.4-2.4
Lead	0.05
Mercury	0.002
Nitrate (as N)	10
Selenium	0.01
Silver	0.05
Endrin	0.0002
Lindane	0.004
Methoxychlor	0.1
Toxaphene	0.005
2-4D	0.1
2,4,5-TP silver	0.01
Radium	5 pCi/l
Gross Alpha	15 pCi/l
Gross Beta	4 millirem/yr
*Turbidity	1/TU
Coliform bacteria	1/100 ml

* Turbidity is applicable only to surface water supplies.

2. The following parameters are to be used as a basis for comparison in the event a groundwater quality assessment is required under LAC 33:V.4373.D:

chloride;

iron;

magnesium;

phenols;

sodium;

sulfate;

3. Parameters used as indicates* of groundwater contamination:

pH;

specific conductance;

total organic carbon; and

total organic halogen.

C. For all monitoring wells, the owner or operator must establish initial background concentrations or values of all parameters as specified in LAC 33:V.4371.B quarterly for one year.

D. For each of the indicator parameters specified in LAC 33:V.4371.B.3, at least four replicate measurements must be obtained for each sample and the initial background arithmetic mean and variance must be determined by pooling the

replicate measurements for the respective parameter concentrations or values in samples obtained from upgradient wells during the first year.

E. After the first year, all monitoring wells must be sampled and the samples analyzed with the following frequencies:

1. at least annually, samples must be collected to establish groundwater quality and analyzed for the parameters specified in LAC 33:V.4371.B.2; and

2. at least semi-annually samples must be collected to indicate groundwater contamination and analyzed for the parameters specified in LAC 33:V.4371.B.3;

3. the administrative authority may require the owner or operator to analyze for specific indicator parameters on a more frequent schedule.

F. Elevation of the groundwater surface at each monitoring well must be determined each time a sample is obtained.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 18:1256 (November 1992).

* As appeared in the published rule.

§4373. Preparation, Evaluation, and Response

A. The owner or operator must have an outline of a groundwater quality assessment program. The outline must describe a more comprehensive groundwater monitoring program (than that described in LAC 33:V.4369 and 4371) capable of determining:

1. whether hazardous waste or hazardous waste constituents have entered the groundwater;

2. the rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater; and

3. the concentrations of hazardous waste or hazardous waste constituents in the groundwater.

B. For each indicator parameter specified in LAC 33:V.4371.B.3 the owner or operator must calculate the arithmetic mean and variance, based on at least four replicate measurements on each sample, for each well monitored in accordance with LAC 33:V.4371.E.2, and compare these results with its initial background arithmetic mean. The comparison must consider, individually, each of the wells in the monitoring system, and must use the Student's t-test at the 0.01 level of significance (see LAC 33:V.Chapter 33, Table 1) to determine statistically significant increases (and decreases in the case of pH) over initial background.

C. If the comparisons for the upgradient wells made under LAC 33:V.4373.B show a significant increase (or decrease in pH), the owner or operator must submit this information in accordance with LAC 33:V.4375.A.2.

D. If the comparison for downgradient wells made under LAC 33:V.4373.B shows a significant increase (or decrease in pH), the owner or operator must then immediately obtain additional groundwater samples from those downgradient wells where a significant difference was detected, split the samples in two, and obtain analyses of all additional samples to determine whether the significant difference was a result of laboratory error.

E. If the analyses performed under LAC 33:V.4373 confirm the significant increase (or pH decrease), the owner or operator must provide written notice to the administrative authority, within seven days of the date of such confirmation, that the facility may be affecting groundwater quality.

F. Within 15 days after the notification under LAC 33:V.4373.E, the owner or operator must develop and submit to the administrative authority a specific plan, based on the outline required under LAC 33:V.4373.A and certified by a qualified geologist or geotechnical engineer, for a groundwater quality assessment program at the facility.

G. The plan to be submitted under LAC 33:V.4367.C.1 or 4373.F must specify:

1. the number, location, and depth of wells;

2. sampling and analytical methods for those hazardous wastes or hazardous waste constituents in the facility;

3. evaluation procedures, including any use of previously gathered groundwater quality information; and

4. a schedule of implementation.

H. The owner or operator must implement the groundwater quality assessment plan which satisfies the requirements of LAC 33:V.4373.G, and, at a minimum, determine:

1. the rate and extent of migration of the hazardous waste or hazardous waste constituents in the groundwater; and

2. the concentrations of the hazardous waste or hazardous waste constituents in the groundwater.

I. The owner or operator must make his first determination under LAC 33:V.4373.H as soon as technically feasible, and, within 15 days after that determination, submit to the administrative authority a written report containing an assessment of the groundwater quality.

J. If the owner or operator determines, based on the results of the first determination under LAC 33:V.4373.H, that no hazardous waste or hazardous waste constituents from the facility have entered the groundwater, then he may reinstate the indicator evaluation program described in LAC 33:V.4371 and 4373.B. If the owner or operator reinstates the indicator evaluation program, he must notify the administrative authority in the report submitted under LAC 33:V.4373.I.

K. Notwithstanding any other provision of this Chapter, the administrative authority may order such corrective action measures as may be necessary for groundwater protection. When it is determined, based on the groundwater

quality assessment plan, that hazardous waste or hazardous waste constituents from the facility have entered the groundwater, the administrative authority shall establish a groundwater protection standard including:

1. a list of hazardous constituents; concentration limits; the compliance points and the compliance period;

2. within 30 days or other schedule required by the administrative authority, after the establishment of the groundwater protection standard, the owner or operator shall submit a corrective action and monitoring plan;

3. within a reasonable time set by the administrative authority, corrective action measures shall be instituted by the owner or operator that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place;

4. If the owner or operator determines, based on the first determination under LAC 33:V.4373 that hazardous waste or hazardous waste constituents from the facility have entered the groundwater, he:

a. must continue to make the determinations required under LAC 33:V.4373 on a quarterly basis until final closure of the facility if the groundwater quality assessment plan was implemented prior to final closure of the facility; or

b. may cease to make the determination required under LAC 33:V.4373 if the groundwater quality assessment plan was implemented during the post-closure care period.

L. Notwithstanding any other provision of this Subchapter, any groundwater quality assessment to satisfy the requirements of LAC 33:V.4373.H, which is initiated prior to final closure of the facility, must be completed and reported in accordance with LAC 33:V.4373.I.

M. Unless the groundwater is monitored to satisfy the requirements of LAC 33:V.4373.H, the owner or operator must evaluate the data on groundwater surface elevations obtained under LAC 33:V.4371.F at least annually to determine whether the requirements under LAC 33:V.4369.A for locating the monitoring wells continue to be satisfied. If the evaluation shows that LAC 33:V.4369.A is no longer satisfied, the owner or operator must immediately modify the number, location, or depth of the monitoring wells to bring the groundwater monitoring system into compliance with this requirement.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 14:791 (November 1988), LR 18:723 (July 1992).

§4375. Recordkeeping and Reporting

A. Unless the groundwater is monitored to satisfy the requirements of LAC 33:V.4373.H, the owner or operator must:

1. keep records throughout the active life of the facility of the analyses required in LAC 33:V.4371.C and E, the associated groundwater surface elevations required in LAC 33:V.4369, and the evaluations required in LAC 33:V.4373.B, and, for disposal facilities, throughout the post-closure care period as well; and

2. report the following groundwater monitoring information to the administrative authority:

a. during the first year when initial background concentrations are being established for the facility, concentrations or values of the parameters listed in LAC 33:V.4371.B.1 for each groundwater monitoring well within 15 days after completing each quarterly analysis. The owner or operator must separately identify for each monitoring well any parameters whose concentration or value has been found to exceed the maximum contaminant levels listed in LAC 33:V.4371.B.1;

b. concentrations or values of the parameters listed in LAC 33:V.4371.B.3 for each groundwater monitoring well, along with the required evaluations for these parameters under LAC 33:V.4373.B. The owner or operator must separately identify any significant differences from initial background found in the upgradient wells, in accordance with LAC 33:V.4373.C. During the active life of the facility, this information must be submitted no later than March 1 following each calendar year; and

c. no later than March 1 following each calendar year, results of the evaluations of groundwater surface elevations under LAC 33:V.4373.M, and a description of the response to that evaluation, where applicable.

B. If the groundwater is monitored to satisfy the requirements of LAC 33:V.4373.H, the owner or operator must:

1. keep records of the analyses and evaluations specified in the plan, which satisfies the requirements of LAC 33:V.4373.G, throughout the active life of the facility, and, for disposal facilities, throughout the post-closure care period as well; and

2. annually, until final closure of the facility, submit to the administrative authority a report containing the results of his or her groundwater quality assessment program which includes, but is not limited to, the calculated (or measured) rate of migration of hazardous waste or hazardous waste constituents in the groundwater during the reporting period. This information must be submitted no later than March 1 following each calendar year.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 18:723 (July 1992).

Subchapter F. Closure and Post-closure

§4377. Applicability

Except as LAC 33:V.105.D provides otherwise:

A. LAC 33:V.4379-4387 (which concerns closure) apply to the owners and operators of all hazardous waste management facilities; and

B. LAC 33:V.4389-4395 (which concerns post-closure care) apply to the owners and operators of:

1. all hazardous waste disposal facilities;

2. waste piles, and surface impoundments for which the owner or operator intends to remove the wastes at closure to the extent that these sections are made applicable to such facilities in LAC 33:V.4457 and 4475;

3. tank systems that are required under LAC 33:V.4442 to meet the requirements for landfills; and

~~4. containment buildings that are required under LAC 33:V.4705 to meet the requirements for landfills.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:219 (March 1990), LR 16:614 (July 1990), LR 21:266 (March 1995).

§4379. Closure Performance Standard

The owner or operator must close his facility in a manner that:

A. minimizes the need for further maintenance, and

B. controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated rainfall, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere, and

C. complies with the closure requirements of these regulations including but not limited to LAC 33:V.1915, 4457, 4475, 4489, 4501, 4521, 4543, ~~and LAC 33:V.4705.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 15:181 (March 1989), LR 21:266 (March 1995).

§4381. Closure Plan; Amendment of Plan

A. *Written Plan.* By the effective dates of these regulations, the owner or operator of a hazardous waste management facility must have a written closure plan. Until final closure is completed and certified in accordance with LAC 33:V.4387, a copy of the most current plan must be furnished to the administrative authority upon request, including request by mail. In addition, for facilities without approved plans, it must also be provided during site inspections, on the day of inspection, to any officer employee or representative of the department who is duly designated by the administrative authority.

B. *Content of Plan.* The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include at least:

1. a description of how each hazardous waste management unit at the facility will be closed in accordance with LAC 33:V.4379; and

2. a description of how final closure of the facility will be conducted in accordance with LAC 33:V.4379. The description must identify the maximum extent of the operation which will be unclosed during the active life of the facility; and

3. the maximum inventory of hazardous wastes ever on-site over the active life of the facility for a final closure, and/or an estimate of the maximum inventory for a partial closure, and a detailed description of the methods to be used during the partial and final closure, including, but not limited to methods for removing, transporting, treating, storing or disposing of all hazardous waste, identification of, and type(s) of off-site hazardous waste management unit(s) to be used, if applicable; and

4. a detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures and soils during partial and final closure including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination necessary to satisfy the closure performance standard; and

5. a detailed description of other activities necessary during the partial and final closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and run-on and run-off control; and

6. a schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which allow tracking

of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included); and

7. an estimate of the expected year of final closure for facilities that use trust funds to demonstrate financial assurance under LAC 33:V.4403 or LAC 33:V.4407 and whose remaining operating life is less than 20 years, and for facilities without approved closure plans.

C. *Amendment of Plan.* The owner or operator may amend the closure plan at any time prior to the notification of partial or final closure of the facility. An owner or operator with an approved closure plan must submit a written request to the administrative authority to authorize a change to the approved closure plan. The written request must include a copy of the amended closure plan for approval by the administrative authority.

1. The owner or operator must amend the closure plan whenever:

a. changes in operating plans or facility design affect the closure plan, or

b. there is a change in the expected year of closure, if applicable, or

c. in conducting partial or final closure activities, unexpected events require a modification of the closure plan.

2. The owner or operator must amend the closure plan at least 60 days prior to the proposed changes in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must amend the closure plan no later than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure, but are required to close as landfills in accordance with LAC 33:V.4501.

3. An owner or operator with an approved closure plan must submit the modified plan to the administrative authority at least 60 days prior to the proposed change in facility design or operation, or no more than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event has occurred during the partial or final closure period, the owner or operator must submit the modified plan no more than 30 days after the unexpected event. These provisions also apply to owner or operator of surface impoundments and waste piles who intended to remove all hazardous wastes at closure but are required to close as landfills in accordance with LAC 33:V.4501. If the amendment to the plan is a Class 2 or 3 modification according to the criteria in LAC 33:V.321.C and 322, the modification to the plan will be approved according to the procedures in LAC 33:V.4381.D.4.

4. The administrative authority may request modifications to the plan under the conditions described in LAC 33:V.4381.C.1. An owner or operator with an approved closure plan must submit the modified plan within 60 days of the request from the administrative authority, or within 30 days if the unexpected event occurs during partial or final closure. If the amendment is considered a Class 2 or 3 modification according to the criteria in LAC 33:V.321.C and 322, the modification to the plan will be approved in accordance with the procedures in LAC 33:V.4381.D.4.

D. Notification of Partial Closure and Final Closure

1. The owner or operator must submit the closure plan to the administrative authority at least 180 days prior to the date on which he expects to begin closure of the first surface impoundment, waste pile, land treatment, or landfill unit, or final closure if it involves such a unit, whichever is earlier. The owner or operator must submit the closure plan to the administrative authority at least 45 days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace. The owner or operator must submit the closure plan to the administrative authority at least 45 days prior to the date on which he expects to begin final closure of a facility with only tanks,container storage, or incinerator units. Owners or operators with approved closure plans must notify the administrative authority in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, landfill, or land treatment unit, or final closure of a facility involving such a unit. Owners or operators with approved closure plans must notify the administrative authority in writing at least 45 days prior to the date on which they expect to begin partial or final closure of a boiler or industrial furnace. Owners or operators with approved closure plans must notify the administrative authority in writing at least 45 days prior to the date on which they expect to begin final closure of a facility with only tanks, container storage, or incinerator units.

2. The date when he or she "expects to begin closure" either:

a. within 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes. If the owner or operator of a hazardous waste management unit can demonstrate to the administrative authority that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he or she has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements, the administrative authority may approve an extension to this one-year limit; or

b. for units meeting the requirements of LAC 33:V.4383.D, no later than 30 days after the date on which

the hazardous waste management unit receives the known final volume of nonhazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional nonhazardous wastes, no later than one year after the date on which the unit received the most recent volume of nonhazardous wastes. If the owner or operator can demonstrate to the administrative authority that the hazardous waste management unit has the capacity to receive additional nonhazardous wastes and he has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements, the administrative authority may approve an extension to this one-year limit.

3. The owner or operator must submit his closure plan to the administrative authority no later than 15 days after:

a. termination of interim status except when a permit is issued simultaneously with termination of interim status; or

b. issuance of a judicial decree or final order under R.S. 30:2025 to cease receiving hazardous wastes or close.

4. The administrative authority will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the plan and request modifications to the plan no later than 30 days from the date of the notice. He will also, in response to a request or at his own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning a closure plan. The administrative authority will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.) The administrative authority will approve, modify, or disapprove the plan within 90 days of its receipt. If the administrative authority does not approve the plan he shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator must modify the plan or submit a new plan for approval within 30 days after receiving such written statement. The administrative authority will approve or modify this plan in writing within 60 days. If the administrative authority modifies this plan, this modified plan becomes the approved closure plan. The administrative authority must assure that the approved plan is consistent with LAC 33:V.4377-4389 and the applicable requirements of LAC 33:V.Subchapter E, LAC 33:V.4441, 4457, 4475, 4489, 4501, 4521, 4531, 4543, and 4705. A copy of the modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.

E. Removal of wastes and decontamination or dismantling of equipment. Nothing in this Section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 16:614 (July 1990), LR 17:362 (April 1991), LR 17:478 (May 1991), LR 18:723 (July 1992), LR 18:1375 (December 1992), LR 21:266 (March 1995).

§4383. Closure; Time Allowed for Closure

A. Within 90 days after receiving the final volume of hazardous wastes or the final volume of nonhazardous wastes, if the owner or operator complies with all applicable requirements in LAC 33:V.4383.D and E, at a hazardous waste management unit or facility, or within 90 days after approval of the closure plan, whichever is later, the owner or operator must treat, remove from the unit or facility, or dispose of on-site all hazardous wastes in accordance with the approved closure plan. The administrative authority may approve a longer period if the owner or operator demonstrates that:

1. the activities required to comply with this Paragraph will, of necessity, take him longer than 90 days to complete; or

2. the hazardous waste management unit or facility has the capacity to receive additional wastes, or has the capacity to receive non-hazardous wastes if the facility owner or operator receives administrative authority allowance pursuant to LAC 33:V.4383.D and complies with LAC 33:V.4383.D and E;

a. there is a reasonable likelihood that he or a person other than the owner or operator will recommence operation of the hazardous waste management unit or the facility within one year; and

b. closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

3. he has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with interim status requirements.

B. The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes or the final volume of nonhazardous wastes, if the owner or operator complies with all applicable requirements in LAC 33:V.4383.D and E, at the hazardous waste management unit or facility or 180 days after approval of the closure plan, if that is later. The administrative authority may approve an extension to the closure period if the owner or operator demonstrates that:

1. either the closure activities will, of necessity, take him longer than 180 days to complete; or

2. the hazardous waste management unit has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes if the facility owner or operator receives administrative authority allowance pursuant to LAC 33:V.4383.D and complies with LAC 33:V.4383.D and E; and

a. there is a reasonable likelihood that he or a person other than the owner or operator will recommence operation of the hazardous waste management unit or facility within one year; and

b. closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

3. he has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management units including compliance with applicable interim status requirements.

C. The demonstrations referred to in LAC 33:V.4383.A and B must be made as follows:

1. the demonstrations in LAC 33:V.4383.A must be made at least 30 days prior to the expiration of the 90 day period in LAC 33:V.4383.A; and

2. the demonstrations in LAC 33:V.4383.B must be made at least 30 days prior to the expiration of the 180-day period in LAC 33.V.4383.B, unless the owner or operator is otherwise subject to the deadlines in LAC 33:V.4383.D.

D. The administrative authority may allow an owner or operator to receive non-hazardous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of hazardous wastes at that unit if the following conditions are met:

1. The owner or operator submits an amended Part II application, or a Part II application if not previously required, and demonstrates that:

a. the unit has the existing design capacity as indicated on the Part I application to receive non-hazardous wastes;

b. there is a reasonable likelihood that the owner or operator or another person will receive non-hazardous wastes in the unit within one year after the final receipt of hazardous wastes;

c. the non-hazardous wastes will not be incompatible with any remaining wastes in the unit or with the facility design and operating requirements of the unit or facility under LAC 33:V.Chapter 43;

d. closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and

e. the owner or operator is operating and will continue to operate in compliance with all applicable interim status requirements.

2. The Part II application includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required under LAC 33:V.503.A, and closure and post-closure plans, and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate to reflect any changes due to the presence of hazardous constituents in the non-hazardous wastes and changes in closure activities, including the expected year of closure if applicable under LAC 33:V.4381.B.7, as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes.

3. The Part II application is amended, as necessary and appropriate, to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes.

4. The Part II application and the demonstrations referred to in LAC 33:V.4383.D.1 and 2 are submitted to the administrative authority no later than 180 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes, or no later than 90 days after the effective date of this rule, whichever is later.

E. In addition to the requirements in LAC 33:V.4383.D, an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in LAC 33:V.Chapter 29 must do the following.

1. Submit with the Part II application:

a. a contingent corrective measures plan; and

b. a plan for removing hazardous wastes in compliance with LAC 33:V.4383.E.2.

2. Remove all hazardous wastes from the unit by removing all hazardous liquids and removing all hazardous sludges to the extent practicable without impairing the integrity of the liner(s), if any.

3. Removal of hazardous wastes must be completed no later than 90 days after the final receipt of hazardous wastes. The administrative authority may approve an extension to this deadline if the owner or operator demonstrates that the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.

4. If a release that is a statistically significant increase (or decrease in the case of pH) in hazardous constituents over background levels is detected in accordance with the requirements in LAC 33:V.Chapter 43.Subchapter E, the owner or operator of the unit:

a. must implement corrective measures in accordance with the approved contingent corrective measures plan required by LAC 33:V.4383.E.1 no later than one year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;

b. may receive wastes at the unit following ction of the release only if the approved corrective asures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and

c. may be required by the administrative authority to implement corrective measures in less than one year or to cease receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.

5. During the period of corrective action, the owner or operator shall provide semiannual reports to the administrative authority that describe the progress of the corrective action program, compile all groundwater monitoring data, and evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.

6. The administrative authority may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in LAC 33:V.4383.E.4, or fails to make substantial progress in implementing corrective action and achieving the facility's background levels.

7. If the owner or operator fails to implement corrective measures as required in LAC 33:V.4383.E.4 or if the administrative authority determines that substantial progress has not been made pursuant to LAC 33:V.4383.E.6, he or she shall do the following.

a. The administrative authority will notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadline in LAC 33:V.4383.A and B and provide a detailed statement of reasons for this determination.

b. The administrative authority will provide the owner or operator and the public, through a newspaper notice, with the opportunity to submit written comments on the decision no later than 20 days after the date of the notice.

c. If the administrative authority receives no written comments, the decision will become final five days after the close of the comment period. The administrative authority will notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, must be submitted within 15 days of the final notice, and that closure must begin in accordance with the deadlines in LAC 33:V.4383.A and B.

d. If the administrative authority receives written comments on the decision, he or she shall make a final decision within 30 days after the end of the comment period and provide the owner or operator in writing and the public through a newspaper notice with a detailed statement of reasons for the final decision. If the administrative authority determines that substantial progress has not been made, closure must be initiated in accordance with the deadlines in LAC 33:V.4383.A and B.

e. The final determinations made by the administrative authority under LAC 33:V.4383.E.7.c and d are not subject to administrative appeal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 14:791 (November 1988), LR 17:478 (May 1991), LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§4385. Disposal or Decontamination of Equipment, Structures and Soils

During the partial and final closure periods, all contaminated equipment, structures, and soil must be properly disposed of, or decontaminated unless specified otherwise in LAC 33:V.4442, 4457, 4475, 4489, or 4501. By removing all hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that hazardous waste in accordance with all applicable requirements of LAC 33:V.Chapter 11.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:614 (July 1990).

§4387. Certification of Closure

A. Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of completion of final closure, the owner or operator must submit to the administrative authority, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the administrative authority upon request until he releases the owner or operator from the financial assurance requirements for closure under LAC 33:V.4403.H.

B. Survey Plat. No later than the submission of the certification of closure of each hazardous waste disposal unit, an owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the administrative authority, a survey plat indicating the location and dimensions of landfill cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use must contain a note, prominently

displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable LAC 33:V.Chapters 35 or 43 regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987).

§4389. Post-closure Care and Use of Property

A. Post-closure care for each hazardous waste management unit subject to the requirements of LAC 33:V.4389 through 4395 must begin after completion of closure of the unit and continue for 30 years after that date. It must consist of at least the following:

1. monitoring and reporting in accordance with the requirements of Subchapters E, J, K, L, M; and

2. maintenance and monitoring of waste containment systems in accordance with the requirements of LAC 33:V.Chapter 43, Subchapters E, J, K, L, and M.

B. Any time preceding closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular hazardous waste disposal unit, the administrative authority may:

1. shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if he finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or groundwater monitoring results, characteristics of the hazardous waste, application of advanced technology, or alternative disposal treatment, or re-use techniques indicate that the hazardous waste management unit or facility is secure); or

2. extend the post-closure care period applicable to the hazardous waste management unit or facility, if he finds that the extended period is necessary to protect human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

C. The administrative authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.4315 during part or all of the post-closure period when:

1. hazardous wastes may remain exposed after completion of partial or final closure; or

2. access by the public or domestic livestock may pose a hazard to human health.

D. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the facility's monitoring systems, unless the administrative authority finds that the disturbance:

1. is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

2. is necessary to reduce a threat to human health or the environment.

E. All post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in LAC 33:V.4391.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 18:723 (July 1992).

§4391. Post-closure Plan; Amendment of Plan

A. Written Plan. By May 19, 1988, the owner or operator of a hazardous waste disposal unit must have a written post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous wastes at closure must prepare a post-closure plan and submit it to the administrative authority within 90 days of the date that the owner or operator or administrative authority determines that the hazardous waste management unit or facility must be closed as a landfill, subject to the requirements of LAC 33:V.4389-4395.

B. Until final closure of the facility, a copy of the most current post-closure plan must be furnished to the administrative authority upon request, including request by mail. In addition, for facilities without approved post-closure plan, it must also be provided during site inspections, on the day of inspection, to any officer, employee or representative of the agency who is duly designated by the administrative authority. After final closure has been certified, the person or office specified in LAC 33:V. 4381.C.3 must keep the approved post-closure plan during the post-closure period.

C. For each hazardous waste management unit subject to the requirements of this Subchapter, the post-closure plan must identify the activities that will be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

1. a description of the planned monitoring activities and frequencies at which they will be performed, to comply with LAC 33:V.Chapter 43, Subchapters E, J, K, L, and M, during the post-closure care period; and

2. a description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:

a. the integrity of the cap and final cover or other containment systems in accordance with the requirements of LAC 33:V.Chapter 43, Subchapters J, K, L, and M; and

b. the function of the monitoring equipment in accordance with the requirements of LAC 33:V.Chapter 43, Subchapters J, K, L, and M; and

3. the name, address, and phone numbers of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period.

D. Amendment of Plan. The owner or operator may amend the post-closure plan any time during the active life of the facility or during the post-closure care period. An owner or operator with an approved post-closure plan must submit a written request to the administrative authority to authorize a change to the approved plan. The written request must include a copy of the amended post-closure plan for approval by the administrative authority.

1. The owner or operator must amend the post-closure plan whenever:

a. changes in operating plans or facility design affect the post-closure plan, or

b. events which occur during the active life of the facility, including partial and final closures, affect the post-closure plan.

2. The owner or operator must amend the post-closure plan at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the post-closure plan.

3. An owner or operator with an approved post-closure plan must submit the modified plan to the administrative authority at least 60 days prior to the proposed change in facility design or operation, or no more than 60 days after an unexpected event has occurred which has affected the post-closure plan. If an owner or operator of a surface impoundment or a waste pile who intended to remove all hazardous wastes at closure in accordance with LAC 33:V.4457.B or LAC 33:V.4475.A, is required to close as a landfill in accordance with LAC 33:V.4501, the owner or operator must submit a post-closure plan within 90 days of the determination by the owner or operator or administrative authority that the unit must be closed as a landfill. If the amendment to the post-closure plan is a Class 2 or 3 modification according to the criteria in LAC 33:V.321.C and 322, the modification to the plan will be approved according to the procedures in LAC 33:V.4391.F.

4. The administrative authority may request modifications to the plan under the conditions described in LAC 33:V.4391.D.1. An owner or operator with an approved post-closure plan must submit the modified plan no later than 60 days after the request from the administrative authority. If the amendment to the plan is considered a Class 2 or 3 modification according to the criteria in LAC 33:V.321.C and 322, the modifications to the post-closure plan will be approved in accordance with the procedures in LAC 33:V.4391.F. If the administrative authority determines that an owner or operator of a surface impoundment or waste pile who intended to remove all hazardous wastes at closure must close the facility as a landfill, the owner or operator must submit a post-closure plan for approval to the administrative authority within 90 days of the determination.

E. The owner or operator of a facility with hazardous waste management units subject to these requirements must submit his post-closure plan to the administrative authority at least 180 days before the date he expects to begin partial or final closure of the first hazardous waste disposal unit. The date he "expects to begin closure" of the first hazardous waste disposal unit must be either within 30 days after the date on which the hazardous waste management unit receives the known final volume of hazardous waste, or if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes. The owner or operator must submit the post-closure plan to the administrative authority no later than 15 days after:

1. termination of interim status (except when a permit is issued to the facility simultaneously with termination of interim status); or

2. issuance of a judicial decree or final orders under Louisiana Environmental Quality Act to cease receiving wastes or close.

F. The administrative authority will provide the owner or operator and the public through a newspaper notice, the opportunity to submit written comments on the post-closure plan and request modifications to the plan no later than 30 days from the date of the notice. The administrative authority will also, in response to a request or at the administrative authority's own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning a post-closure plan. The administrative authority will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.) The administrative authority will approve, modify, or disapprove the plan within 90 days of its receipt. If the administrative authority does not approve the plan, he or she shall provide the owner or operator with a detailed written statement of reasons for the refusal, and the owner or operator must modify the plan or submit a new plan for approval within 30 days after receiving such written statement. If the administrative authority modifies the plan, this modified plan becomes the approved post-closure plan. The administrative authority must ensure that the approved post-closure plan is consistent with LAC 33:V.4389 through 4395. A copy of the modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.

G. The post-closure plan and length of the post-closure care period may be modified any time prior to the end of the post-closure care period in either of the following two ways:

1. The owner or operator or any member of the public may petition the administrative authority to extend or reduce the length or alter the requirements of the post-closure care period applicable to a hazardous waste management unit or facility based on cause.

a. The petition must include evidence demonstrating that:

i. the secure nature of the hazardous waste management unit or facility makes the post-closure care requirement(s) unnecessary or supports reduction of the post-closure care period specified in the current post-closure plan (e.g., leachate or groundwater monitoring results, characteristics of the wastes, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the facility is secure), or

ii. the requested extension in the post-closure care period or alteration of post-closure care requirements is necessary to prevent threats to human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

b. A petition will be considered by the administrative authority only when it presents new and relevant information not previously considered by the administrative authority. Whenever the administrative authority is considering a petition, the administrative authority will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments within 30 days of the date of the notice. The administrative authority will also, in response to a request or at the administrative authority's own discretion, hold a public hearing whenever a hearing might clarify one or more issues concerning the post-closure plan. The administrative authority will give the public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for written public comments, and the two notices may be combined.) After considering the comments, the administrative authority will issue a final determination, based upon the criteria set forth in LAC 33:V.4391.G.1.

c. If the administrative authority denies the petition, he will send the petitioner a brief written response giving a reason for the denial.

2. The administrative authority may tentatively decide to modify the post-closure plan if he or she decides that modification is necessary to prevent threats to human health and the environment. The administrative authority may propose to extend or reduce the length of or alter the requirements of the post-closure care period applicable to a hazardous waste management unit or facility based on cause or alter the requirements of the post-closure care period based on cause.

a. The administrative authority will provide the owner or operator and the affected public, through a newspaper notice, the opportunity to submit written comments within 30 days of the date of the notice and the opportunity for a public hearing as in LAC 33:V.4391.G.1. After considering the comments, the administrative authority will issue a final determination.

b. The administrative authority will base his or her final determination upon the same criteria required for petitions under LAC 33:V.4391.G.1.a. Where appropriate, a modification of the post-closure plan may include the temporary suspension rather than permanent deletion of one or more post-closure care requirements. At the end of the specified period of suspension, the administrative authority would then determine whether the requirement(s) should be permanently discontinued or reinstated to prevent threats to human health and the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 14:791 (November 1988), LR 16:614 (July 1990), LR 18:723 (July 1992).

§4393. Post-closure Notices

A. No later than 60 days after certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the administrative authority, a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

B. Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator must:

1. Record, in accordance with state law, a notation on the deed to the facility property—or on some other instrument which is normally examined during title search—that will in perpetuity notify any potential purchaser of the property that:

a. the land has been used to manage hazardous wastes;

b. its use is restricted under LAC 33:V.Chapter 43, Subchapter F; and

c. the survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by LAC 33:V.4387 and LAC 33:V.4393.A have been filed with

the local zoning authority or the authority with jurisdiction over local land use and with the administrative authority; and

2. Submit to the administrative authority a certification signed by the owner or operator that he has recorded the notation specified in LAC 33:V.4393.B.1 and a copy of the document in which the notation has been placed, to the administrative authority.

C. If the owner or operator or any subsequent owner or operator or any subsequent owner of the land upon which a hazardous waste disposal unit was located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, and all contaminated structures, equipment, and soils, he must request a modification to the approved post-closure plan in accordance with the requirements of LAC 33:V.4391.G. The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of LAC 33:V.4389.C. By removing hazardous waste, the owner or operator may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of this Chapter. If the owner or operator is granted approval to conduct the removal activities, the owner or operator may request that the administrative authority approve either:

a. the removal of the notation on the deed to the facility property or other instrument normally examined during title search, or

b. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 18:723 (July 1992).

§4395. Certification of Completion of Post-closure Care

No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the administrative authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the administrative authority upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under LAC 33:V.4407.H.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987).

Subchapter G. Financial Requirements

§4397. Applicability

A. The requirements of LAC 33:V.3719, 4401, 4403, 4411, and 4413 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this Section or in LAC 33:V.105.D.

B. The requirements of LAC 33:V.4405 and 4409 apply only to owners and operators of:

1. disposal facilities;

2. tank systems that are required under LAC 33:V.4442 to meet the requirements for landfills; and

3. containment buildings that are required under LAC 33:V.4705 to meet the requirements for landfills.

C. States and the federal government are exempt from the requirements of this Subchapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 13:651 (November 1987), LR 21:266 (March 1995).

§4399. Definitions of Terms as Used in This Subpart

A. General Terms

1. *Closure Plan*—the plan for closure prepared in accordance with the requirements of LAC 33:V.4381.

2. *Current Closure Cost Estimate*—the most recent of the estimates prepared in accordance with LAC 33:V.4401.

3. *Current Post-closure Cost Estimate*—the most recent of the estimates prepared in accordance with LAC 33:V.4405.

4. *Parent Corporation*—a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

5. *Post-closure Plan*—the plan for post-closure care prepared in accordance with the requirements of LAC 33:V.4389-4395.

6. The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

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

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

c. *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.

d. *Independently Audited*—an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

e. *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.

f. *Net Working Capital*—current assets minus current liabilities.

g. *Net Worth*—total assets minus total liabilities and is equivalent to owner's equity.

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

~~i. *Current Plugging and Abandonment Cost Estimate*—the most recent of the estimates prepared in accordance with the applicable Louisiana Department of Natural Resources (LDNR) regulations.~~

7. *Current Plugging and Abandonment Costs*—the most recent of the cost estimates prepared in accordance with 40CFR 144.62, Office of Conservation financial assurance regulations, or other substantially equivalent state programs.

8. *Substantial Business Relationship*—the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A "substantial business relationship" must arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the administrative authority.

B. Insurance-Related Terms. In the liability insurance requirements the terms bodily injury and property damage shall have the meanings given these terms by applicable state law. However, these terms do not include those liabilities which, consistent with standard industry practice, are excluded from coverage in liability policies for bodily injury and property damage. The department intends the meanings of other terms used in the liability insurance requirements are to be consistent with their common meanings within the insurance industry. The definitions of several of the terms given below are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

1. *Accidental Occurrence*—an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

2. *Legal Defense Costs*—any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

3. *Nonsudden Accidental Occurrence*—an occurrence which takes place over time and involves continuous or repeated exposure.

4. *Sudden Accidental Occurrence*—an occurrence which is not continuous or repeated in nature.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:219 (March 1990), LR 18:723 (July 1992).

§4401. Cost Estimate for Closure

A. The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in LAC 33:V.4381-4395 and applicable closure requirements in LAC 33:V.2117, 1911, 4457, 4489, 4501, 4521, 4531, 4543, and 4705.

1. The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see LAC 33:V.4399); and

2. The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary or the owner or operator. (See definition of parent corporation in LAC 33:V.4399. The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

3. The closure cost estimate may not incorporate any salvage value that may be realized by the sale of hazardous wastes, or non-hazardous wastes if applicable under LAC 33:V.4383.D, facility structures or equipment, land or other assets with the facility at the time of partial or final closure.

4. The owner or operator may not incorporate a zero cost for hazardous wastes, or non-hazardous wastes if applicable under LAC 33:V.4383.D that might have economic value.

B. During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instruments used to comply with LAC 33:V.4403. For an owner or operator using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the administrative authority as specified in LAC 33:V.4403.E.3. The adjustment may be made by recalculating the closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business, as specified in LAC 33:V.4401.B.1 and B.2. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

1. The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

2. Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

C. During the active life of the facility, the owner or operator must revise the closure cost estimate no later than 30 days after a revision that increases the cost of a closure has been made to the closure plan. If the owner or operator has an approved closure plan, the closure cost estimate must be revised no later than 30 days after the administrative authority has approved the request to modify the closure plan if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in LAC 33:V.4401.B.

D. The owner or operator must keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with LAC 33:V.4401.A and C and, when this estimate has been adjusted in accordance with LAC 33:V.4401.B, the latest adjusted closure estimate.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 17:478 (May 1991), LR 18:723 (July 1992), LR 21:266 (March 1995).

§4403. Financial Assurance for Closure

By the effective date of these regulations an owner or operator of each facility must establish financial assurance for closure of the facility. He must choose from the options as specified in LAC 33:V.4403.A through 4403.E.

A. Closure Trust Fund

1. An owner or operator may satisfy the requirements of LAC 33:V.4403 by establishing a closure trust fund which conforms to the requirements of this Paragraph, and submitting an originally signed duplicate of the trust agreement to the administrative authority. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

2. The wording of the trust agreement must be identical to the wording specified in LAC 33:V.7191.A.1, and the trust agreement must be accompanied by a formal certification of acknowledgement (for example, see LAC 33:V.3719.A.2). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

3. Payments into the trust fund must be made annually by the owner or operator over the 20-years beginning with the effective date of these regulations or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:

a. The first payment must be made by the effective date of these regulations except as provided in LAC 33:V.4403.A.5. The first payment must be at least equal to the current closure cost estimate, except as provided in LAC 33:V.4403.F, divided by the number of years in the pay-in period.

b. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\textit{Next Payment} = \frac{CE - CV}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

4. The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current closure cost estimate at the time the fund is established. However, he must 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 LAC 33:V.4403.A.3.

5. If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in LAC 33:V.4403, 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 as specified in LAC 33:V.4403.A.3.

6. After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator 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 owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

7. If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the administrative authority for release of the amount in excess of the current closure cost estimate.

8. If an owner or operator substitutes other financial assurance as specified in LAC 33:V.4403 for all or part of the trust fund, he may submit a written request to the administrative authority for release of the amount in excess of the current closure cost estimate covered by the trust fund.

9. Within 60 days after receiving a request from the owner or operator for release of funds as specified in LAC 33:V.4403.A.7 or A.8 the administrative authority will instruct the trustee to release to the owner or operator such funds as the administrative authority specifies in writing.

10. After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the administrative authority. The owner or operator may request reimbursement for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. No later than 60 days after receiving bills for partial or final closure activities, the administrative authority will instruct the trustees to make reimbursements in those amounts as the administrative authority specifies in writing, if the administrative authority determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the administrative authority has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with LAC 33:V.4407.H that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the administrative authority does not instruct the trustee to make such reimbursements, he will provide to the owner or operator a detailed written statement of reasons.

11. The administrative authority will agree to termination of the trust when:

a. an owner or operator substitutes alternate financial assurance as specified in LAC 33:V.4403; or

b. the administrative authority releases the owner or operator from the requirements of LAC 33:V.4403 in accordance with LAC 33:V.4403.H.

B. Surety Bond Guaranteeing Payment Into a Closure Trust Fund

1. An owner or operator may satisfy the requirements of LAC 33:V.4403 by obtaining a surety bond which conforms to the requirements of this Paragraph and submitting the bond to the administrative authority. 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.

2. The wording of the surety bond must be identical to the wording specified in LAC 33:V.3719.B.

3. The owner or operator who uses a surety bond to satisfy the requirements of LAC 33:V.4403 must also establish 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. This standby trust fund must meet the requirements specified in LAC 33:V.4403.A except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the surety bond; and

b. until the standby trust fund is funded pursuant to the requirements of LAC 33:V.4403, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC 33:V.4403.A;

ii. updating of Schedule A of the trust agreement to show current closure cost estimates;

iii. annual valuations as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The bond must guarantee that the owner or 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 final closure is issued by the administrative authority or a U.S. district court or other court of competent jurisdiction; or

c. provide alternate financial assurance as specified in LAC 33:V.4403 and obtain the administrative authority's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the

administrative authority of a notice of cancellation of the bond n the surety.

5. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

6. The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in LAC 33:V.4403.F.

7. Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, 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 cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in LAC 33:V.4403 to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the administrative authority.

8. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the administrative authority. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of ncellation by both the owner or operator and the dministrative authority, as evidenced by the return receipts.

9. The owner or operator may cancel the bond if the administrative authority has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in LAC 33:V.4403.

C. Closure Letter of Credit

1. An owner or operator may satisfy the requirements of LAC 33:V.4403 by obtaining an irrevocable standby letter of credit which conforms to the requirements of this Paragraph and submitting the letter to the administrative authority. The issuing institution must be an entity which 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. The wording of the letter of credit must be identical to the wording specified in LAC 33:V.3719.D.

3. An owner or operator who uses a letter of credit to satisfy the requirements of LAC 33:V.4403 must also establish 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 in accordance with instructions from the administrative authority. This standby trust fund must meet the requirements of the trust fund specified in LAC 33:V.4403.A, except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the letter of credit; and

b. unless the standby trust fund is funded pursuant to the requirements of LAC 33:V.4403, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC 33:V.4403.A;

ii. updating of Schedule A of the trust agreement (see LAC 33:V.3719.A) to show current closure cost estimates;

iii. annual valuation as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the hazardous waste facility identification number, name and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.

5. The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator 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 begin on the date when both the owner or operator and the administrative authority have received the notice, as evidenced by the return receipts.

6. The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in LAC 33:V.4403.F.

7. Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, 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 cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in LAC 33:V.4403 to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the administrative authority.

8. Following a determination that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other interim status requirements when required to do so, the administrative authority may draw on the letter of credit.

9. If the owner or operator does not establish alternate financial assurance as specified in LAC 33:V.4403, and obtain written approval of such alternate assurance from the

administrative authority within 90 days after receipt by both the owner or operator and the administrative authority of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the administrative authority may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the administrative authority will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in LAC 33:V.4403 and obtain written approval of such assurance from the administrative authority.

10. The administrative authority will return the letter of credit to the issuing institution for termination when:

a. an owner or operator substitutes alternate financial assurance as specified in LAC 33:V.4403; or

b. the administrative authority releases the owner or operator from the requirements of LAC 33:V.4403 in accordance with LAC 33:V.4403.H.

D. Closure Insurance

1. An owner or operator may satisfy the requirements of LAC 33:V.4403 by obtaining closure insurance which conforms to the requirements of this Paragraph and submitting a certificate of such insurance to the administrative authority. By the effective date of these regulations the owner or operator must submit to the administrative authority a letter from an insurer stating that the insurer is considering issuance of closure insurance conforming to the requirements of this Paragraph to the owner or operator. Within 90 days after the effective date of these regulations, the owner or operator must submit the certificate of insurance to the administrative authority or establish other financial assurance as specified in this Section. At a minimum, the insurer must be licensed to transact the business of insurance, or be eligible to provide insurance as an excess or surplus lines insurer, in one or more states, and authorized to transact business in Louisiana.

2. The wording of the certificate of insurance must be identical to the wording specified in LAC 33:V.3719.E.

3. The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in LAC 33:V.4403.F. 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 closure insurance policy must guarantee that funds will be available to close the facility whenever 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, an owner or operator, or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the administrative authority. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the administrative authority will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the insurer 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 will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with LAC 33:V.4403.H, that the owner or operator is no longer required to maintain financial assurance for closure of the facility. If the administrative authority does not instruct the insurer to make such reimbursements, he will provide to the owner or operator a detailed written statement of reasons.

6. The owner or operator must maintain the policy in full force and effect until the administrative authority consents to termination of the policy by the owner or operator as specified in LAC 33:V.4403.D.10. Failure to pay the premium, without substitution of alternate financial assurance as specified in LAC 33:V.4403, will constitute a significant violation of these regulations, warranting such remedy as the administrative authority deems necessary. Such violation will be deemed to begin upon receipt by the administrative authority of a notice of future cancellation, termination,or failure to renew, due to nonpayment of the premium, rather than upon the date of expiration.

7. Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent in 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 owner or operator and the administrative authority. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the administrative authority and the owner or operator, 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 abandoned; or

b. interim status is terminated or revoked;

c. closure is ordered by the administrative authority or U.S. district court or other courts of competent jurisdiction;

d. the owner or operator 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 closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in LAC 33:V.4403 to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the administrative authority.

10. The administrative authority will give written consent to the owner or operator that he may terminate the insurance policy when:

a. an owner or operator substitutes alternate financial assurance as specified in LAC 33:V.4403; or

b. the administrative authority releases the owner or operator from the requirements of LAC 33:V.4403 in accordance with LAC 33:V.4403.H.

E. Financial Test and Corporate Guarantee for Closure

1. An owner or operator may satisfy the requirements of LAC 33:V.4403 by demonstrating that he passes a financial test as specified in this Paragraph. To pass this test the owner or operator must meet the criteria of either LAC 33:V.4403.E.1.a or b.

a. the owner or operator must have:

i. either a ratio of total liabilities to net worth less than 1.5; or a ratio of the sum of net income plus depreciation, depletion, and amortization minus $10 million, to total liabilities greater than 0.10 and

ii. tangible net worth greater than the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test.

b. The owner or operator must have:

i. a current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

ii. tangible net worth greater than the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test.

2. The phrase "current closure and post-closure cost estimates" as used in LAC 33:V.4403.E.1 refers to the cost estimates required to be shown in Paragraphs 1 through 7 of the letter from the owner's or operator's chief financial officer (see LAC 33:V.3719.F).

3. To demonstrate that he meets this test, the owner or operator must submit the following items to the administrative authority:

a. a letter signed by the owner's or operator's chief financial officer and worded as specified in LAC 33:V.3719.F; and

b. a copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

c. a special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

i. he has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii. in connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

4. The owner or operator may obtain an extension of the time allowed for submission of the items specified in LAC 33:V.4403.E.3 if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the chief financial officer of the owner or operator must send, by the effective date of these regulations, a letter to the administrative authority. This letter from the chief financial officer must:

a. request the extension;

b. certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

c. specify for each facility to be covered by the test the Hazardous Waste Facility Identification Number, name,

address, and current closure and post-closure cost estimates to be covered by the test;

d. specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;

e. specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in LAC 33:V.4403.E.3; and

f. certify that the year-end financial statement of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

5. After the initial submission of items specified in LAC 33:V.4403.E.3, the owner or operator must send updated information to the administrative authority within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in LAC 33:V.4403.E.3.

6. If the owner or operator no longer meets the requirements of LAC 33:V.4403.E.1, he must send notice to the administrative authority of intent to establish alternate financial assurance as specified in LAC 33:V.4403. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

7. The administrative authority may, based on a reasonable belief that the owner or operator may no longer meet the requirements of LAC 33:V.4403.E.1, require reports of financial condition at any time from the owner or operator in addition to those specified in LAC 33:V.4403.E.3. If the administrative authority finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of LAC 33:V.4403.E.1, the owner or operator must provide alternate financial assurance as specified in LAC 33:V.4403 within 30 days after notification of such a finding.

8. The administrative authority may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see LAC 33:V.4403.E.3). 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 owner or operator must provide alternate financial assurance as specified in LAC 33:V.4403 within 30 days after notification of the disallowance.

9. The owner or operator is no longer required to submit the items specified in LAC 33:V.4403.E.3 when:

a. an owner or operator substitutes alternate financial assurance as specified in LAC 33:V.4403; or

b. the administrative authority releases the owner or operator from the requirements of LAC 33:V.4403 in accordance with LAC 33:V.4403.H.

10. An owner or operator may meet the requirements of LAC 33:V.4403 by obtaining a written guarantee.

a. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business" relationship with the owner or operator. The guarantor must meet the requirements for owners or operators in LAC 33:V.4403.E.1 through E.8 and must comply with the terms of the guarantee. The wording of the guarantee must be identical to the wording specified in LAC 33:V.3719.H. A certified copy of the guarantee must accompany the items sent to the administrative authority as specified in LAC 33:V.4403.E.3. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee must provide that:

i. if the owner or operator fails to perform final closure of a facility covered by the guarantee in accordance with the closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in LAC 33:V.4403.A in the name of the owner or operator.

ii. the guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the administrative authority. 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.

iii. if the owner or operator fails to provide alternate financial assurance as specified in LAC 33:V.4403 and obtain the written approval of such alternate assurance from the administrative authority within 90 days after receipt by administrative authority of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

F. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of LAC 33:V.4403 by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit insurance, and financial test and guarantee, except that the financial test and guarantee may not be combined. The mechanisms must be as specified in LAC 33:V.4403.A

through F, respectively, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The administrative authority may use any or all of the mechanisms to provide for closure of the facility.

G. Use of a Financial Mechanism for Multiple Facilities. An owner or operator may use a financial assurance mechanism specified in LAC 33:V.4403 to meet the requirements of LAC 33:V.4403 for more than one facility. Evidence of financial assurance submitted to the administrative authority must include a list showing, for each facility, the EPA identification number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing the funds available through the mechanism for closure of any of the facilities covered by the mechanism, the administrative authority may direct only the amount of funds designated for that particular facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

H. Release of the Owner or Operator from the Requirements of LAC 33:V.4403. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that closure has been completed in accordance with the approved closure plan ~~and after receiving the certification required under LAC 33:V.4393.B.2 for facilities subject to LAC 33:V.4393,~~ the administrative authority will notify the owner or operator in writing that he is no longer required by LAC 33:V.4403 to maintain financial assurance for final closure of the particular facility, unless the administrative authority has reason to believe that the final closure has not been in accordance with the approved closure plan ~~or that the owner or operator has failed to comply with the applicable requirements of LAC 33:V.4393~~. The administrative authority shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan ~~or that the owner or operator has failed to comply with the applicable requirements of LAC 33:V.4393~~.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 14:791 (November 1988), LR 16:219 (March 1990), LR 18:723 (July 1992).

§4405. Cost Estimate for Post-closure Care

A. The owner or operator of a hazardous waste disposal unit must have a detailed written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in LAC 33:V.4389 through LAC 33:V.4395, LAC 33:V.4457, 4475, 4489, and 4501.

1. The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor subsidiary of the owner or operator. (See definition of parent corporation in LAC 33:V.4399.)

2. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under LAC 33:V.4389.

B. During the active life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with LAC 33:V.4407. For owners or operators using the financial test or corporate guarantee, the post-closure care cost estimate must be updated for inflation no later than 30 days after the close of the firm's fiscal year and before submission of updated information to the administrative authority as specified in LAC 33:V.4407.D.5. The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business as specified in LAC 33:V.4405.B.1 and B.2. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

1. The first adjustment is made by multiplying the latest adjusted post-closure cost estimate by the inflator factor. The result is the adjusted post-closure cost estimate.

2. Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

C. During the active life of the facility, the owner or operator must revise the post-closure cost estimate no later than 30 days after a revision to the post-closure plan which increases the cost of post-closure care. If the owner or operator has an approved post-closure plan, the post-closure cost estimate must be revised no later than 30 days after the administrative authority has approved the request to modify the plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in LAC 33:V.4405.B.

D. The owner or operator must keep the following at the facility during the operating life of the facility: the latest

post-closure cost estimate prepared in accordance with LAC 33:V.4405.A and C and, when this estimate has been adjusted in accordance with LAC 33:V.4405.B, the latest adjusted post-closure cost estimate.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

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§4407. Financial Assurance for Post-closure Care

An owner or operator of each hazardous waste disposal unit must establish financial assurance for post-closure care of the facility. He must choose from the options as specified in LAC 33:V.4407.A-E.

A. Post-closure Trust Fund

1. An owner or operator may satisfy the requirements of LAC 33:V.4407.A by establishing a post-closure trust fund which conforms to the requirements of this Paragraph and submitting an originally signed duplicate of the trust agreement to the administrative authority. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

2. The wording of the trust agreement must be identical to the wording specified in LAC 33:V.3719.A.1, and the trust agreement must be accompanied by a formal certification of acknowledgement (for example, see LAC 33:V.3719.A.2). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

3. Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning with the effective date of these regulations or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments in to the post-closure trust fund must be made as follows:

a. The first payment must be made by the effective date of these regulations, except as provided in LAC 33:V.4407.A.5. The first payment must be at least equal to the current post-closure cost estimate, except as provided in LAC 33:V.4407.F, divided by the number of years in the pay-in period.

b. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$Next\ Payment = \frac{CE - CV}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

4. The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, he must 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 LAC 33:V.4407.A.3.

5. If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in LAC 33:V.4407, 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 as specified in LAC 33:V.4407.A.3.

6. After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator 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 owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in LAC 33:V.4407 to cover the difference.

7. During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the administrative authority for release of the amount in excess of the current post-closure cost estimate.

8. If an owner or operator substitutes other financial assurance as specified in LAC 33:V.4407 for all or part of the trust fund, he may submit a written request to the administrative authority for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

9. Within 60 days after receiving a request from the owner or operator for release of funds as specified in LAC 33:V.3711.G or H, the administrative authority will instruct the trustee to release to the owner or operator such funds as the administrative authority specifies in writing.

10. During the period of post-closure care, the administrative authority may approve a release of funds if the owner or operator demonstrates to the administrative authority that the value of the trust fund exceeds the remaining cost of post-closure care.

11. An owner or operator, or any other person thorized to perform post-closure care, may request nbursement for the post-closure expenditures by submitting itemized bills to the administrative authority. Within 60 days after receiving bills for post-closure activities, the administrative authority will instruct the trustee to make reimbursements in those amounts as the administrative authority specifies in writing, if the administrative authority determines that the post-closure expenditures are in accordance with the approved post-closure plan or otherwise justified. If the administrative authority does not instruct the trustee to make such reimbursements, he will provide the owner or operator with a detailed statement of reasons.

12. The administrative authority releases the owner or operator from the requirements of LAC 33:V.4407.A. in accordance with LAC 33:V.4407.H.

B. Surety Bond Guaranteeing Payment into a Post-closure Trust Fund

1. An owner or operator may satisfy the requirements of LAC 33:V.4407.B by obtaining a surety bond which conforms to the requirements of this Paragraph and submitting the bond to the administrative authority. 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.

2. The wording of the surety bond must be identical to the wording specified in LAC 33:V.3719.B.

3. The owner or operator who uses a surety bond to satisfy the requirements of LAC 33:V.4407.B must also establish 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. This standby trust fund must meet the requirements specified in LAC 33:V.4407.A, except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the surety bond; and

b. until the standby trust fund is funded pursuant to the requirements of LAC 33:V.4407.B, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC 33:V.4407.A.3;

ii. updating of Schedule A of the trust agreement (LAC 33:V.3719.A) to show current post-closure cost estimates;

iii. annual valuations as required by the trust greement; and

iv. notices of nonpayment as required by the trust agreement.

4. The bond must guarantee that the owner or 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 final closure is issued by the administrative authority becomes final, or within 15 days after an order to begin final closure is issued by a court of competent jurisdiction; or

c. provide alternate financial assurance as specified in LAC 33:V.4407.B and obtain the administrative authority's written approval of the assurance provided within days after receipt by both the owner or operator and the administrative authority of a notice of cancellation of the bond from the surety.

5. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

6. The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in LAC 33:V.4407.F.

7. Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in LAC 33:V.4407.B to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the administrative authority.

8. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator, and to the administrative authority. 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.

9. The owner or operator may cancel the bond if the administrative authority has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in LAC 33:V.4407.B.

C. Post-closure Letter of Credit

1. An owner or operator may satisfy the requirements of LAC 33:V.4407.C by obtaining an irrevocable standby letter of credit which conforms to the requirements of this Paragraph and by submitting the letter to the administrative authority. The issuing institution must be an entity which 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. The wording of the letter of credit must be identical to the wording specified in LAC 33:V.3719.D.

3. An owner or operator who uses a letter of credit to satisfy the requirements of LAC 33:V.4407.C must also establish 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 in accordance with instructions from the administrative authority. This standby trust fund must meet the requirements of the trust fund specified in LAC 33:V.4407.A, except that:

a. an originally signed duplicate of the trust agreement must be submitted to the administrative authority with the letter of credit; and

b. unless the standby trust fund is funded pursuant to the requirements of LAC 33:V.4407.C, the following are not required by these regulations:

i. payments into the trust fund as specified in LAC 33:V.4407.A;

ii. updating of Schedule A of the trust agreement (see LAC 33:V.3719.A) to show current post-closure cost estimates;

iii. annual valuations as required by the trust agreement; and

iv. notices of nonpayment as required by the trust agreement.

4. The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the hazardous waste facility identification number, name and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.

5. The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator, 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 begin on the date when both the owner or operator, and the administrative authority have received the notice, as evidenced by the return receipts.

6. The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in LAC 33:V.4407.F.

7. Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, 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 post-closure cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in LAC 33:V.4407 to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the administrative authority.

8. During the period of post-closure care, the administrative authority may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the administrative authority that the amount exceeds the remaining cost of post-closure care.

9. Following a final administrative determination by the administrative authority that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, the administrative authority may draw on the letter of credit.

10. If the owner or operator does not establish alternate financial assurance as specified in LAC 33:V.4407 and obtain written approval of such alternate assurance from the administrative authority within 90 days after receipt by both the owner or operator and the administrative authority of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the administrative authority will draw on the letter of credit. The administrative authority may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the administrative authority will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in LAC 33:V.4407 and obtain written approval of such assurance from the administrative authority.

11. The administrative authority will return the letter of credit to the issuing institution for termination when:

a. an owner or operator substitutes alternate financial assurance as specified in LAC 33:V.4407; or

b. the administrative authority releases the owner or operator from the requirements of LAC 33:V.4407 in accordance with LAC 33:V.4407.H.

D. Post-closure Insurance

1. An owner or operator may satisfy the requirements of LAC 33:V.4407.D by obtaining post-closure insurance which conforms to the requirements of this Paragraph and submitting a certificate of such insurance to the administrative authority. The owner or operator must submit to the administrative authority a letter from an insurer stating that the insurer i considering issuance of post-closure insurance conforming to the requirements of this Paragraph to the owner or operator. Within 90 days after the effective date of these regulations, the

owner or operator must submit the certificate of insurance to the administrative authority or establish other financial assurance as specified in LAC 33:V.4407. At a minimum, the insurer must be licensed to transact the business of insurance, or be eligible to provide insurance as an excess or surplus lines insurer in one or more states, and authorized to transact insurance business in Louisiana.

2. The wording of the certificate of insurance must be identical to the wording specified in LAC 33:V.3719.E.

3. The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in LAC 33:V.4407.F. 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 post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure period begins. The policy must also guarantee that once post-closure care 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. An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the administrative authority. Within 60 days after receiving bills for post-closure activities, the administrative authority will instruct the insurer to make reimbursements in those amounts as the administrative authority specifies in writing, if the administrative authority determines that the post-closure expenditures are in accordance with the approved post-closure plan or otherwise justified. If the administrative authority does not instruct the insurer to make such reimbursements, he will provide a detailed written statement of reasons.

6. The owner or operator must maintain the policy in full force and effect until the administrative authority consents to termination of the policy by the owner or operator as specified in LAC 33:V.4407.D.11. Failure to pay the premium, without substitution of alternate financial assurance as specified in LAC 33:V.4407, will constitute a significant violation of these regulations, warranting such remedy as the administrative authority deems necessary. Such violation will be deemed to begin upon receipt by the administrative authority of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

7. Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such 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 owner or operator and the administrative authority. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the administrative authority and the owner or operator, 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 abandoned; or

b. interim status is terminated or revoked;

c. closure is ordered by the administrative authority, or a U. S. District Court; or

d. the owner or operator 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 post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the administrative authority, or obtain other financial assurance as specified in LAC 33:V.4407 to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the administrative authority.

10. Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to eighty-five percent of the most recent investment rates or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26 week treasury securities.

11. The administrative authority will give written consent to the owner or operator that he may terminate the insurance policy when:

a. an owner or operator substitutes alternate financial assurance as specified in LAC 33:V.4407; or

b. the administrative authority releases the owner or operator from the requirements of LAC 33:V.4407 in accordance with LAC 33:V.4407.H.

E. Financial Test and Guarantees for Post-closure Care

1. An owner or operator may satisfy the requirements of LAC 33:V.4407.E by demonstrating that he passes a financial test as specified in this Paragraph. To pass this test the owner or operator must meet the criteria of either LAC 33:V.4407.E.1.a or b.

a. The owner or operator must have:

i. either a ratio of total liabilities to net worth less than 1.5, or a ratio of the sum of net income plus depreciation, depletion, and amortization, minus $10 million, to total liabilities greater than 0.10; and

ii. tangible net worth greater than the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test.

b. The owner or operator must have:

i. a current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

ii. tangible net worth greater than the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test plus $10 million; and

iii. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and any other obligations covered by a financial test.

2. The phrase "current closure and post-closure cost estimates" as used in LAC 33:V.4407.E.1 refers to the cost estimates required to be shown in Paragraphs 1 through 7 of the letter from the owner's or operator's chief financial officer (see LAC 33:V.3719.F).

3. To demonstrate that he meets this test, the owner or operator must submit the following items to the administrative authority:

a. a letter signed by the owner's or operator's chief financial officer and worded as specified in LAC 33:V.3719.F; and

b. a copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

c. a special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

i. he has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii. in connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

4. The owner or operator may obtain an extension of the time allowed for submission of the documents specified in LAC 33:V.4407.E.3 if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the administrative authority. This letter from the chief financial officer must:

a. request the extension;

b. certify that he has ground* to believe that the owner or operator meets the criteria of the financial test;

c. specify for each facility to be covered by the test the EPA identification number, name, address, and current closure and post-closure cost estimates to be covered by the test;

d. specify the date ending the owner's or operator's latest complete fiscal year before the effective date of these regulations;

e. specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in LAC 33:V.4407.E.3; and

f. certify that the year-end financial statement of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

5. After the initial submission of items specified in LAC 33:V.4407.E.3, the owner or operator must send updated information to the administrative authority within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in LAC 33:V.4407.E.3.

6. If the owner or operator no longer meets the requirements of LAC 33:V.4407.E.1, he must send notice to the administrative authority of intent to establish alternate financial assurance as specified in LAC 33:V.4407. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

7. The administrative authority may, based on a reasonable belief that the owner or operator may no longer meet the requirements of LAC 33:V.4407.E.1, require reports of financial condition at any time from the owner or operator in addition to those specified in LAC 33:V.4407.E.3. If the administrative authority finds, on the basis of such reports or

other information, that the owner or operator no longer meets the requirements of LAC 33:V.4407.E.1, the owner or operator must provide alternate financial assurance as specified in LAC 33:V.4407 within 30 days after notification of such a finding.

8. The administrative authority may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see LAC 33:V.4407.E.3). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The administrative authority will evaluate other qualifications on an individual basis. Based on the application, the circumstances, and the accessibility of the applicant's assets, the administrative authority may disallow the use of this test. The owner or operator must provide alternate financial assurance as specified in LAC 33:V.4407 within 30 days after notification of the disallowance.

9. During the period of post-closure care, the administrative authority may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the administrative authority that the amount of the cost estimate exceeds the remaining cost of post-closure care.

10. The owner or operator is no longer required to submit the items specified in LAC 33:V.4407.E.3 when:

a. an owner or operator substitutes alternate financial assurance as specified in LAC 33:V.4407; or

b. the administrative authority releases the owner or operator from the requirements of LAC 33:V.4407 in accordance with LAC 33:V.4407.H.

11. An owner or operator may meet the requirements of LAC 33:V.4407.E by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for an owner or operator in LAC 33:V.4407.E.1 through E.9 and must comply with the terms of the guarantee. The wording of the guarantee must be identical to the wording specified in LAC 33:V.3719.H. A certified copy of the guarantee must accompany the items sent to the administrative authority specified in LAC 33:V.4407.E.3. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee must provide that:

a. if the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in LAC 33:V.4407.A in the name of the owner or operator;

b. the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the administrative authority. 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 the owner or operator fails to provide alternate financial assurance as specified in LAC 33:V.4407 and obtain the written approval of such alternate assurance from the administrative authority within 90 days after receipt by both the owner or operator and the administrative authority of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

F. Use of Multiple Financial Mechanisms. An owner or operator may satisfy the requirements of LAC 33:V.4407.F by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, insurance, and financial test and guarantee, except that the financial test and guarantee may not be combined. The mechanisms must be as specified in LAC 33:V.4407.A, B, D, E, and F, respectively, except that it is the combination of mechanisms rather than the single mechanism which must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The administrative authority may use any or all of the mechanisms to provide for post-closure care of the facility.

G. Use of a Financial Mechanism for Multiple Facilities. An owner or operator may use a financial assurance mechanism specified in LAC 33:V.4407.G to meet the requirements of LAC 33:V.4407.G for more than one facility. Evidence of financial assurance submitted to the administrative authority must include a list showing, for each facility, the EPA identification number, name, address, and the amount of funds for post-closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the administrative authority may direct only the amount of funds designated for that particular facility, unless

the owner or operator agrees to the use of additional funds available under the mechanism.

H. Release of the Owner or Operator from the Requirements of LAC 33:V.4407. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that the post-closure care period has been completed in accordance with the approved post-closure plan, the administrative authority will notify the owner or operator in writing that he is no longer required by this Section to maintain financial assurance for post-closure care of that unit, unless the administrative authority has reason to believe that post-closure care has not been in accordance with the approved post-closure plan. The administrative authority will provide the owner or operator a detailed written statement of any such reason to believe that post-closure care has not been in accordance with the approved post-closure plan.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:433 (August 1987), LR 18:723 (July 1992).

* As appeared in the published rule.

§4409. Use of a Mechanism for Financial Assurance of Both Closure and Post-closure Care

An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both LAC 33:V.4403 and 4407. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism has been established and maintained for financial assurance of closure and post-closure care.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4411. Liability Requirements

A. Coverage for Sudden Accidental Occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in LAC 33:V.4411.A.1-6.

1. An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this Paragraph.

a. Each insurance policy must be amended by attachment of the hazardous waste facility liability endorsement or evidenced by a certificate of liability insurance. The wording of the endorsement must be identical to the wording specified in LAC 33:V.3719.I. The wording of the certificate of insurance must be identical to the wording specified in LAC 33:V.3719.J. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the administrative authority. If requested by the administrative authority, the owner or operator must provide a signed duplicate original of the insurance policy.

b. Each insurance policy must be issued by an insurer which, at a minimum, is authorized to transact business in Louisiana and in one or more states and is licensed to transact the business of insurance or is eligible to provide insurance as an excess or surplus lines insurer, in one or more states, and authorized to transact business in Louisiana.

2. An owner or operator may meet the requirements of this Section by passing a financial test or using the guarantee for liability coverage as specified in LAC 33:V.4411.F through G.

3. An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage as specified in LAC 33:V.4411.H.

4. An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage as specified in LAC 33:V.4411.I.

5. An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage as specified in LAC 33:V.4411.J.

6. An owner or operator may demonstrate the required liability coverage through the use of combinations of financial test, insurance, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this Paragraph, the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

7. An owner or operator shall notify the administrative authority in writing within 30 days whenever:

a. a claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in LAC 33:V.4411.A.1-6; or

b. a Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage under LAC 33:V.4411.A.1-6; or

c. a final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under LAC 33:V.4411.A.1-6.

B. Coverage for Non-sudden Accidental Occurrences. An owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by non-sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for non-sudden accidental occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs. An owner or operator who must meet the requirements of this Section may combine the required per-occurrence coverage levels for sudden and non-sudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and non-sudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and non-sudden accidental occurrences must maintain liability coverage in the amount of at least $4 million per occurrence and $8 million annual aggregate. This liability coverage may be demonstrated as specified in LAC 33:V.4411.B.1-6.

1. An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this Paragraph.

a. Each insurance policy must be amended by attachment of the hazardous waste facility liability endorsement or evidenced by a certificate of liability insurance. The wording of the endorsement must be identical to the wording specified in LAC 33:V.3719.I. The wording of the certificate of insurance must be identical to the wording specified in LAC 33:V.3719.J. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the administrative authority. If requested by the administrative authority, the owner or operator must provide a signed duplicate original of the insurance policy.

b. Each insurance policy must be issued by an insurer which, at a minimum, 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 authorized to transact business in Louisiana.

2. An owner or operator may meet the requirements of LAC 33:V.4411.B by passing a financial test or using the corporate guarantee for liability coverage as specified in LAC 33:V.4411.F and G.

3. An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage as specified in LAC 33:V.4411.H.

4. An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage as specified in LAC 33:4411.I.

5. An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage as specified in LAC 33:V.4411.J.

6. An owner or operator may demonstrate the required liability coverage through use of combinations of the financial test, insurance, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this Paragraph, the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.

7. An owner or operator shall notify the administrative authority in writing within 30 days whenever:

a. a claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in LAC 33:V.4411.B.1-6; or

b. a Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage under LAC 33:V.4411.B.1-6; or

c. a final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under LAC 33:V.4411.B.1-6.

C. Request for Variance. If an owner or operator can demonstrate to the satisfaction of the administrative authority that the levels of financial responsibility required by LAC 33:V.4411.A or B are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the administrative authority. The request for a variance must be submitted in writing to the administrative authority. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the administrative authority's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The administrative authority may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the administrative authority to determine a level of financial responsibility other than that required by LAC 33:V.4411.A or B. The administrative authority will process a variance request as if it were a permit modification request. Notwithstanding any other provision, the administrative authority may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing, a significant degree of public interest in a tentative decision to grant a variance.

D. Adjustments by the administrative authority. If the administrative authority determines that the levels of financial responsibility required by LAC 33:V.4411.A or B are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the administrative authority may adjust the level of financial responsibility required by LAC 33:V.4411.A or B as may be necessary to protect human health and the environment. This adjusted level will be based on the administrative authority's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the administrative authority determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with LAC 33:V.4411.B. An owner or operator must furnish to the administrative authority, within a reasonable time, any information which the administrative authority requests to determine whether cause exists for such adjustments of level or type of coverage. The administrative authority will process an adjustment of the level of required coverage as if it were a permit modification. Notwithstanding any other provision, the administrative authority may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing, a significant degree of public interest in a tentative decision to adjust the level or type of required coverage.

E. Period of Coverage. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the administrative authority will notify the owner or operator in writing that he is no longer required by this Section to maintain liability coverage for that facility, unless the administrative authority has reason to believe that closure has not been in accordance with the approved closure plan.

F. Financial Test for Liability Coverage

1. An owner or operator may satisfy the requirements of this Section by demonstrating that he passes a financial test as specified in LAC 33:V.4411.F. To pass this test the owner or operator must meet the criteria of either LAC 33:V.4411.F.1.a or b.

a. The owner or operator must have:

i. tangible net worth greater than the sum of the amount of liability coverage to be demonstrated by this test plus $10 million; and

ii. assets located in the United States amounting to either: (1) at least 90 percent of his total assets; or (2) at least six times the sum of the amount of liability coverage and any other obligations covered by a financial test.

b. The owner or operator must have:

i. a current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

ii. tangible net worth greater than the sum of the amount of liability coverage to be demonstrated by this test plus $10 million; and

iii. assets located in the United States amounting to either at least 90 percent of his total assets or at least six times the sum of the amount of liability coverage and any other obligations covered by a financial test;

2. The phrase "amount of liability coverage" as used in LAC 33:V.4411.F.1 refers to the annual aggregate amounts for which coverage is required under LAC 33:V.4411.A and B.

3. To demonstrate that he meets this test, the owner or operator must submit the following three items to the administrative authority.

a. A letter signed by the owner's or operator's chief financial officer and worded as specified in LAC 33:V.3719.G. If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, and liability coverage, he must submit the letter specified in LAC 33:V.3719.G to cover both forms of financial responsibility; a separate letter as specified in LAC 33:V.3719.F is not required.

b. A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

c. A special report from the owner's or operator's ...pendent certified public accountant to the owner or ...ator stating that:

i. he has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii. in connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

4. The owner or operator may obtain a one-time extension of the time allowed for submission of the documents specified in LAC 33:V.4411.F.3 if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the chief financial officer for the owner or operator must send a letter to the administrative authority. This letter from the chief financial officer must:

a. request the extension;

b. certify that he has grounds to believe that the owner ... operator meets the criteria of the financial test;

c. specify for each facility to be covered by the test the EPA identification number, name, address, the amount of liability coverage and, when applicable, current closure and post-closure cost estimates to be covered by the test;

d. specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;

e. specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in LAC 33:V.4411.F.3; and

f. certify that the year-end financial statement of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

5. After the initial submission of items specified in LAC 33:V.4411.F.3, the owner or operator must send updated information to the administrative authority within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in LAC 33:V.4411.F.3.

6. If the owner or operator no longer meets the requirements of LAC 33:V.4411.F.1, he must obtain ...surance, a letter of credit, a surety bond, a trust fund, or a ...uarantee for the entire amount of required liability coverage as specified in LAC 33:V.4411. Evidence of liability coverage must be submitted to the administrative authority within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

7. The administrative authority may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see LAC 33:V.4411.F.3). 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 owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in LAC 33:V.4411 within 30 days after notification of disallowance.

G. Guarantee for Liability Coverage

1. Subject to LAC 33:V.4411.G.2, an owner or operator may meet the requirements of this Section by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in LAC 33:V.4411.F.1 through 6. The wording of the guarantee must be identical to the wording specified in LAC 33:V.3719.H.2. A certified copy of the guarantee must accompany the items sent to the administrative authority as specified in LAC 33:V.4411.F.3. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" wit the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee.

a. If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or non-sudden accidental occurrences or both, arising from the operation of facilities covered by this corporate guarantee or fails to pay an amount agreed upon in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor will do so up to the limits of coverage.

b. Reserved.

2. In the case of corporations incorporated in the United States, a guarantee may be used to satisfy the requirements of this Section only if the attorney general or insurance commissioner of the state in which the guarantor is incorporated and the attorney general or insurance commissioner of Louisiana have submitted written statements to the department that a guarantee executed as described in this Section and LAC 33:V.3719.H.2 is a legally valid and enforceable obligation in that state.

3. In the case of corporations incorporated outside the United States, a guarantee may be used to satisfy the requirements of this Section only if the non-U.S. corporation has identified a registered agent for service of process in Louisiana and in the state in which it has its principal place of business, and if the attorney general or insurance commissioner of Louisiana and the state in which the guarantor corporation has its principal place of business have submitted written statements to the department that a guarantee executed as described in this Section and LAC 33:V.3719.H.2 is a legally valid and enforceable obligation in that state.

H. Letter of Credit for Liability Coverage

1. An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this Subsection and submitting a copy of the letter of credit to the administrative authority.

2. The financial institution issuing the letter of credit 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.

3. The wording of the letter of credit must be identical to the wording specified in LAC 33:V.3719.K.

4. An owner or operator who uses a letter of credit to satisfy the requirements of this Section may also establish a standby trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust will be deposited by the issuing institution into the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund 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.

5. The wording of the standby trust fund must be identical to the wording specified in LAC 33:V.3719.N.

I. Surety Bond for Liability Coverage

1. An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this Subsection and submitting a copy of the bond to the administrative authority.

2. The surety company issuing the bond must be among those listed as acceptable sureties on federal bonds in the most recent Circular 570 of the U.S. Department of the Treasury.

3. The wording of the surety bond must be identical to the wording specified in LAC 33:V.3719.L.

4. A surety bond may be used to satisfy the requirements of this Section only if the attorney general or insurance commissioners of the state in which the surety is incorporated and the attorney general or insurance commissioner of Louisiana have submitted written statements to the department that a surety bond executed as described in this Section and LAC 33:V.3719.L is a legally valid and enforceable obligation in that state.

J. Trust Fund for Liability Coverage

1. An owner or operator may satisfy the requirements of this Section by establishing a trust fund that conforms to the requirements of this Subsection and submitting an originally signed duplicate of the trust agreement to the administrative authority.

2. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

3. The trust fund for liability coverage must be funded for the full amount of the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of this Section. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of the liability coverage to be provided, the owner or operator, by the anniversary date of the establishment of the fund, must either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in this Section to cover the difference. For purposes of this Paragraph, "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and/or non-sudden occurrences required to be provided by the owner or operator by this Section, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

4. The wording of the trust fund must be identical to the wording specified in LAC 33:V.3719.M.

K. Notwithstanding any other provision of LAC 33:V.Chapter 43, an owner or operator using liability insurance to satisfy the requirements of this Section may use, until October 16, 1982, a Hazardous Waste Facility Liability Endorsement or Certificate of Liability Insurance that does not certify that the insurer is licensed to transact the business of insurance, or eligible as an excess or surplus lines insurer, in one or more states.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:399 (May 1990), LR 18:723 (July 1992), repromulgated LR 19:627 (May 1993).

§4413. Incapacity of Owners or Operators, Guarantors, or Financial Institutions

A. An owner or operator must notify the administrative authority by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as

debtor, within ten days after commencement of the ceeding. A guarantor of a corporate guarantee as specified LAC 33:V.4403.E and 4407.E must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (see LAC 33:V.3719.H).

B. An owner or operator who fulfills the requirements of LAC 33:V.4403, 4407, or 4411 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4415. Reserved

Subchapter H. Containers

§4417. Applicability

Owners and operators of all hazardous waste facilities with interim status that store hazardous wastes in containers are subject to the requirements of this Chapter and LAC 33:V.Chapter 21 as indicated below.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4419. Condition of Containers

Interim status facilities are subject to the requirements of LAC 33:V.2103.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4421. Compatibility of Waste with Containers

Interim status facilities are subject to the requirements of LAC 33:V.2105.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4423. Management of Containers

Interim status facilities are subject to the requirements of LAC 33:V.2107.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4425. Inspections

Interim status facilities are subject to the requirements of LAC 33:V.2109.A.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4427. Special Requirements for Ignitable or Reactive Waste

Interim status facilities are subject to the requirements of LAC 33:V.2113.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4429. Special Requirements for Incompatible Wastes

Interim status facilities are subject to the requirements of LAC 33:V.2115.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

Subchapter I. Tanks

§4431. Applicability

A. The regulations of this Subchapter apply to owners or operators of facilities that use tank systems for storing or treating hazardous waste, except as otherwise provided in LAC 33:V.4431 and 4433 or in LAC 33:V.4301 and 105.F.

1. Tank systems that are used to store or treat hazardous waste which contains no free liquids and that are situated inside a building with an impermeable floor are exempted from the requirements of LAC 33:V.4437. To demonstrate the absence or presence of free liquids in the stored/treated waste EPA Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", (EPA Publication No. SW-846), must be used.

2. Tank systems, including sumps, as defined in LAC 33:V.109, that serve as part of a secondary containment

system to collect or contain releases of hazardous wastes are exempted from the requirements in LAC 33:V.4437.A.

3. Tanks, sumps and other collection devices used in conjunction with drip pads, as defined in LAC 33:V.109 and regulated under LAC 33:V. Chapter 43. Subchapter S, must meet the requirements of this Subchapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 16:614 (July 1990), LR 18:1375 (December 1992).

§4433. Assessment of Existing Tank System's Integrity

A. For each existing tank system that does not have secondary containment meeting the requirements of these regulations, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided in LAC 33:V.4433.C, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified, registered professional engineer in accordance with LAC 33:V.513 that attests to the tank system's integrity by November 20, 1988.

B. This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

1. design standard(s), if available, according to which the tank and ancillary equipment were constructed;

2. hazardous characteristics of the waste(s) that have been or will be handled;

3. existing corrosion protection measures;

4. documented age of the tank system, if available, (otherwise, an estimate of the age); and

5. results of a leak test, internal inspection, or other tank integrity examination such that:

a. for non-enterable underground tanks, this assessment must consist of a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects;

b. for other than non-enterable underground tanks and for ancillary equipment, this assessment must be either a leak test, as described above, or an internal inspection and/or other tank integrity examination certified by an independent, qualified, registered professional engineer in accordance with LAC 33:V.513 that addresses cracks, leaks, corrosion, and erosion.

C. Tank systems that store or treat materials that became hazardous wastes subsequent to July 14, 1986 must conduct this assessment within 12 months after the date that the waste became a hazardous waste.

D. If, as a result of the assessment conducted in accordance with LAC 33:V.4431, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of LAC 33:V.4441.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 18:723 (July 1992).

§4435. Design and Installation of New Tank Systems or Components

A. Owners or operators of new tank systems or components must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by an independent, qualified, registered professional engineer in accordance with LAC 33:V.513 attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment must include, at a minimum, the following information:

1. design standard(s) according to which the tank(s) and ancillary equipment is or will be constructed;

2. hazardous characteristics of the waste(s) to be handled;

3. for new tank systems or components in which the external shell of a metal tank or any external metal component of the tank systems is or will be in contact with the soil or with the water, a determination by a corrosion expert of:

a. factors affecting the potential for corrosion, including but not limited to:

i. soil moisture content,

ii. soil pH,

iii. soil sulfides level,

iv. soil resistivity,

v. structure to soil potential,

vi. influence of nearby underground metal structures (e.g., piping),

vii. stray electric current, and

viii. existing corrosion-protection measures (e.g., coating, cathodic protection), and

b. the type and degree of external corrosion protectio that are needed to ensure the integrity of the tank system

during the use of the tank system or component, consisting of one or more of the following:

i. corrosion-resistant materials of construction such as special alloys, fiberglass-reinforced plastic,

ii. corrosion-resistant coating (such as epoxy or fiberglass) with cathodic protection (e.g., impressed current or sacrificial anodes), and

iii. electrical isolation devices such as insulating joints and flanges.

4. for underground tank system components that are likely to be affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and

5. design consideration to ensure that:

a. tank foundations will maintain the load of a full tank,

b. tank systems will be anchored to prevent flotation or dislodgement where the tank system is placed in a saturated zone, or is located within a seismic fault zone, and

c. tank systems will withstand the effects of frost heave.

B. The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified installation inspector or an independent, qualified, registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems, must inspect the system or component for the presence of any of the following items:

1. weld breaks;

2. punctures;

3. scrapes of protective coatings;

4. cracks;

5. corrosion;

6. other structural damage or inadequate construction or installation.

All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.

C. New tank systems or components and piping that are placed underground and that are backfilled must be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is carefully installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

D. All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system must be performed prior to the tank system being covered, enclosed, or placed in use.

E. Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion or contraction.

F. The owner or operator must provide the type and degree of corrosion protection necessary, based on the information provided under LAC 33:V.4435.A.3, to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.

G. The owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of LAC 33:V.4435.B through F to attest that the tank was properly designed and installed and that repairs, pursuant to LAC 33:V.4435.B and D were performed. These written statements must also include the certification statement as required in this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 18:723 (July 1992).

§4437. Containment and Detection of Releases

A. In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this Section must be provided (except as provided in LAC 33:V.4437.F and G):

1. for all new tank systems or components, prior to their being put into service;

2. for all existing tanks used to store or treat EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027, within two years after November 20, 1988;

3. for those existing tank systems of known and documentable age, within two years after November 20, 1988, or when the tank systems have reached 15 years of age, whichever comes later;

4. for those existing tank systems for which the age cannot be documented, within eight years of November 20, 1988; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches 15 years of age, or within two years of November 20, 1988, whichever comes later; and

5. for tank systems that store or treat materials that become hazardous wastes subsequent to November 20, 1988, within the time intervals required in LAC 33:V.4437.A.1

through 4, except that the date that a material becomes a hazardous waste must be used in place of November 20, 1988.

B. Secondary containment systems must be:

1. designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and

2. capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

C. To meet the requirements of LAC 33:V.4437.B, secondary containment systems must be at a minimum:

1. constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank systems and must have sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from nearby vehicular traffic);

2. placed on a foundation or base capable of providing support to the secondary containment systems and resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift;

3. provide with a leak detection system that is designed and operated so that it will detect the failure of either the primary and secondary containment structure or any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within 24 hours;

4. Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health or the environment, if removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

D. Secondary containment for tanks must include one or more of the following devices:

1. a liner (external to the tank);

2. a vault;

3. a double-walled tank; or

4. an equivalent device as approved by the administrative authority.

E. In addition to the requirements of LAC 33:V.4437.B-D, secondary containment systems must satisfy the following requirements.

1. External liner systems must be:

a. designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

b. designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

c. free of cracks or gaps; and

d. designed and installed to completely surround the tank and cover all surrounding earth likely to come into contact with the waste if released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).

2. Vault systems must be:

a. designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

b. designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

c. constructed with chemical-resistant water stops in place at all joints (if any);

d. provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

e. provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

i. meets the definition of ignitable waste under LAC 33:V.Chapter 49 of these regulations, or

ii. meets the definition of reactive waste under LAC 33:V.Chapter 49 of these regulations and may form an ignitable or explosive vapor; and

iii. provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

3. Double-walled tanks must be:

a. designed as an integral structure (i.e., an inner tank within an outer shell) so that any release from the inner tank is contained by the outer shell;

b. protected, if constructed of metal, from both corrosion of the primary tank interior and external surface of the outer shell; and

c. provided with a built-in, continuous leak detection system capable of detecting a release within 24 hours or at the

earliest practicable time, if the owner or operator can demonstrate to the administrative authority and the administrative authority concurs, that the existing leak detection technology or site conditions will not allow detection of a release within 24 hours.

F. Ancillary equipment must be provided with full secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of LAC 33:V.4437.B and C, except for:

1. aboveground piping (exclusive of flanges, joints, valves, and connections) that are visually inspected for leaks on a daily basis;

2. welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;

3. sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and

4. pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

G. The owner or operator may obtain a variance from the requirements of this Section if the administrative authority finds, as a result of a demonstration by the owner or operator, either that alternative design and operating practices together with location characteristics will prevent the migration of hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as a secondary containment during the active life of the tank system or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not, per a demonstration in accordance with this Subsection, be exempted from the secondary containment requirements of this Section. Application for a variance as allowed in this Subsection does not waive compliance with the requirements of this Chapter for new tank systems.

1. In deciding whether to grant a variance based on a demonstration of equivalent protection of groundwater and surface water, the administrative authority will consider:

a. the nature and quantity of the waste;

b. the proposed alternate design and operation;

c. the hydrogeologic setting of the facility, including the thickness of soils between the tank system and groundwater and;

d. all other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.

2. In deciding whether to grant a variance, based on a demonstration of no substantial present or potential hazard, the administrative authority will consider:

a. the potential adverse effects on groundwater, surface water, and land quality taking into account:

i. the physical and chemical characteristics of the waste in the tank system, including its potential for migration,

ii. the hydrogeological characteristics of the facility and surrounding land,

iii. the potential for health risks caused by human exposure to waste constituents.

iv. the potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents, and

v. the persistence and permanence of the potential adverse effects;

b. the potential adverse effects of a release on groundwater quality, taking into account:

i. the quantity and quality of groundwater and the direction of groundwater flow,

ii. the proximity and withdrawal rates of water in the area,

iii. the current and future uses of groundwater in the area, and

iv. the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

c. the potential adverse effects of a release on surface water quality, taking into account:

i. the quantity and quality of groundwater and the direction of groundwater flow,

ii. the patterns of rainfall in the region,

iii. the proximity of the tank system to surface waters,

iv. the current and future uses of surface waters in the area and any water quality standards established for those surface waters, and

v. the existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and

d. the potential adverse effects of a release on the land surrounding the tank system, taking into account:

i. the patterns of rainfall in the region, and

ii. the current and future uses of the surrounding land.

3. The owner or operator of a tank system, for which a variance from secondary containment has been granted in

accordance with the requirements of LAC 33:V.4437.G.1, at which a release of a hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), must:

a. comply with the requirements of LAC 33:V.4441 except LAC 33:V.4441.D; and

b. decontaminate or remove contaminated soil to the extent necessary to:

i. enable the tank system, for which the variance was granted, to resume operation with the capability for the detection of and response to releases at least equivalent to the capability it had prior to the release, and

ii. prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and

iii. if contaminated soil cannot be removed or decontaminated in accordance with LAC 33:V.4437.G.3.b, comply with the requirements of LAC 33:V.1915.B.

4. The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with the requirements of LAC 33:V.4437.G.1, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), must:

a. comply with the requirements of LAC 33:V.4441.B-D; and

b. prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if groundwater has been contaminated, the owner or operator must comply with the requirements of LAC 33:V.4442;

c. if repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with the requirements of LAC 33:V.4437.A through F or reapply for a variance from secondary containment and meet the requirements for new tank systems in LAC 33:V.4435 if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil can be decontaminated or removed, and groundwater or surface water has not been contaminated.

H. The following procedures must be followed in order to request a variance from secondary containment:

1. The administrative authority must be notified in writing by the owner or operator that he intends to conduct and submit a demonstration for a variance from secondary containment as allowed in LAC 33:V.4437.G according to the following schedule:

a. for existing tank systems, at least 24 months prior to the date that secondary containment must be provided in accordance with LAC 33:V.4437.A; and

b. for new tank systems, at least 30 days prior to entering into a contract for installation of the tank system.

2. As part of the notification, the owner or operator must also submit to the administrative authority a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in LAC 33:V.4437.G.1 or 2.

3. The demonstration for a variance must be completed and submitted to the administrative authority within 180 days after notifying the administrative authority of intent to conduct the demonstration.

4. The administrative authority will inform the public, through a newspaper notice, of the availability of the demonstration for a variance. The notice shall be placed in a daily or weekly major local newspaper of general circulation and shall provide at least 30 days from the date of the notice for the public to review and comment on the demonstration for a variance. The administrative authority also will hold a public hearing, in response to a request or at his own discretion, whenever such a hearing might clarify one or more issues concerning the demonstration for a variance. Public notice of the hearing will be given at least 30 days prior to the date of the hearing and may be given at the same time as notice of the opportunity for the public to review and comment on the demonstration. These two notices may be combined.

5. The administrative authority will approve or disapprove the request for a variance within 90 days of receipt of the demonstration from the owner or operator and will notify in writing the owner or operator and each person who submitted written comments or requested notice of the variance decision. If the demonstration for a variance is incomplete or does not include sufficient information, the 90-day time period will begin when the administrative authority receives a complete demonstration, including all information necessary to make a final determination. If the public comment period in LAC 33:V.4437.H.4 is extended, the 90-day time period will be similarly extended.

I. All tank systems, until such time as secondary containment meeting the requirements of this Section is provided, must comply with the following:

1. For non-enterable underground tanks, a leak test that meets the requirements of LAC 33:V.4433 must be conducted at least annually.

2. For other than non-enterable underground tanks and for all ancillary equipment, an annual leak test, as described in LAC 33:V.4437.I.1, or an internal inspection or other tank integrity examination by an independent, qualified, registered professional engineer that addresses cracks, leaks, corrosion, and erosion must be conducted at least annually. The owner or operator must remove the stored waste from the tank, necessary, to allow the condition of all internal tank surfaces to be assessed.

3. The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with LAC 33:V.4437.I.1-3.

4. If a tank system or component is found to be leaking or unfit-for-use as a result of the leak test or assessment in LAC 33:V.4437.I.1 through I.3, the owner or operator must comply with the requirements of LAC 33:V.4441.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 14:790 (November 1988), LR 16:614 (July 1990), LR 18:723 (July 1992).

§4439. General Operating Requirements

A. Hazardous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the secondary containment system to rupture, leak, corrode, or otherwise fail.

B. The owner or operator must use appropriate controls and practices to prevent spills and overflows from tank or secondary containment systems. These include at a minimum:

1. spill prevention controls (e.g., check valves, dry dismount couplings);

2. overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

3. maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

C. The owner or operator must comply with the requirements of LAC 33:V.4441 if a leak or spill occurs in the tank system.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651(November 1987).

§4440. Inspections

A. The owner or operator must inspect, where present, at least once each operating day:

1. overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;

2. the aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

3. data gathered from monitoring equipment and leak-detection equipment, (e.g., pressure and temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and

4. the construction materials and the area immediately surrounding the externally accessible portion of the tank system including secondary containment structure (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).

B. The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

1. the proper operation of the cathodic protection system must be confirmed within six months after initial installation, and annually thereafter; and

2. all sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month).

C. The owner or operator must document in the operating record of the facility an inspection of those items in LAC 33:V.4440.A and B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 18:723 (July 1992).

§4441. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements.

A. Cessation of Use; Prevent Flow or Addition of Wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

B. Removal of Waste from Tank System or Secondary Containment System

1. If the release was from the tank system, the owner or operator must, within 24 hours after detection of the leak or, if the owner or operator demonstrates that it is not possible, at the earliest practicable time remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

2. If the release was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

C. Containment of Visible Releases to the Environment. The owner or operator must immediately conduct a visual inspection of the release and, based upon that inspection:

1. prevent further migration of the leak or spill to soils or surface water; and

2. remove, and properly dispose of, any visible contamination of the soil or surface water.

D. Notification, Reports

1. Any release to the environment, except as provided in LAC 33:V.4441.D.2, must be reported to the administrative authority within 24 hours of detection. If the release has been reported pursuant to LAC 33:V.105.A, that report will satisfy this requirement.

2. A leak or spill of hazardous waste that is:

a. less than or equal to a quantity of one pound, and

b. immediately contained and cleaned-up is exempted from the requirements of this Paragraph.

3. Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the administrative authority:

a. likely route of migration of the release;

b. characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

c. results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these dates must be submitted to the administrative authority as soon as they become available;

d. proximity to downgradient drinking water, surface water, and population areas; and

e. description of response actions taken or planned.

E. Provision of Secondary Containment, Repair, or Closure

1. Unless the owner or operator satisfies the requirements of LAC 33:V.4441.E.2 through 4, the tank system must be closed in accordance with LAC 33:V.4442.

2. If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

3. If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

4. If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of LAC 33:V.4437 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of LAC 33:V.4441.F are satisfied. If a component is replaced to comply with the requirements of this Subsection, that component must satisfy the requirements for new tank systems or components in LAC 33:V.4435 and 4437. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with LAC 33:V.4437 prior to being returned to use.

F. Certification of Major Repairs. If the owner or operator has repaired a tank system in accordance with LAC 33:V.4441.E, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner/operator has obtained a certification by an independent, qualified, registered professional engineer in accordance with LAC 33:V.513 that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the administrative authority within seven days after returning the tank system to use.

Note: The administrative authority may, on the basis of any information received that there is or has been a release of hazardous waste or hazardous constituents into the environment, issue an order requiring corrective action or such other response as deemed necessary to protect human health or the environment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 16:614 (July 1990), LR 18:723 (July 1992).

§4442. Closure and Post-closure Care

Interim status facilities are subject to the requirements of LAC 33:V.1915.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 15:182 (March 1989).

§4443. Special Requirements for Ignitable or Reactive Wastes

Interim status facilities are subject to the requirements of LAC 33:V.1917.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 15:182 (March 1989).

§4444. Special Requirements for Incompatible Wastes

Interim status facilities are subject to requirements of LAC 33:V.1919.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 14:790 (November 1988), LR 15:182 (March 1989).

§4445. Waste Analysis and Trial Tests

In addition to performing the waste analysis required by LAC 33:V.4313, the owner or operator must, whenever a tank system is to be used to treat chemically or to store a hazardous waste that is substantially different from waste previously treated or stored in that tank system; or treat chemically a hazardous waste with a substantially different process than any previously used in that tank system:

1. conduct waste analysis and trial treatment or storage test (e.g., benchscale or pilot-plant scale tests); or

2. obtain written, documented information on similar waste under similar operating conditions to show that the proposed treatment or storage will meet the requirements of LAC 33:V.4439.A.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 15:182 (March 1989).

Subchapter J. Surface Impoundments

§4447. Applicability

The regulations in this Subchapter apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of hazardous waste, except as LAC 33:V.105.D provides otherwise.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4449. Action Leakage Rate

A. The owner or operator of surface impoundment units subject to LAC 33:V.4462.A must submit a proposed action leakage rate to the administrative authority when submitting the notice required under LAC 33:V.4462.B. Within 60 days of receipt of the notification, the administrative authority will establish an action leakage rate, either as proposed by the owner or operator or modified using the criteria in this Section, or extend the review period for up to 30 days. If no action is taken by the administrative authority before the original 60- or the extended 90-day review periods, the action leakage rate will be approved as proposed by the owner or operator.

B. The administrative authority shall approve an action leakage rate for surface impoundment units subject to LAC 33:V.4462.A. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

C. To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under LAC 33:V.4455.B to an average daily flow rate (gallons per acre per day) for each sump. Unless the administrative authority approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period and, if the unit closes in accordance with LAC 33:V.A.2, monthly during the post-closure care period when monthly monitoring is required under LAC 33:V.4455.B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

§4451. Response Actions

A. The owner or operator of surface impoundment units subject to LAC 33:V.4462.A must submit a response action plan to the administrative authority when submitting the proposed action leakage rate under LAC 33:V.4449. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in LAC 33:V.4451.B.

B. If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

1. notify the administrative authority in writing of the exceedence within seven days of the determination;

2. submit a preliminary written assessment to the administrative authority within 14 days of the determination as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

3. determine to the extent practicable the location, size, and cause of any leak;

4. determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

5. determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

6. within 30 days after the notification that the action leakage rate has been exceeded, submit to the administrative authority the results of the analyses specified in LAC 33:V.4451.B.3-5, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the administrative authority a report summarizing the results of any remedial actions taken and actions planned.

C. To make the leak and/or remediation determinations in LAC 33:V.4451.B.3-5, the owner or operator must:

1. assess the sources of liquids and amounts of liquids by source;

2. conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the sources of liquids and possible location of any leaks, and the hazard and mobility of the liquids; and

3. assess the seriousness of any leaks in terms of potential for escaping into the environment; or

4. document why such assessments are not needed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

§4453. Waste Analysis and Trial Tests

A. In addition to the waste analyses required by LAC 33:V.1519, whenever a surface impoundment is to be used to:

1. chemically treat a hazardous waste which is substantially different from waste previously treated in that impoundment; or

2. chemically treat hazardous waste with a substantially different process than any previously used in that impoundment.

B. The owner or operator must, before treating the different waste or using the different process:

1. conduct waste analyses and trial treatment tests (e.g., bench scale or pilot-plant scale tests); or

2. obtain written, documented information on similar treatment of similar waste under similar operating conditions; to show that this treatment will comply with LAC 33:V.4321.B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984).

§4455. Monitoring and Inspection

A. The owner or operator must inspect:

1. the freeboard level at least once each operating day to ensure compliance with LAC 33:V.4449; and

2. the surface impoundment, including dikes and vegetation surrounding the them, at least once a week to detect any leaks, deterioration, or failures in the impoundment.

B. An owner or operator required to have a leak detection system under LAC 33:V.4462.A must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

1. After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi-annually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semi-annual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

2. "Pump operating level" is a liquid level proposed by the owner or operator and approved by the administrative authority based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump. The timing for submission and approval of the proposed pump operating level will be in accordance with LAC 33:V.4449.A.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

§4457. Closure and Post-closure

A. At closure, the owner or operator must:

1. Remove or decontaminate all waste residues contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment

contaminated with waste and leachate, and manage them as hazardous waste unless LAC 33:V.4905.A.4 applies; or

2. Close the impoundment and provide post-closure care for a landfill under LAC 33:V.4501, including the following:

a. eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

b. stabilize remaining wastes to a bearing capacity sufficient to support the final cover; and

c. cover the surface impoundment with a final cover designed and constructed to:

i. provide long-term minimization of the migration of liquids through the closed impoundment,

ii. function with minimum maintenance,

iii. promote drainage and minimize erosion or abrasion of the cover,

iv. accommodate settling and subsidence so that the cover's integrity is maintained, and

v. have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

B. In addition to the requirements of LAC 33:V.4501, during the post-closure care period, the owner or operator of a surface impoundment in which wastes, waste residues, or contaminated materials remain after closure in accordance with the provisions of LAC 33:V.4457.A.2 must:

1. maintain 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;

~~2. maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.4367; and~~

2. maintain and monitor the leak detection system in accordance with LAC 33:V.4455.B and comply with all other applicable leak detection system requirements of LAC 33:V.Chapter 43;

3. maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.4367; and

4. prevent run-on and run-off from eroding or otherwise damaging the final cover.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 15:470 (June 1989), LR 18:723 (July 1992), LR 21:266 (March 1995).

§4459. Special Requirements for Ignitable or Reactive Waste

A. Ignitable or reactive waste must not be placed in a surface impoundment, unless ~~the waste and impoundment satisfy all applicable requirements of LAC 33:V.Chapter 22, and~~

1. the waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under LAC 33:V.4903.A or 4903.C and 4321.B is complied with; or

2. the surface impoundment is used solely for emergencies.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:1057 (December 1990).

§4461. Special Requirements for Incompatible Wastes

Incompatible wastes or incompatible wastes and materials must not be placed in the same surface impoundment, unless LAC 33:V.4321.B is complied with.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:723 (July 1992).

§4462. Design Requirements

A. The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners and operate the leachate collection and removal system in accordance with LAC 33:V.2903.J, unless exempted under LAC 33:V.2903.C, K, or L. "Construction commences" is as defined in LAC 33:V.109 under "Existing Facilities."

B. The owner or operator of each unit referred to in LAC 33:V.4462.A must notify the administrative authority at least 60 days prior to receiving waste. The owner or operator of each facility submitting notice must file a Part II application within six months of the receipt of such notice.

C. The owner or operator of any replacement surface impoundment unit is exempt from LAC 33:V.4462.A if:

1. the existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

2. there is no reason to believe that the liner is not functioning as designed.

D. The double liner requirement set forth in LAC 33:V.4462.A may be waived by the administrative authority for any monofill, if:

1. the monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents which would render the wastes hazardous for reasons other than the Toxicity Characteristic in LAC 33:V.4903.E (Hazardous Waste Numbers D004 through D017 only); and

2. the monofill meets the requirements of LAC 33:V.4462.D.2.a or b.

a. The monofill meets the following criteria:

i. the monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this Section the term "liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste or hazardous constituents from migrating beyond the liner to adjacent subsurface soil, groundwater, or surface water at any time during the active life of the facility. In the case of any surface impoundment which has been exempted from the requirements of LAC 33:V.4462.A on the basis of a liner designed, constructed, installed, and operated to prevent hazardous waste or hazardous constituents from passing beyond the liner, at the closure of such impoundment the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment must comply with appropriate post-closure requirements, including but not limited to groundwater monitoring and corrective action.

ii. the monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in LAC 33:V.109).

iii. The monofill is in compliance with generally applicable groundwater monitoring requirements for facilities with permits.

b. The owner or operator demonstrates that the monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous waste or hazardous constituents into groundwater or surface water at any future time.

E. In the case of any unit in which the liner and leachate collection system has been installed pursuant to the requirements of LAC 33:V.4462.A and in good faith compliance with LAC 33:V.4462.A and with guidance documents governing liners and leachate collection systems under LAC 33:V.4462.A, no liner or leachate collection system which is different from that which was so installed pursuant to LAC 33:V.4462.A will be required for such unit by the administrative authority when issuing the first permit to such facility, except that the administrative authority will not be precluded from requiring installation of a new liner when the administrative authority has reason to believe that any liner installed pursuant to the requirements of LAC 33:V.4462.A is leaking.

F. A surface impoundment must maintain enough freeboard to prevent any overtopping of the dike by overfilling, wave action, or a storm. Except as provided in LAC 33:V.4462.B, there must be at least 2 feet (60 cm) of freeboard.

G. A freeboard level less than 2 feet (60 cm) may be maintained if the owner or operator obtains certification by a qualified engineer that alternate design features or operating plans will, to the best of his knowledge and opinion, prevent overtopping of the dike. The certification, along with a written identification of these alternate design features or operating plans which prevent overtopping, must be maintained at the facility.

~~H. Surface impoundments that are newly subject to RCRA~~ section 3005(j)(1) due to the promulgation of additional listings or characteristics for the identification of hazardous waste must be in compliance with LAC 33:V.4462.A, C, and D not later than 48 months after the promulgation of the additional listing or characteristic. This compliance period shall not be cut short as the result of the promulgation of land disposal prohibitions under LAC 33:V.Chapter 22 or the granting of an extension to the effective date of a prohibition in accordance ~~with LAC 33:V.2239, within this 48-month period.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 17:368 (April 1991), LR 18:723 (July 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

Subchapter K. Waste Piles

§4463. Applicability

The regulations in this Subchapter apply to owners and operators of facilities that treat or store hazardous waste in piles, except as LAC 33:V.105.D provides otherwise. Alternatively, a pile of hazardous waste may be managed as a landfill under Subchapter M.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4465. Protection from Wind

The owner or operator of a pile containing hazardous waste which could be subject to dispersal by wind must cover c otherwise manage the pile so that wind dispersal is controlled.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4467. Waste Analysis

A. In addition to the waste analyses required by LAC 33:V.1519, the owner or operator must analyze a representative sample of waste from each incoming movement before adding the waste to any existing pile, unless:

1. the only wastes the facility receives which are amenable to piling are compatible with each other; or

2. the waste received is compatible with the waste in the pile to which it is to be added.

B. The analysis conducted must differentiate between the types of hazardous waste the owner or operator places in piles, so that the mixing of incompatible waste does not inadvertently occur. The analysis must include a visual comparison of color and texture.

C. As required by LAC 33:V.1519, the waste analysis plan must include analyses needed to comply with LAC 33:V.2311 and 2313.

D. As required by LAC 33:V.1529, the owner or operator must place the results of this analysis in the operating record of the facility.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4469. Containment

If collected leachate or run-off is discharged through a point source to waters of the United States, it is subject to the requirements of Section 402 of the Clean Water Act, as amended. If a leachate or run-off from a pile is a hazardous waste, then either:

A. the pile must be placed on an impermeable base that is compatible with the waste under the conditions of treatment or storage;

B. the owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm;

C. the owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm; and

D. empty, or otherwise expeditiously manage, collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems to maintain design capacity of the system; or

E. the pile must be protected from precipitation and run-on by some other means and no liquids or waste containing free liquids may be placed in the pile.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4470. Monitoring and Inspection

An owner or operator required to have a leak detection system under LAC 33:V.4476 must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4471. Special Requirements for Ignitable or Reactive Waste

Ignitable or reactive wastes must not be placed in a pile unless ~~the waste and pile satisfy all applicable requirements of LAC 33:V.Chapter 22, and:~~

1. addition of the waste to an existing pile results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under LAC 33:V.109 and complies with LAC 33:V.4321.B; or

2. the waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:1057 (December 1990).

§4472. Response Actions

A. The owner or operator of waste pile units subject to LAC 33:V.4476 must submit a response action plan to the administrative authority when submitting the proposed action leakage rate under LAC 33:V.4474. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in LAC 33:V.4472.B.

B. If the flow rate into the leak determination system exceeds the action leakage rate for any sump, the owner or operator must:

1. notify the administrative authority in writing of the exceedence within seven days of the determination;

2. submit a preliminary written assessment to the administrative authority within 14 days of the determination as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

3. determine to the extent practicable the location, size, and cause of any leak;

4. determine whether waste receipts should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

5. determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

6. within 30 days after the notification that the action leakage rate has been exceeded, submit to the administrative authority the results of the analyses specified in LAC 33:V.4472.B.3-5, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the administrative authority a report summarizing the results of any remedial actions taken and actions planned.

C. To make the leak and/or remediation determinations in LAC 33:V.4472.B.3-5, the owner or operator must:

1. assess the sources of liquids and amounts of liquids by source,

2. conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the sources of liquids and possible location of any leaks, and the hazard and mobility of the liquids; and

3. assess the seriousness of any leaks in terms of potential for escaping into the environment; or

4. document why such assessments are not needed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4473. Special Requirements for Incompatible Wastes

Owners or operators having interim status for waste piles used to manage incompatible wastes must comply with the requirements of LAC 33:V.2313.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4474. Action Leakage Rates

A. The owner or operator of waste pile units subject to LAC 33.V.4476 must submit a proposed action leakage rate to the administrative authority when submitting the notice required under LAC 33:V.4476. Within 60 days of receipt of the notification, the administrative authority will establish an action leakage rate, either as proposed by the owner or operator or modified using the criteria in this Section, or extend the review period for up to 30 days. If no action is taken by the administrative authority before the original 60- or the extended 90-day review periods, the action leakage rate will be approved as proposed by the owner or operator.

B. The administrative authority shall approve an action leakage rate for waste pile units subject to LAC 33:V.4476. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

C. To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under LAC 33:V.4470, to an average daily flow rate (gallons per acre per day) for each sump. Unless the administrative authority approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4475. Closure and Post-closure Care

A. At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste if they are identified as such in LAC 33:V.Chapter 49; or

B. If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in LAC 33:V.4475.A, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills. (LAC 33:V.Chapter 43, Subchapter M.)

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:723 (July 1992).

§4476. Design and Operating Requirements

The owner or operator of each new waste pile on which construction commences after January 29, 1992, each lateral expansion of a waste pile unit on which construction commences after July 29, 1992, and each such replacement of an existing waste pile unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners, and operate the leachate collection and removal systems, in accordance with LAC 33:V.2303.C, unless exempted under LAC 33:V.2303.D-F, and must comply with the procedures of LAC 33:V.4462.B. "Construction commences" is as defined in LAC 33:V.109 under "Existing Facilities".

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 21:266 (March 1995).

Subchapter L. Land Treatment

§4477. Applicability

The regulations in this Subchapter apply to owners and operators of hazardous waste land treatment facilities with interim status, except as LAC 33:V.105.D provides otherwise.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:723 (July 1992).

§4479. General Operating Requirements

A. Hazardous waste must not be placed in or on a land treatment facility unless the waste can be made less hazardous or non-hazardous by biological degradation or chemical reactions occurring in or on the soil.

B. The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portions of the facility during peak discharge from at least a 25-year storm.

C. The owner or operator must design, construct, operate, and maintain a run-off management system capable of collecting and controlling a water volume at least equivalent to a 24-hour, 25-year storm.

D. Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

E. If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator must manage the unit to control wind dispersal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 18:723 (July 1992).

§4481. Waste Analysis

In addition to the waste analyses required by LAC 33:V.1519, before placing a hazardous waste in or on a land treatment facility, the owner or operator must:

A. determine the concentration in the waste of any substances which equal or exceed the maximum concentrations listed in Table 5 of LAC 33:V.4903, that cause the waste to exhibit the Toxicity Characteristic;

B. determine the concentrations of any substances which cause the waste to be listed in LAC 33:V.4901 as a hazardous waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 17:369 (April 1991).

§4483. Food-Chain Crops

No produce may be allowed to grow on a landfarm. Additionally, grasses and other cover plants may not be used for grazing or hay production for domestic livestock.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4485. Unsaturated Zone (Zone of Aeration) Monitoring

A. The owner or operator must have in writing, and must implement, an unsaturated zone monitoring plan which is designed to:

1. detect the vertical migration of hazardous waste and hazardous waste constituents under the active portion of the land treatment facility; and

2. provide information on the background concentrations of the hazardous waste and hazardous waste constituents in similar but untreated soils nearby. This background monitoring must be conducted before or in conjunction with the monitoring required in LAC 33:V.4485.A.1.

B. The unsaturated zone monitoring plan must include, at a minimum:

1. soil monitoring using soil cores; and

2. soil-pore water monitoring using devices such as lysimeters.

C. To comply with LAC 33:V.4485.A.1 of this Section, the owner or operator must demonstrate in his unsaturated zone monitoring plan that:

1. the depth at which soil and soil-pore water samples are to be taken is below the depth to which the waste is incorporated into the soil;

2. the number of soil and soil-pore water samples to be taken is based on the variability of:

a. the hazardous waste constituents as identified in LAC 33:V.4481.A and B, in the waste and in the soil; and

b. the soil type(s); and

3. the frequency and timing of soil and soil-pore water sampling is based on the frequency, time, and rate of waste application, proximity to groundwater, and soil permeability.

D. The owner or operator must keep at the facility his unsaturated zone monitoring plan, and the rationale used in developing this plan.

E. The owner or operator must analyze the soil and soil-pore water samples for the hazardous waste constituents that were found in the waste during the waste analysis under LAC 33:V.4481.A and B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4487. Recordkeeping

Interim status facilities are subject to the requirements of LAC 33:V.2713.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4489. Closure and Post-closure

A. In the closure plan under LAC 33:V.4381.A and the post-closure plan under LAC 33:V.4391, the owner or operator must address the following objectives and indicate how they will be achieved:

1. control of the migration of hazardous waste and hazardous waste constituents from the land treatment area into the groundwater;

2. control of the release of contaminated run-off from the facility into surface water; and

3. control of the release of airborne particulate contaminants caused by wind erosion;

4. complies with food-chain crops, LAC 33:V.4483.

B. The owner or operator must consider at least the following factors in addressing the closure and post-closure care objectives of LAC 33:V.4489.A:

1. type and amount of hazardous waste and hazardous waste constituents applied to the land treatment facility;

2. the mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;

3. site location, topography, and surrounding land use, with respect to the potential effects of pollutant migration (e.g., proximity to groundwater, surface water, and drinking water sources);

4. climate, including amount, frequency, and pH of precipitation;

5. geological and soil profiles, and surface and subsurface hydrology, of the site, and soil characteristics, including cation exchange capacity, total organic carbon, and pH;

6. unsaturated zone monitoring information obtained under LAC 33:V.4485; and

7. type, concentration, and depth of migration of hazardous waste constituents in the soil as compared to their background concentrations.

C. The owner or operator must consider at least the following methods in addressing the closure and post-closure care objectives of LAC 33:V.4489.A:

1. removal of contaminated soils;

2. placement of a final cover, considering:

a. functions of the cover (e.g., infiltration control, erosion, and run-off control, and wind erosion control);

b. characteristics of the cover, including material final surface contours, thickness, porosity, and permeability, slope, length of run of slope, and type of vegetation on the cover; and

3. groundwater monitoring.

D. In addition to the requirements of LAC 33:V.Chapter 43, Subchapter F, during the closure period the owner or operator of a land treatment facility must:

1. continue unsaturated zone monitoring in a manner and frequency specified in the closure plan, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone;

2. maintain the run-on control system required under LAC 33:V.2703.C;

3. maintain the run-off management system required under LAC 33:V.2703.D; and

4. control particulate matter which may be subject to wind dispersal.

E. For the purpose of complying with LAC 33:V.4387, ...hen closure is completed the owner or operator may submit ...e administrative authority certification both by the owner or operator and by an independent qualified soil scientist in lieu of an independent registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

F. In addition to the requirements of LAC 33:V.4389, during the post-closure care period the owner or operator of a land treatment unit must:

1. continue soil-pore monitoring by collecting and analyzing samples in a manner and frequency specified in the post-closure plan;

2. restrict access to the unit as appropriate for its post-closure use;

3. assure that growth of food-chain crops complies with LAC 33:V.2709; and

4. control wind dispersal of hazardous waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 18:723 (July 1992).

...491. Special Requirements for Ignitable or Reactive Waste

Interim status facilities are subject to the requirements of LAC 33:V.2715.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4493. Special Requirements for Incompatible Wastes

Interim status facilities are subject to the requirements of LAC 33:V.2717.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

Subchapter M. Landfills

§4495. Applicability

The regulations in this Subchapter apply to owners and operators of facilities that dispose of hazardous waste in landfills, except as LAC 33:V.105.D provides otherwise. A ...aste pile used as a disposal facility is a landfill and is governed by this Subchapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4497. Action Leakage Rate

A. The owner or operator of landfill units subject to LAC 33:V.4512.A must submit a proposed action leakage rate to the administrative authority when submitting the notice required under LAC 33:V.4512.B. Within 60 days of receipt of the notification, the administrative authority will establish an action leakage rate, either as proposed by the owner or operator or modified using the criteria in this Section, or extend the review period for up to 30 days. If no action is taken by the administrative authority before the original 60- or the extended 90-day review periods, the action leakage rate will be approved as proposed by the owner or operator.

B. The administrative authority shall approve an action leakage rate for surface impoundment units subject to LAC 33:V.4512.A. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

C. To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under LAC 33:V.4502 to an average daily flow rate (gallons per acre per day) for each sump. Unless the administrative authority approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period and monthly during the post-closure care period when monthly monitoring is required under LAC 33:V.4502.B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

§4498. Response Actions

A. The owner or operator of landfill units subject to LAC 33:V.4512.A must submit a response action plan to the administrative authority when submitting the proposed action leakage rate under LAC 33:V.4497. The response action plan

must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in LAC 33:V.4498.B.

B. If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:

1. notify the administrative authority in writing of the exceedence within seven days of the determination;

2. submit a preliminary written assessment to the administrative authority within 14 days of the determination as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;

3. determine to the extent practicable the location, size, and cause of any leak;

4. determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

5. determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and

6. within 30 days after the notification that the action leakage rate has been exceeded, submit to the administrative authority the results of the analyses specified in LAC 33:V.4498.B.3-5, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the administrative authority a report summarizing the results of any remedial actions taken and actions planned.

C. To make the leak and/or remediation determinations in LAC 33:V.4498.B.3-5, the owner or operator must:

1. assess the sources of liquids and amounts of liquids by source;

2. conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the sources of liquids and possible location of any leaks, and the hazard and mobility of the liquids; and

3. assess the seriousness of any leaks in terms of potential for escaping into the environment; or

4. document why such assessments are not needed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4499. Surveying and Recordkeeping

Interim status facilities must comply with LAC 33:V.2509.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4501. Closure and Post-closure

A. At final closure of the landfill or upon closure of any cell, the owner or operator must place a final cover over the landfill or cell, and the closure plan under LAC 33:V.4381 must specify the function and design of the cover. In the post-closure plan under LAC 33:V.4391, the owner or operator must include the post-closure care requirements of LAC 33:V.4501.D.

B. In the closure and post-closure plans, the owner or operator must address the following objectives and indicate how they will be achieved:

1. control of pollutant migration from the facility via groundwater, surface water, and air;

2. control of surface water infiltration, including prevention of pooling; and

3. provide long-term minimization of migration of liquids through the closed landfill;

4. function with minimum maintenance;

5. promote drainage and minimize erosion or abrasion of the cover;

6. accommodate settling and subsidence so that the cover's integrity is maintained; and

7. have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

C. The owner or operator must consider at least the following factors in addressing the closure and post-closure care objectives of LAC 33:V.4501.B:

1. type and amount of hazardous waste and hazardous waste constituents in the landfill;

2. the mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;

3. site location, topography, and surrounding land use, with respect to the potential effects of pollutant migration (e.g., proximity to groundwater, surface water, and drinking water sources);

4. climate, including amount, frequency, and pH of precipitation;

5. characteristics of the cover including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope, and type of vegetation on the cover, and

6. geological and soil profiles and surface and subsurface hydrology of the site.

D. In addition to the requirements of LAC 33:V.4389, during the post-closure care period, the owner or operator of ızzardous waste landfill must:

1. maintain 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;

2. maintain and monitor the leachate collection, removal, and treatment system (if there is one present in the landfill) to prevent excess accumulation of leachate in the system. If the collected leachate is a hazardous waste under LAC 33:V.Chapter 49, it must be managed as a hazardous waste in accordance with all applicable requirements of LAC 33:V.Chapters 11, 13 and 43. If the collected leachate is discharged through a point source to waters of the United States, it is subject to the requirements of Section 402 of the Clean Water Act, as amended;

~~3. maintain and monitor the leak detection system in~~ accordance with LAC 33:V.2503.K.4.d, K.5, and 4502.B and comply with all other applicable leak detection system ~~requirements of LAC 33:V.Chapter 43;~~

4. maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.4367;

5. prevent run-on and run-off from eroding or otherwise ımaging the final cover;

6. maintain and monitor the gas collection and control system (if there is one present in the landfill) to control the vertical and horizontal escape of gases;

7. protect and maintain surveyed benchmarks used in complying with LAC 33:V.2509 subject to authority of LAC 33:V.4499; and

8. restrict access to the landfill as appropriate for its post-closure use.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

§4502. Monitoring and Inspection

A. An owner or operator required to have a leak detection system under LAC 33:V.4512.A must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

B. After the final cover is installed, the amount of liquids removed from each leak detection system sump must be ecorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi-annually. If at any time during the post-closure care period, the pump operating level is exceeded at units on quarterly or semi-annual recording schedules, the owner or operator must return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.

C. "Pump operating level" is a liquid level proposed by the owner or operator and approved by the administrative authority based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump. The timing for submission and approval of the proposed pump operating level will be in accordance with LAC 33:V.4497.A.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§4503. Special Requirements for Ignitable or Reactive Waste

A. Except as provided in LAC 33:V.4503.B and in LAC 33:V.4511, ignitable or reactive waste must not be placed in a landfill, unless ~~the waste and landfill meet all applicable requirements of LAC 33:V.Chapter 22, and~~ the waste is treated, rendered, or mixed before or immediately after placement in a landfill so that:

1. the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste in LAC 33:V.4903.B or D; and

2. LAC 33:V.4321.B is complied with.

B. Except for prohibited wastes subject to treatment standards in LAC 33:V.Chapter 22, ignitable wastes in containers may be landfilled without meeting the requirements of LAC 33:V.4503.A, provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes:

1. must be disposed of in non-leaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes;

2. must be covered daily with soil or other non-combustible material to minimize the potential for ignition of the wastes; and

3. must not be disposed of in cells that contain, or will contain, other wastes which may generate heat sufficient to cause ignition of the waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

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

Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:1057 (December 1990), LR 18:723 (July 1992), LR 20:1000 (September 1994).

§4505. Special Requirements for Incompatible Wastes

Incompatible wastes, or incompatible wastes and materials, must not be placed in the same landfill cell, unless LAC 33:V.4321.B is complied with.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4507. Special Requirements for Liquid Waste

A. Bulk or noncontainerized liquid waste or waste containing free liquids may be placed in a landfill prior to May 8, 1985 only if:

1. the landfill has a liner and leachate collection and removal system that meets the requirements of LAC 33:V.2503.A; or

2. before disposal, the liquid waste or waste containing free liquids is treated or stabilized, chemically or physically (e.g., by mixing with a sorbent solid), so that free liquids are no longer present.

B. Effective May 8, 1985, the placement of bulk or noncontainerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

C. Containers holding free liquids must not be placed in a landfill unless:

1. all free-standing liquid:

a. has been removed by decanting or other methods;

b. has been mixed with sorbent or solidified so that free-standing liquid is no longer observed; or

c. has been otherwise eliminated; or

2. the container is very small, such as an ampule; or

3. the container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

4. the container is a lab pack as defined in LAC 33:V.4511 and is disposed of in accordance with LAC 33:V.4511.

D. To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" [EPA Publication Number SW-846] must be used.

E. The date for compliance with LAC 33:V.4507.A is November 19, 1981. The date for compliance with LAC 33:V.4507.C is March 22, 1982.

F. Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are: materials listed or described in LAC 33:V.4507.F.1; materials that pass one of the tests in LAC 33:V.4507.F.2; or materials that are determined by EPA to be nonbiodegradable through the petition process in LAC 33:V.105.

1. Nonbiodegradable Sorbents

a. inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas [illite], vermiculites, zeolites, calcium carbonate [organic free limestone]; oxides/hydroxides, alumina, lime, silica [sand], diatomaceous earth, perlite [volcanic glass]; expanded volcanic rock, volcanic ash, cement kiln dust, fly ash, rice hull ash, and activated charcoal/activated carbon); or

b. high molecular weight synthetic polymers (e.g., polyethylene, high-density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polysobutylene, ground synthetic rubber, cross-linked allylstyrene, and tertiary butyl copolymers). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

c. mixtures of these nonbiodegradable materials.

2. Tests for Nonbiodegradable Sorbents

a. The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a)-Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or

b. The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b)-Standard Practice for Determining Resistance of Plastics to Bacteria.

G. Effective November 8, 1985, the placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the administrative authority or the administrative authority determines that:

1. the only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains or may reasonably be anticipated to contain hazardous waste; and

2. placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in 40 CFR 144.3).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

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

Hazardous Waste Division, LR 10:200 (March 1984), amended LR 21:266 (March 1995).

509. Special Requirements for Containers

Interim status facilities must comply with LAC 33:V.2517.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4511. Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs)

Lab packs may be placed in a landfill if the following requirements are met.

A. Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be designed and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the Louisiana Department of Public Safety (LDPS) hazardous materials/hazardous waste regulations (LAC 33:V.Subpart 2.Chapter 101), if those regulations specify a particular inside container for the waste.

B. The inside containers must be overpacked in an open ead LDPS specification metal shipping container (LAC 33:V.Subpart 2.Chapter 101) of no more than 416-liter (110-gallon) capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material to completely sorb all of the liquid contents of the inside containers. The metal outer container must be full after packing with inside containers and sorbent material.

C. The sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers in accordance with LAC 33:V.4321.B.

D. Incompatible wastes, as defined in LAC 33:V.109, must not be placed in the same outside container; and

E. Reactive wastes, other than cyanide- or sulfide-bearing waste, as defined in LAC 33:V.109, must be treated or rendered nonreactive prior to packaging in accordance with LAC 33:V.4511.A, B, C, D ~~and F.~~ Cyanide- and sulfide-bearing reactive waste may be packed in accordance with LAC 33:V.4511.A, B, C, D, ~~and F~~ without first being treated or rendered nonreactive.

~~F. Such disposal is in compliance with the requirements of~~ LAC 33:V.Chapter 22. Persons who incinerate lab packs according to the requirements in LAC 33:V.2227.C.1 may use fiber drums in place of metal outer containers. Such fiber drums must meet the specifications of the Louisiana Department of Public Safety and Corrections or its successor agency in LAC 33:V.Subpart 2, Chapter 101, and be overpacked according to the requirements in LAC 33:V.4511.B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:1057 (December 1990), LR 18:723 (July 1992), LR 21:266 (March 1995).

§4512. Design and Operating Requirements

A. The owner or operator of each new landfill unit on which construction commences after January 29, 1992, each lateral expansion of a landfill unit on which construction commences after July 29, 1992, and each replacement of an existing landfill unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners and operate the leachate collection and removal systems, in accordance with LAC 33:V.4512.D, E, or F. "Construction commences" is as defined in LAC 33:V.109 under "Existing Facilities".

B. The owner or operator of each unit referred to in LAC 33:V.4512.A must notify the administrative authority at least 60 days prior to receiving waste. The owner or operator of each facility submitting notice must file a Part II application within six months of the receipt of such notice.

C. The owner or operator of any replacement landfill unit is exempt from LAC 33:V.4512.A if:

1. the existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

2. there is no reason to believe that the liner is not functioning as designed.

D. The double liner requirement set forth in LAC 33:V.4512.A may be waived by the administrative authority for any monofill, if it meets the requirements specified in LAC 33:V.4512.D.1 and 2.

1. The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such waste does not contain constituents which would render the wastes hazardous for reasons other than the toxicity characteristics in LAC 33:V.105, with EPA Hazardous Waste Numbers D004-D017.

2. The monofill meets the criteria of either LAC 33:V.4512.D.2.a or b below.

a. The monofill:

i. has at least one liner for which there is no evidence that such liner is leaking;

ii. is located more than one-quarter mile from an underground source of drinking water (as that term is defined in LAC 33:V.109); and

iii. is in compliance with generally applicable groundwater monitoring requirements for facilities with permits.

b. The owner or operator demonstrates that the monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous waste or hazardous waste constituents into groundwater or surface water at any future time.

E. In the case of any unit in which the liner and leachate collection system have been installed pursuant to the requirements of LAC 33:V.4512.A and in good faith compliance with LAC 33:V.4512.A and with guidance documents governing liners and leachate collection systems under LAC 33:V.4512.A, no liner or leachate collection system which is different from that which was so installed pursuant to LAC 33:V.4512.A will be required for such unit by the administrative authority when issuing the first permit to such facility, except that the administrative authority will not be precluded from requiring installation of a new liner when the administrative authority has reason to believe that any liner installed pursuant to the requirements of LAC 33:V.4512.A is leaking.

F. The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a 25-year storm.

G. The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

H. Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

I. The owner or operator of a landfill containing hazardous waste which is subject to dispersal by wind must cover or otherwise manage the landfill so that wind dispersal of the hazardous waste is controlled.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 18:723 (July 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

Subchapter N. Incinerators

§4513. Applicability

A. The regulations in this Section apply to owners or operators of hazardous waste incinerators (as defined in LAC 33:V.109) except as LAC 33:V.4307 provides otherwise.

B. Owners or operators of incinerators burning hazardous waste are exempt from all of the requirements of this Section, except LAC 33:V.4521 (Closure), provided that the owner or operator has documented, in writing, that the waste would not reasonably be expected to contain any of the hazardous constituents listed in LAC 33:V.3105.Table 1, and such documentation is retained at the facility, if the waste to be burned is:

1. listed as a hazardous waste in LAC 33:V.4901, solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

2. listed as a hazardous waste in LAC 33:V.4901, solely because it is reactive (Hazard Code R) for characteristics other than those listed in LAC 33:V.4903.D.4 and 5, and will not be burned when other hazardous wastes are present in the combustion zone; or

3. a hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under LAC 33:V.4903; or

4. a hazardous waste solely because it possesses the reactivity characteristics described by LAC 33:V.4903.D.1-3 and 6-8, and will not be burned when other hazardous wastes are present in the combustion zone.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:737 (September 1989), amended LR 16:220 (March 1990), LR 18:1375 (December 1992), LR 20:1000 (September 1994).

§4515. Waste Analysis

A. In addition to the waste analyses required by LAC 33:V.1519, the owner or operator must sufficiently analyze any waste which has not previously been burned in his incinerator to establish steady state (normal) operating conditions (including waste and auxiliary fuel feed and air flow) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must determine:

1. heating value of the waste;

2. halogen and sulfur content in the waste; and

3. concentrations in the waste of lead and mercury, unless the owner or operator has written, documented data that show that the element is not present.

B. The owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility, as required by LAC 33:V.1529.B.6.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4517. General Operating Requirements

During start-up and shutdown of an incinerator, the owner or operator must not feed hazardous waste unless the incinerator is at steady state (normal) conditions of operation, including steady state operating temperature and air flow.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4519. Monitoring and Inspections

The owner or operator must conduct, as a minimum, the following monitoring and inspections when incinerating hazardous waste:

A. monitoring of instruments which relate to combustion and emission control (e.g., those instruments measuring waste feed, auxiliary fuel feed, air flow, incinerator temperature, scrubber flow, scrubber pH, and relevant level controls) at least every 15 minutes. Appropriate corrections to maintain steady state combustion conditions must be made immediately either automatically or by the operator; and

B. daily inspection of the complete incinerator and associated equipment (e.g., pumps, valves, conveyors, pipes, etc.) for leaks, spills, and fugitive emissions. Also, all emergency shutdown controls and system alarms must be inspected daily to assure proper operation.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4521. Closure

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including but not limited to ash, scrubber waters, and scrubber sludges) from the incinerator. Unless the owner or operator can demonstrate, in accordance with LAC 33:V.Chapter 49 that the residue removed from his incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4522. Interim Status Incinerators Burning Particular Hazardous Wastes

A. Owners or operators of incinerators subject to LAC 33:V.Chapter 43.Subchapter N may burn EPA Hazardous Wastes F020, F021, F022, F023, F026, or F027 if they receive a certification from the administrative authority that they can meet the performance standards of LAC 33:V.Chapter 31 when they burn these wastes.

B. The following standards and procedures will be used in determining whether to certify an incinerator.

1. The owner or operator will submit an application to the administrative authority containing applicable information in LAC 33:V.529 and LAC 33:V.3115 demonstrating that the incinerator can meet the performance standards in LAC 33:V.Chapter 31 when they burn these wastes.

2. The administrative authority will issue a tentative decision as to whether the incinerator can meet the performance standards in LAC 33:V.Chapter 31. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the incinerator is located. The administrative authority will accept comment on the tentative decision for 60 days. The administrative authority also may hold a public hearing upon request or at his discretion.

3. After the close of the public comment period, the administrative authority will issue a decision whether or not to certify the incinerator.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 20:1000 (September 1994).

Subchapter O. Thermal Treatment

§4523. Applicability

The regulations in this Subpart apply to owners or operators of facilities that thermally treat hazardous waste in devices other than enclosed devices using controlled flame combustion, except as LAC 33:V.105.D provides otherwise. Thermal treatment in enclosed devices using controlled flame combustion is subject to the requirements of LAC 33:V.Chapter 31 and Subchapter N of LAC 33:V.Chapter 43, if the unit is an incinerator, ~~and LAC 33:V.Chapter 30, if the unit is a boiler or an industrial furnace as defined in LAC 33:V.109.~~

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:1139 (December 1985), LR 21:266 (March 1995).

§4525. General Operating Requirements

Before adding hazardous waste, the owner or operator must bring his thermal treatment process to steady state (normal) conditions of operation, including steady state operating temperature, using auxiliary fuel or other means, unless the process is a non-continuous (batch) thermal treatment process which requires a complete thermal cycle to treat a discrete quantity of hazardous waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4527. Waste Analysis

In addition to the waste analyses required by LAC 33:V.1519, the owner or operator must sufficiently analyze any waste which he has not previously treated in his thermal process to enable him to establish steady state (normal) or other appropriate (for a non-continuous process) operating conditions (including waste and auxiliary fuel feed) and to determine the type of pollutants which might be emitted. As required by LAC 33:V.1529, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility. At a minimum, the analysis must determine:

A. heating value of the waste;

B. halogen content and sulfur content in the waste; and

C. concentrations in the waste of lead and mercury, unless the owner or operator has written, documented data that show that the element is not present.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4529. Monitoring and Inspections

The owner or operator must conduct, as a minimum, the following monitoring and inspections when thermally treating hazardous waste:

A. existing instruments which relate to temperature and emission control (if an emission control device is present), must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state or other appropriate thermal treatment conditions must be made immediately, either automatically or by the operator. Instruments which relate to temperature and emission control would normally include those measuring waste feed, auxiliary fuel feed, treatment process temperature, and relevant process flow and level controls;

B. visual observation of the stack plume (emissions), where present, at least hourly for normal appearance (color and opacity). The operator must immediately make any indicated operating corrections necessary to return any visible emissions to their normal appearance; and

C. inspection of the complete thermal treatment process and associated equipment (pumps, valves, conveyors, pipes, etc.) at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4531. Closure

A. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash) from the thermal treatment process or equipment.

B. At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with LAC 33:V.Chapter 49, that any solid waste removed from his thermal treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4533. Open Burning; Waste Explosives

Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives. Waste explosives include waste which has the potential to detonate and bulk military propellants which cannot safely be disposed of through other modes of treatment. Detonation is an explosion in which chemical transformation passes through the material faster than the speed of sound (0.33 kilometers/second at sea level). Owners or operators choosing to open burn or detonate waste explosives must do so in accordance with the following table and in a manner that does not threaten human health or the environment.

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others	
0 to 100	204 meters	(670 feet)
101 to 1,000	380 meters	(1,250 feet)
1,001 to 10,000	530 meters	(1,730 feet)
10,001 to 30,000	680 meters	(2,200 feet)

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4534. Interim Status Thermal Treatment Devices Burning Particular Hazardous Waste

A. Owners or operators of thermal treatment devices subject to this Subchapter may burn EPA Hazardous Wastes F020, F021, F022, F023, F026, or F027 if they receive a certification from the administrative authority that they can meet the performance standards of LAC 33:V.Chapter 31 when they burn these wastes.

B. The following standards and procedures will be used in determining whether to certify a thermal treatment unit.

1. The owner or operator will submit an application to the administrative authority containing the applicable information in LAC 33:V.529 and LAC 33:V.3115 demonstrating that the thermal treatment unit can meet the performance standard in LAC 33:V.Chapter 31 when they burn these wastes.

2. The administrative authority will issue a tentative decision as to whether the thermal treatment unit can meet the performance standards in LAC 33:V.Chapter 31. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the thermal treatment device is located. The administrative authority will accept comment on the tentative decision for 60 days. The administrative authority also may hold a public hearing upon request or at his discretion.

3. After the close of the public comment period, the administrative authority will issue a decision whether or not to certify the thermal treatment unit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:220 (March 1990), amended LR 20:1000 (September 1994).

Subchapter P. Chemical, Physical, and Biological Treatment

§4535. Applicability

The regulations in this Subchapter apply to owners and operators of facilities which treat hazardous wastes by chemical, physical, or biological methods in other than tanks, surface impoundments, and land treatment facilities, except as LAC 33:V.105.D provides otherwise. Chemical, physical, and biological treatment of hazardous waste in tanks, surface impoundments, and land treatment facilities must comply with the requirements of LAC 33:V.Chapter 43, Subchapters I, J, and L, respectively.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 18:723 (July 1992).

§4537. General Operating Requirements

A. Chemical, physical, or biological treatment of hazardous waste must comply with LAC 33:V.4321.

B. Hazardous wastes or treatment reagents must not be placed in the treatment process or equipment if they could cause the treatment process or equipment to rupture, leak, corrode, or otherwise fail before the end of its intended life.

C. Where hazardous waste is continuously fed into a treatment process or equipment, the process or equipment must be equipped with a means to stop this inflow (e.g., a waste feed cut off system or by-pass system to a standby containment device). These systems are intended to be used in the event of a malfunction in the treatment process or equipment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4539. Waste Analysis and Trial Tests

As required by LAC 33:V.1519.A.1, the waste analysis plan must include analyses needed to comply with LAC 33:V.4545 and 4547. As required by LAC 33:V.1529, the owner or operator must place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility. In addition to the waste analysis required by LAC 33:V.1519.A.1, the owner or operator must conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale tests), or obtain written, documented information on similar treatment of similar waste under similar operating conditions, to show that this proposed treatment will meet all applicable requirements of LAC 33:V.4537.A and B, before treating the different waste or using the different method, whenever:

A. a hazardous waste which is substantially different from waste previously treated in a treatment process or equipment at the facility is to be treated in that process or equipment; or

B. a substantially different process than any previously used at the facility is to be used to chemically treat hazardous waste.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4541. Inspections

A. The owner or operator of a treatment facility must inspect, where present:

1. discharge control and safety equipment (e.g., waste feed cut-off systems, by-pass systems, drainage systems, and pressure relief systems) at least once each operating day, to ensure good working order;

2. data gathered from monitoring equipment (e.g., pressure and temperature gauges), at least once each operating day, to ensure that the treatment process or equipment is being operated according to its design;

3. the construction materials of the treatment process or equipment, at least weekly, to detect corrosion or leaking of fixtures or seams; and

4. the construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes), at least weekly, to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

B. As required by LAC 33:V.1509.C, the owner or operator must remedy any deterioration or malfunction he finds.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4543. Closure

At closure, all hazardous waste and hazardous waste residues must be removed from treatment processes or equipment, discharge control equipment, and discharge confinement structures. At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with LAC 33:V.Chapter 49, that any solid waste removed from this treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4545. Special Requirements for Ignitable or Reactive Waste

Ignitable or reactive waste must not be placed in a treatment process or equipment unless:

A. the waste is treated, rendered, or mixed before or immediately after placement in the treatment process or equipment so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under LAC 33:V.4903.A and C, and 4321 is complied with; or

B. the waste is treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984).

§4547. Special Requirements for Incompatible Wastes

A. Incompatible wastes, or incompatible wastes and materials must not be placed in the same treatment process or equipment, unless LAC 33:V.4321 is complied with.

B. Hazardous waste must not be placed in unwashed treatment equipment which previously held an incompatible waste or material, unless LAC 33:V.4321 is complied with.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:723 (July 1992).

Subchapter Q. Air Emission Standards for Process Vents

§4549. Applicability

A. The regulations in this Subchapter apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in LAC 33:V.4301).

B. Except for LAC 33:V.1711.D and E, as referenced in LAC 33:V.4557, this Subchapter applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in:

1. units that are subject to the permitting requirements of LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43; or

2. hazardous waste recycling units located on hazardous waste management facilities otherwise subject to the permitting requirements of LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43.

[Note: The requirements of LAC 33:V.4553 through 4559 apply to process vents on hazardous waste recycling units previously exempt under LAC 33:V.4115.A. Other exemptions under LAC 33:V.105.D, 1109, and 4307 are not affected by these requirements.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 18:723 (July 1992), LR 20:1000 (September 1994).

§4551. Definitions

As used in this Subchapter, all terms shall have the meanings given them in LAC 33:V.1703.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4553. Standards: Process Vents

Interim status facilities are subject to the requirements of LAC 33:V.1707.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4555. Standards: Closed-Vent Systems and Control Devices

Interim status facilities are subject to the requirements of LAC 33:V.1709.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4557. Test Methods and Procedures

Interim status facilities are subject to the requirements of LAC 33:V.1711.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4559. Recordkeeping Requirements

Interim status facilities are subject to the requirements of LAC 33:V.1713.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

Subchapter R. Air Emission Standards for Equipment Leaks

§4561. Applicability

A. The regulations in this Subchapter apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in LAC 33:V.4307).

B. Except as provided in LAC 33:V.1743.J, as referenced in LAC 33:V.4509, this Subchapter applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in:

1. units subject to the permitting requirements of LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43; or

2. hazardous waste recycling units located on hazardous waste management facilities otherwise subject to the permitting requirements of LAC 33:V.Chapters 3, 5, 7, 27, 31, and 43.

C. Each piece of equipment to which this Subchapter applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

D. Equipment that is in vacuum service is excluded from the requirements of LAC 33:V.4565 through 4581 if it is identified as required in LAC 33:V.1743.G.5, as referenced in LAC 33:V.4589.

[Note: The requirements of LAC 33:V.4565-4589 apply to equipment associated with hazardous waste recycling units previously exempt under LAC 33:V.4115.A. Other exemptions under LAC 33:V.105.D, 1109.E, and 4307 are not affected by these requirements.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 20:1000 (September 1994).

§4563. Definitions

As used in this Subchapter, all terms shall have the meanings given them in LAC 33:V.1703.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4565. Standard: Pumps in Light Liquid Service

Interim status facilities are subject to the requirements of LAC 33:V.1719.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4567. Standard: Compressors

Interim status facilities are subject to the requirements of LAC 33:V.1721.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4569. Standards: Pressure Relief Devices In Gas/Vapor Service

Interim status facilities are subject to the requirements of LAC 33:V.1723.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4571. Standards: Sampling Connection Systems

Interim status facilities are subject to the requirements of LAC 33:V.1725.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4573. Standards: Open-Ended Valves or Lines

Interim status facilities are subject to the requirements of LAC 33:V.1727.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4575. Standards: Valves in Gas/Vapor Service or in Light Liquid Service

Interim status facilities are subject to the requirements of LAC 33:V.1729.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4577. Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors

Interim status facilities are subject to the requirements of LAC 33:V.1731.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4579. Standards: Delay of Repair

Interim status facilities are subject to the requirements of LAC 33:V.1733.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4581. Standards: Closed-Vent Systems and Control Devices

Interim status facilities are subject to the requirements of LAC 33:V.1735.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4583. Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Percentage of Valves Allowed to Leak

Interim status facilities are subject to the requirements of LAC 33:V.1737.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4585. Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Skip Period Leak Detection and Repair

Interim status facilities are subject to the requirements of LAC 33:V.1739.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4587. Test Methods and Procedures

Interim status facilities are subject to the requirements of LAC 33:V.1741.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

§4589. Recordkeeping Requirements

Interim status facilities are subject to the requirements of LAC 33:V.1743.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991).

Subchapter S. Drip Pads

§4591. Applicability

Interim status facilities are subject to the requirements of LAC 33:V.2801.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, ardous Waste Division, LR 18:1375 (December 1992).

§4593. Assessment of Existing Drip Pad Integrity

Interim status facilities are subject to the requirements of LAC 33:V.2803.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992).

§4595. Design and Installation of New Drip Pads

Interim status facilities are subject to the requirements of LAC 33:V.2811.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992).

§4597. Design and Operating Requirements

Interim status facilities are subject to the requirements of LAC 33:V.2805.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992).

§4599. Inspections

Interim status facilities are subject to the requirements of LAC 33:V.2807.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992).

§4601. Closure

Interim status facilities are subject to the requirements of LAC 33:V.2809.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992).

~~Subchapter T. Containment Buildings~~

§4701. Applicability

A. The requirements of this Subchapter apply to owners or operators who store or treat hazardous waste in units designed and operated under LAC 33:V.4703. These provisions will become effective on February 18, 1993, although the owner or operator may notify the administrative authority of his intent to be bound by this Subchapter at an earlier time. The owner or operator is not subject to the definition of land disposal in RCRA section 3004(k) provided that the unit:

1. is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the units and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the hazardous wastes to which they are exposed, climatic conditions, and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls;

2. has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel and handling equipment within the unit;

3. if it is used to manage liquids, has:

a. a primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;

b. a liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and

c. a secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest possible time, unless the unit has been granted a variance from the secondary containment system requirements under LAC 33:V.4703.B.4;

4. has controls as needed to permit fugitive dust emissions; and

5. is designed and operated to ensure containment and prevent the tracking of materials out of the unit by personnel or equipment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995)

§4703. Design and Operating Standards

A. All containment buildings must comply with the following design standards:

1. the containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-on) and to ensure containment of managed wastes;

2. the floor and containment walls of the unit, including the secondary containment system if required under LAC 33:V.4703.B, must be designed and constructed of materials

of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the hazardous wastes to which they are exposed, climatic conditions, and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The administrative authority will consider standards established by professional organizations which are generally recognized by the industry, such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM), in judging the structural integrity requirements of LAC 33:V.4703.A. If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:

a. they provide an effective barrier against fugitive dust emissions under LAC 33:V.4703.C.1.d; and

b. the unit is designed and operated in a fashion that ensures that wastes will not actually come in contact with these openings;

3. incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail; and

4. a containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

B. For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include:

1. a primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g. a geomembrane covered by a concrete wear surface);

2. a liquid collection and removal system to prevent the accumulation of liquid on the primary barrier of the containment building:

a. the primary barrier must be sloped to drain liquids to the associated collection system; and

b. liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time that protects human health and the environment;

3. a secondary containment system, including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time;

a. the requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum:

i. constructed with a bottom slope of 1 percent or more; and

ii. constructed of a granular drainage material with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more;

b. if treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building;

c. the secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building. (Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of LAC 33:V.4437.D.1. In addition, the containment building must meet the requirements of LAC 33:V.4437.B and C to be considered an acceptable secondary containment system for a tank.); and

4. for existing units other than 90-day generator units, the administrative authority may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of this Subchapter. In making this demonstration, the owner or operator must:

a. provide written notice to the administrative authority of their request by February 18, 1993. This notification must describe the unit and its operating practices with specific reference to the performance of existing containment systems and specific plans for retrofitting the unit with secondary containment;

b. respond to any comments from the administrative authority on these plans within 30 days; and

c. fulfill the terms of the revised plans, if such plans are approved by the administrative authority.

C. Owners or operators of all containment buildings must:

1. use controls and practices to ensure containment of the hazardous waste within the unit and, at a minimum:

a. maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier;

b. maintain the level of the stored/treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;

c. take measures to prevent the tracking of hazardous waste out of the unit by personnel or equipment used in handling the waste. An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and

d. take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions. In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator) must be operated and maintained with sound air pollution control practices. This state of no visible emissions must be maintained effectively at all times during normal operating conditions, including when vehicles and personnel are entering and exiting the unit;

2. obtain certification by a qualified registered professional engineer that the containment building design meets the requirements of LAC 33:V.4703.A-C. For units placed into operation prior to February 18, 1993, this certification must be placed in the facility's operating record (or on-site files for those generators who are not formally required to have operating records) no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit;

3. throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, must repair the condition promptly, in accordance with the following procedures:

a. Upon detection of a condition that has led to a release of hazardous waste (e.g., upon detection of leakage from the primary barrier) the owner or operator must:

i. enter a record of the discovery in the facility operating record;

ii. immediately remove the portion of the containment building affected by the condition from service;

iii. determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and

iv. within seven days after the discovery of the condition, notify the administrative authority of the condition and, within 14 working days, provide a written notice to the administrative authority with a description of the steps taken to repair the containment building and the schedule for accomplishing the work;

b. The administrative authority will review the information submitted, make a determination regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing; and

c. Upon completing all repairs and cleanup, the owner or operator must notify the administrative authority in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with LAC 33:V.4703.C.3.a.iv; and

4. inspect and record in the facility's operating record, at least once every seven days, data gathered from monitoring equipment, leak detection equipment, and containment building and the area immediately surrounding it to detect signs of releases of hazardous waste.

D. For containment buildings having areas both with and without secondary containment, the owner or operator must:

1. design and operate each area in accordance with the requirements in LAC 33:V.4703.A-C;

2. take measures to prevent the release of liquids or wet materials into areas without secondary containment; and

3. maintain, in the facility's operating log, a written description of the operating procedures used to maintain the integrity of areas without secondary containment.

E. Notwithstanding any other provision of this Subchapter, the administrative authority may waive requirements for secondary containment for a permitted containment building where the owner or operator demonstrates that the only free liquids in the unit are limited amounts of dust-suppression liquids required to meet occupational health and safety requirements and where containment of managed wastes and liquids can be ensured without a secondary containment system.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

~~§4705. Closure and Post-closure Care~~

A. At closure of a containment building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate and manage them as hazardous waste, unless LAC 33:V.109.*Hazardous Waste*.6 applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings must meet all of the requirements specified in LAC 33:V.Chapter 43.Subchapters F and G.

B. If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in LAC 33:V.4705.A, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (LAC 33:V.4501). In addition, for the purposes of closure, post-closure, and financial responsibility, such a containment building is then considered to be a landfill and the owner or operator must meet all of the requirements for landfills specified in LAC 33:V.Chapter 43.Subchapters F and G.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, ~~Hazardous Waste Division, LR 21:266 (March 1995).~~

Chapter 49. Lists of Hazardous Wastes

§4901. Category I Hazardous Wastes

A. Category I hazardous wastes are chemicals and process streams whose hazardous nature has been prescribed by prior determination.

[Comment: Chapter 49 is divided into two sections: Category I Hazardous Wastes, which consist of Hazardous Wastes from nonspecific and specific sources (F & K wastes), Acute Hazardous Wastes (P wastes), and Toxic Wastes (U wastes) (LAC 33:V.4901); and Category II Hazardous Wastes, which consist of wastes which are ignitable, corrosive, reactive, or toxic (LAC 33:V.4903).] Hazard codes are defined as follows for the listed hazardous wastes.

Ignitable waste	(I)
Corrosive waste	(C)
Reactive waste	(R)
Toxicity Characteristic waste	(E)
Acute hazardous waste or Acutely hazardous waste	(H)
Toxic waste	(T)

1. The industry and EPA Hazardous Waste numbers are used to identify specific hazardous wastes, and the hazard codes are used to identify the hazardous waste characteristics.

2. The following hazardous wastes listed in LAC 33:V.4901.B and C are subject to the exclusion limits for acutely hazardous wastes established in LAC 33:V.Chapter 39: Hazardous Wastes Numbers F020, F021, F022, F023, F026, and F027.

B. Hazardous Wastes from Nonspecific Sources

1. The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded pursuant to LAC 33:V.105.H.

(Note: EPA in January 1985 added new listed hazardous wastes.)

Table 1. Hazardous Wastes from Nonspecific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
Generic		
F001	(T)	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F002	(T)	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene,1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2- trichloroethane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F003	(I)*	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of 10% or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

Table 1. Hazardous Wastes from Nonspecific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
F004	(T)	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F005	(I,T)	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/ blends containing, before use, a total of 10% or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F006	(T)	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.
F007	(R,T)	Spent cyanide plating bath solutions from electroplating operations.
F008	(R,T)	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.
F009	(R,T)	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.
F010	(R,T)	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.
F011	(R,T)	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.

Table 1. Hazardous Wastes from Nonspecific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
F012	(T)	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.
F019	(T)	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.
F020	(H)	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)
F021	(H)	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.
F022	(H)	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.
F023	(H)	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2, 4, 5-trichlorophenol.)

Table 1. Hazardous Wastes from Nonspecific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
F024	(T)	Processed wastes, including, but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in LAC 33:V.4901.B or C.)
F025	(T)	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.
F026	(H)	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.
F027	(H)	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2, 4, 5-trichlorophenol as the sole component.)
F028	(T)	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.

Table 1. Hazardous Wastes from Nonspecific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
F032	(T)	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with LAC 33:V.4901.B.3 of this Subpart and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F034	(T)	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.
F035	(T)	Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.

Table 1. Hazardous Wastes from Nonspecific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
F037	(T)	Petroleum refinery primary oil/water/solids separation sludge—Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators, tanks and impoundments, ditches and other conveyances, sumps, and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in LAC 33:V.4901.B.2.b (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.
F038	(T)	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge—Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in LAC 33:V.4901.B.2.b (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.

Table 1. Hazardous Wastes from Nonspecific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
F039	(T)	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under LAC 33:V.4901. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.)

* (I,T) should be used to specify mixtures containing ignitable and toxic constituents.

2. Listing Specific Definitions

a. For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids.

b. For the purposes of the F037 and F038 listing:

i. aggressive biological treatment units are defined as units which employ one of the following four treatment methods:

(a). activated sludge;

(b). trickling filter;

(c). rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or

(d). high-rate aeration.

ii. high-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and

(a). the unit employs a minimum of six hp per million gallons of treatment volume; and either

(b). the hydraulic retention time of the unit is no longer than five days; or

(c). the hydraulic retention time is no longer than 30 days, and the unit does not generate a sludge that is a hazardous waste by the Toxicity Characteristic.

iii. generators and treatment, storage, and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment, storage, and disposal facilities must maintain, in their operating or other onsite records, documents and data sufficient to prove that:

(a). the unit is an aggressive biological treatment unit as defined in this Subparagraph; and

(b). the sludges sought to be exempted from the definitions of F037 and/or F038 were actually generated in the aggressive biological treatment unit.

c. For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement. For the purposes of the F038 listing:

i. sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement; and

ii. floats are considered to be generated at the moment they are formed in the top of the unit.

3. Deletion of Certain Hazardous Waste Codes Following Equipment Cleaning and Replacement

a. Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of LAC 33:V.4901 B.2.b and c. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

b. Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including but not limited to treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the groundwater, surface water, or atmosphere.

i. Generators shall do one of the following:

(a). prepare and follow an equipment cleaning plan and clean equipment in accordance with this Section;

(b). prepare and follow an equipment replacement plan and replace equipment in accordance with this Section; or

(c). document cleaning and replacement in accordance with this Section, carried out after termination of use of chlorophenolic preservations;

ii. Cleaning Requirements

(a). prepare and sign a written equipment cleaning plan that describes:

(i). the equipment to be cleaned;

(ii). how the equipment will be cleaned;

(iii). the solvent to be used in cleaning;

(iv). how solvent rinses will be tested; and

(v). how cleaning residues will be disposed.

(b). equipment must be cleaned as follows:

(i). remove all visible residues from process equipment; and

(ii). rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

(c). Analytical Requirements

(i). rinses must be tested in accordance with SW-846, Method 8290, as described in LAC 33:V.Chapter 49.Appendix A;

(ii). "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, as described in LAC 33:V.Chapter 49.Appendix A;

(d). The generator must manage all residues from the cleaning process as F032 waste.

iii. Replacement Requirements

(a). prepare and sign a written equipment replacement plan that describes:

(i). the equipment to be replaced;

(ii). how the equipment will be replaced; and

(iii). how the equipment will be disposed.

(b). the generator must manage the discarded equipment as F032 waste.

iv. Documentation is required which states that previous equipment cleaning and/or replacement was performed in accordance with this Section and occurred after cessation of use of chlorophenolic preservatives.

C. Hazardous wastes from specific sources are listed in Table 2.

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
Wood preservation		
K001	(T)	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.
Inorganic pigments		
K002	(T)	Wastewater treatment sludge from the production of chrome yellow and orange pigments.
K003	(T)	Wastewater treatment sludge from the production of molybdate orange pigments.

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
K004	(T)	Wastewater treatment sludge from the production of zinc yellow pigments.
K005	(T)	Wastewater treatment sludge from the production of chrome green pigments.
K006	(T)	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).
K007	(T)	Wastewater treatment sludge from the production of iron blue pigments.
K008	(T)	Oven residue from the production of chrome oxide green pigments.
Organic chemicals		
K009	(T)	Distillation bottoms from the production of acetaldehyde from ethylene.
K010	(T)	Distillation side cuts from the production of acetaldehyde from ethylene.
K011	(R,T)	Bottom stream from the wastewater stripper in the production of acrylonitrile.
K013	(R,T)	Bottom stream from the acetonitrile column in the production of acrylonitrile.
K014	(T)	Bottoms from the acetonitrile purification column in the production of acrylonitrile.
K015	(T)	Still bottoms from the distillation of benzyl chloride.
K016	(T)	Heavy ends of distillation residues from the production of carbon tetrachloride.
K017	(T)	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.
K018	(T)	Heavy ends from the fractionation column in ethyl chloride production.
K019	(T)	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.
K020	(T)	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.
K021	(T)	Aqueous spent antimony catalyst waste from fluoromethanes production.
K022	(T)	Distillation bottom tars from the production of phenol/acetone from cumene.

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
K023	(T)	Distillation light ends from the production of phthalic anhydride from naphthalene.
K024	(T)	Distillation bottoms from the production of phthalic anhydride from naphthaline.
K093	(T)	Distillation light ends from the production of phthalic anhydride from ortho-xylene.
K094	(T)	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.
K025	(T)	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.
K026	(T)	Stripping still tails from the production of methyl ethyl pyridines.
K027	(R,T)	Centrifuge and distillation residues from toluene diisocyanate production.
K028	(T)	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.
K029	(T)	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.
K095	(T)	Distillation bottoms from the production of 1,1,1-trichloroethane.
K096	(T)	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.
K030	(T)	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
K083	(T)	Distillation bottoms from aniline production.
K103	(T)	Process residues from aniline extraction from the production of aniline.
K104	(T)	Combined wastewater streams generated from nitrobenzene/aniline production.
K085	(T)	Distillation or fractionation column bottoms from the production of chlorobenzenes.
K105	(T)	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.
K107	(C,T)	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
K108	(I,T)	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides
K109	(T)	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides
K110	(T)	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides
K111	(C,T)	Product washwaters from the production of dinitrotoluene via nitration of toluene.
K112	(T)	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.
K113	(T)	Condensed liquid light ends from the purification of toluenediamine in the production of tolunediamine via hydrogenation of dinitrotoluene.
K114	(T)	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K115	(T)	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K116	(T)	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.
K117	(T)	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.
K118	(T)	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K136	(T)	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
K149	(T)	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.)
K150	(T)	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.
K151	(T)	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.
Inorganic chemicals		
K071	(T)	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.
K073	(T)	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
K106	(T)	Wastewater treatment sludge from the mercury cell process in chlorine production.
Pesticides		
K031	(T)	By-product salts generated in the production of MSMA and cacodylic acid.
K032	(T)	Wastewater treatment sludge from the production of chlordane.
K033	(T)	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.
K034	(T)	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.
K097	(T)	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
K035	(T)	Wastewater treatment sludges generated in the production of creosote.
K036	(T)	Still bottoms from toluene reclamation distillation in the production of disulfoton.
K037	(T)	Wastewater treatment sludges from the production of disulfoton.
K038	(T)	Wastewater treatment sludge from the washing and stripping of phorate production.
K039	(T)	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.
K040	(T)	Wastewater treatment sludge from the production of phorate.
K041	(T)	Wastewater treatment sludge from the production of toxaphene.
K098	(T)	Untreated process wastewater from the production of toxaphene.
K042	(T)	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.
K043	(T)	2,6-Dichlorophenol waste from the production of 2,4-D.
K099	(T)	Untreated wastewater from the production of 2,4-D.
K123	(T)	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt.
K124	(C,T)	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.
K125	(T)	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.
K126	(T)	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.
K131	(C,T)	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
K132	(T)	Spent absorbent and wastewater separator solids fro* the production of methyl bromide
Explosives		
K044	(R)	Wastewater treatment sludges from the manufacturing and processing of explosives.
K045	(R)	Spent carbon from the treatment of wastewater containing explosives.
K046	(T)	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.
K047	(R)	Pink/red water from TNT operations.
Petroleum refining		
K048	(T)	Dissolved air flotation (DAF) float from the petroleum refining industry.
K049	(T)	Slop oil emulsion solids from the petroleum refining industry.
K050	(T)	Heat exchanger bundle cleaning sludge from the petroleum refining industry.
K051	(T)	API separator sludge from the petroleum refining industry.
K052	(T)	Tank bottom (leaded) from the petroleum refining industry.
Iron and steel		
K061	(T)	Emission control dust/sludge from the primary production of steel in electric furnaces.
K062	(C,T)	Spent pickle liquor generated by steel finishing operations of iron and steel industry (SIC Codes 331 and 332).
Primary copper		
K064	(T)	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.
Primary lead		
K065	(T)	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
Primary zinc		
K066	(T)	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.
Primary aluminum		
K088	(T)	Spent potliners from primary aluminum reduction.
Ferroalloys		
K090	(T)	Emission control dust or sludge from ferrochromium-silicon production.
K091	(T)	Emission control dust or sludge from ferrochromium production.
Secondary lead		
K069	(T)	Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action affecting this stay, EPA will publish a notice of the action in the *Federal Register*.)
K100	(T)	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.
Veterinary pharmaceuticals		
K084	(T)	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
K101	(T)	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
K102	(T)	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

Table 2. Hazardous Wastes from Specific Sources

Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
Ink formulation		
K086	(T)	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.
Coking		
K060	(T)	Ammonia still lime sludge from coking operations.
K087	(T)	Decanter tank tar sludge from coking operations.
K141	(T)	Process residues from the recovery of coal tar, including but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank car sludge from coking operations).
K142	(T)	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.
K143	(T)	Process residues from the recovery of light oil, including but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K144	(T)	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.
K145	(T)	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.
K147	(T)	Tar storage tank residues from coal tar refining.
K148	(T)	Residues from coal tar distillation, including but not limited to, still bottoms.

D. Discarded Commercial Chemical Products, Off-specification Species, Container Residues, Spill Residues Thereof, Any Associated Wastewaters, and Any Discarded Process Wastewaters. The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in LAC 33:V.109 (definition of solid waste), when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original

intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel, or

n they present a threat to groundwater or human health and the environment.

1. any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in LAC 33:V.4901.E or F;

2. any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in LAC 33:V.4901.E or F;

3. any residue remaining in a container or an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in LAC 33:V.4901.E, unless the container is empty as defined in LAC 33:V.109 (definition of empty container);

[Comment: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed, or being accumulated, stored, transported, or treated prior to such use, re-use, recycling, or reclamation, the department considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate reuse of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.]

4. any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in LAC 33:V.4901.E or F, or any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in LAC 33:V.4901.E or F;

[Comment: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance that is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in LAC 33:V.4901.E or F. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in LAC 33:V.4901.E or F, such waste will be listed in either LAC 33:V.4901.B or C or will be identified as a hazardous waste by the characteristics set forth in LAC 33:V.4903.]

5. effluent discharges with a NPDES permit are exempt from these regulations. This exemption applies only to the actual point source discharge. It does not exempt industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.

E. The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products or manufacturing chemical intermediates referred to in LAC 33:V.4901.D.1-4 are identified as acute hazardous wastes (H) and are subject to the small quantity exclusions defined in LAC 33:V.3911. These wastes and their corresponding EPA Hazardous Waste Numbers are listed in Table 3.

[Comment: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity) and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.]

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P070	116-06-3	Aldicarb
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate (1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1, 2-Benzenediol, 4-[1-hydroxy-2-(methylamino) ethyl], (R)-
P046	122-09-8	Benzeneethanamine, alpha, alpha-dimethyl-
P014	108-98-5	Benzenethiol
P001	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O- [(methylamino) carbonyl] oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)-

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta, 8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth [2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha, 3beta,6beta,6aalpha,7beta, 7aalpha)-
P051	[1]72-20-8	2,7:3,6-Dimethanonaphth [2,3-b] oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7, 7a- octahydro-, (1aalpha,2beta,2abeta, 3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha, alpha-Dimethylphenethylamine
P047	[1]534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P065	628-86-4	Fulminic acid, mercury (2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P007	2763-96-4	3 (2H)-Isoxazolone, 5-(aminomethyl)-
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P050	115-29-7	6, 9-Methano-2,4,3-benzo-dioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide
P059	76-44-8	4,7-Methano-1H-indene,1,4,5,6,7, 8,8-heptachloro-3a,4,7,7a-tetrahydro-
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$ (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide $Ni(CN)_2$
P075	[1]54-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO_2
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	[1]534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P039	298-04-4	Phosphorodithioic acid, O,O- diethyl S-[2-(ethyl- thio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O, O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O, O-dimethyl S-[2-(methylamino)- 2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis (1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl] phenyl]O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P075	[1]54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (s)- & salts
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	[1]57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	[1]57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyllead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl_2O_3
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-

Table 3. Acute Hazardous Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V_2O_5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	[1]81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10% (R,T)

[1]CAS Number given for parent compound only.

F. Commercial chemical products or manufacturing chemical intermediates or off-specification commercial chemical products referred to in LAC 33:V.4901.D.1-4 are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity generator exclusion defined in LAC 33:V.3903, 3913, and 3915.A and C. [Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability), and C (Corrosivity). Absence of a letter indicates that the compound is listed only for toxicity.]

These wastes and their corresponding EPA Hazardous Waste Numbers are listed in Table 4.

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	94-75-7	Acetic acid, (2,4-dichloro- phenoxy)-, salts & esters
U112	141-78-6	Acetic acid, ethyl ester (I)
U144	301-04-02	Acetic acid, lead (2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino [2',3':3,4]pyrrolo[1,2-a] indole-4,7-dione,6-amino-8-[[(aminocarbonyl)oxy]methyl]- 1,1a,2,8,8a,8b,-hexahydro-8a-methoxy-5-methyl-,[1aS-(1aalpha,8beta,8aalpha,8balpha)]-
U157	56-49-5	Benz (j) aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz(c)acridine
U016	225-51-4	3,4-Benzacridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide,3,5-dichloro-N-(1,1-dimethyl-2 propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine,4,4'-carbonimidoylbis (N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine,N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis [2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1, 1'-(2, 2-dichloroethylidene)bis [4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene,1,3-diisocyanatomethyl-(R,T)
U239	1330-20-7	Benzene, dimethyl-(I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro-(I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)-(I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1, 1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1, 1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	[1]81-07-2	1,2-Benzisothiazol-3 (2H)- one,1,1,-dioxide, and salts
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[rst]pentaphene
U248	[1]81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3 % or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene,1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U143	303-34-4	2-Butenoic acid, 2-methyl-,7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin- 1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*), 7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-,ethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	[1]111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-,salts and esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-S-(2,3-dichloro-2- propenyl)ester
U215	6533-73-9	Carbonic acid, dithallium (1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresols (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN) Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane,1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha, 5alpha,6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	[1]94-75-7	2,4-D, salts and esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl-S-methyl-dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbestrol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethyl-benzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	91-80-5	1,2-Ethanediamine,-N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis (oxy)]bis[2-chloro-
U117	60-29-7	Ethane,1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis [2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U359	110-80-5	Ethanol,2-ethoxy-
U173	1116-54-7	Ethanol,2,2'-(nitrosoimino)bis-
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U117	60-29-7	Ethyl ether (I)
U238	51-79-6	Ethyl carbamate (urethane)
U114	[1]111-54-6	Ethylenebisdithiocarbamic acid, salts and esters

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethlene oxide (I,T)
U116	96-45-7	Ethylene thiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose,2-deoxy-2-(3-methyl-3-nitrosoureido)-,D-
U206	18883-66-4	D-Glucose, 2-deoxy-2- [[(methylnitrosoamino)-carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine,N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen Sulfide H_2S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-(R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead,bis(acetato-O) tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I,T)
U092	124-40-3	Methanamine, N-methyl-(I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro-(I,T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I,T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octa-chloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta-[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a, 5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)-oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U026	494-03-1	2-Naphthalenamine,N,N'-bis (2-chloroethyl)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-dimethyl-[1,1'-biphenyl]-4,4'-diyl) bis(azo)bis[5-amino-4-hydroxy]-,tetrasodium salt
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+)salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-13	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine,N,N-bis(2-chloroethyl) tetrahydro-,2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2- ethenediyl) bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6- trichloro-
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis (2 -chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+)salt(2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl,S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine,1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso- N-propyl-
U110	142-84-7	1-Propanamine, N-propyl-(I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro-(I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid,2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	73-83-1	1-Propanol, 2-methoxy-(I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl-(I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione,1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5- [bis(2-chloroethyl) amino]-

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U164	56-04-24	(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	'81-07-2	Saccharin and salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS_2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex(2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2,-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium (I) chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium (I) nitrate
U218	62-55-5	Thioacetamide
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2 S_2$, tetramethyl-
U219	62-56-6	Thiourea

Table 4. Toxic Wastes

EPA Hazardous Waste No.	Chemical Abstract Number	Hazardous Waste
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U121	75-69-4	Trichloromonofluoromethane
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	[1]81-81-2	Warfarin, & salts, when present at concentrations of 10% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester,(3beta, 16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10% or less

[1]CAS Number given for parent compound only.

G. Constituents that Serve as a Basis for Listing Hazardous Waste

Table 6 lists constituents that serve as a basis for listing hazardous waste.

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. F001 Tetrachloroethylene methylene chloride trichloroethylene 1,1,1-trichloroethane carbon tetrachloride chlorinated fluorocarbons
EPA Hazardous Waste No. F002 Tetrachloroethylene methylene chloride trichloroethylene 1,1,1-trichloroethane 1,1,2-trichloroethane chlorobenzene 1,1,2-trichloro-1,2,2-trifluoroethane ortho-dichlorobenzene trichlorofluoromethane
EPA Hazardous Waste No. F003 N.A.
EPA Hazardous Waste No. F004 Cresols and cresylic acid nitrobenzene
EPA Hazardous Waste No. F005 Toluene methyl ethyl ketone carbon disulfide isobutanol pyridine 2-ethoxyethanol benzene 2-nitropropane
EPA Hazardous Waste No. F006 Cadmium hexavalent chromium nickel cyanide (complexed)
EPA Hazardous Waste No. F007 Cyanide (salts)
EPA Hazardous Waste No. F008 Cyanide (salts)
EPA Hazardous Waste No. F009 Cyanide (salts)
EPA Hazardous Waste No. F010 Cyanide (salts)
EPA Hazardous Waste No. F011 Cyanide (salts)
EPA Hazardous Waste No. F012 Cyanide (complexed)

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. F019
Hexavalent chromium
cyanide (complexed)
EPA Hazardous Waste No. F020
Tetra- and pentachlorodibenzo-p-dioxins
tetra and pentachlorodibenzofurans
tri- and tetrachlorophenols and their
chlorophenoxy derivative acids
esters
ethers
amine and other salts
EPA Hazardous Waste No. F021
Penta- and hexachlorodibenzo-p-dioxins
penta- and hexachlorodibenzofurans
pentachlorophenol and its derivatives
EPA Hazardous Waste No. F022
Tetra-, penta-, and hexachlorodibenzo-p-dioxins
tetra-, penta-, and hexachlorodibenzofurans
EPA Hazardous Waste No. F023
Tetra- and pentachlorodibenzo-p-dioxins
tetra-, and pentachlorodibenzofurans
tri- and tetrachlorophenols and their
chlorophenoxy derivative acids
esters
ethers
amine and other salts
EPA Hazardous Waste No. F024
Chloromethane
dichloromethane
trichloromethane
carbon tetrachloride
chloroethylene
1,1-dichloroethane
1,2-dichloroethane
trans-1-2-dichloroethylene
1,1-dichloroethylene
1,1,1-trichloroethane
1,1,2-trichloroethane
trichloroethylene
1,1,1,2-tetra-chloroethane
1,1,2,2-tetrachloroethane
tetrachloroethylene
pentachloroethane
hexachloroethane
allyl chloride (3-chloropropene)
dichloropropane
dichloropropene
2-chloro-1,3-butadiene
hexachloro-1,3-butadiene
hexachlorocyclopentadiene
hexachlorocyclohexane
benzene
chlorobenzene

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

dichlorobenzenes 1,2,4-trichlorobenzene tetrachlorobenzene pentachlorobenzene hexachlorobenzene toluene naphthalene
EPA Hazardous Waste No. F025 Chloromethane Dichloromethane Trichloromethane Carbon tetrachloride Chloroethylene 1,1-Dichloroethane 1,2-Dichloroethane trans-1,2-Dichloroethylene 1,1-Dichloroethylene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethylene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethylene Pentachloroethane Hexachloroethane Allyl chloride (3-Chloropropene) Dichloropropane Dichloropropene 2-Chloro-1,3-butadiene Hexachloro-1,3-butadiene Hexachlorocyclopentadiene Benzene Chlorobenzene Dichlorobenzene 1,2,4-Trichlorobenzene Tetrachlorobenzene Pentachlorobenzene Hexachlorobenzene Toluene Naphthalene
EPA Hazardous Waste No. F026 Tetra-, penta-, and hexachlorodibenzo-p-dioxins tetra-, penta-, and hexachlorodibenzofurans
EPA Hazardous Waste No. F027 Tetra-, penta-, and hexachlorodibenzo-p-dioxins tetra-, penta-,and hexachlorodibenzofurans tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids esters ethers amine and other salts

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. F028 Tetra-, penta-, and hexachlorodibenzo-p-dioxins tetra-, penta-, and hexachlorodibenzofurans tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids esters ethers amine and other salts
EPA Hazardous Waste No. F032 Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h) -anthracene,indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo -p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans
EPA Hazardous Waste No. F034 Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium
EPA Hazardous Waste No. F035 Arsenic, chromium, lead
EPA Hazardous Waste No. F037 Benzene, benzo(a)pyrene, chrysene, lead, chromium
EPA Hazardous Waste No. F038 Benzene, benzo(a)pyrene chrysene, lead, chromium
EPA Hazardous Waste No. F039 All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under LAC 33:V.2247.Table 2
EPA Hazardous Waste No. K001 Pentachlorophenol phenol 2-chlorophenol p-chloro-,-cresol 2,4-dimethylphenyl 2,4-dinitrophenol trichlorophenols tetrachlorophenols 2,4-dinitrophenol creosote chrysene naphthalene fluoranthene benzo(b)fluoranthene benzo(a)pyrene indeno(1,2,3-cd)pyrene benz(a)anthracene dibenz(a)anthracene acenaphthalene
EPA Hazardous Waste No. K002 Hexavalent chromium lead
EPA Hazardous Waste No. K003 Hexavalent chromium lead

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. K004 Hexavalent chromium
EPA Hazardous Waste No. K005 Hexavalent chromium lead
EPA Hazardous Waste No. K006 Hexavalent chromium
EPA Hazardous Waste No. K007 Cyanide (complexed) hexavalent chromium
EPA Hazardous Waste No. K008 Hexavalent chromium
EPA Hazardous Waste No. K009 Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid
EPA Hazardous Waste No. K010 Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde
EPA Hazardous Waste No. K011 Acrylonitrile, acetonitrile, hydrocyanic acid
EPA Hazardous Waste No. K013 Hydrocyanic acid, acrylonitrile, acetonitrile
EPA Hazardous Waste No. K014 Acetonitrile, acrylamide
EPA Hazardous Waste No. K015 Benzyl chloride, chlorobenzene, toluene, benzotrichloride
EPA Hazardous Waste No. K016 Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene
EPA Hazardous Waste No. K017 Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-Chloroethyl) ethers], trichloropropane, dichloropropanols
EPA Hazardous Waste No. K018 1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene
EPA Hazardous Waste No. K019 Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride
EPA Hazardous Waste No. K020 Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane) trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. K021 Antimony, carbon tetrachloride, chloroform
EPA Hazardous Waste No. K022 Phenol, tars (polycyclic aromatic hydrocarbons)
EPA Hazardous Waste No. K023 Phthalic anhydride, maleic anhydride
EPA Hazardous Waste No. K024 Phthalic anhydride, 1,4-naphthoquinone
EPA Hazardous Waste No. K025 Meta-dinitrobenzene, 2,4-dinitrotoluene
EPA Hazardous Waste No. K026 Paraldehyde, pyridines, 2-picoline
EPA Hazardous Waste No. K027 Toluene diisocyanate, toluene-2,4-diamine
EPA Hazardous Waste No. K028 1,1,1-trichloroethane, vinyl chloride
EPA Hazardous Waste No. K029 1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform
EPA Hazardous Waste No. K030 Hexachlorobenzene, Hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride
EPA Hazardous Waste No. K031 Arsenic
EPA Hazardous Waste No. K032 Hexachlorocyclopentadiene
EPA Hazardous Waste No. K033 Hexachlorocyclopentadiene
EPA Hazardous Waste No. K034 Hexachlorocyclopentadiene
EPA Hazardous Waste No. K035 Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene
EPA Hazardous Waste No. K036 Toluene, phosphorodithioic and phosphorothioic acid esters
EPA Hazardous Waste No. K037 Toluene, phosphorodithioic and phosphorothioic acid esters
EPA Hazardous Waste No. K038 Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters
EPA Hazardous Waste No. K039 Phosphorodithioic and phosphorothioic acid esters
EPA Hazardous Waste No. K040 Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters
EPA Hazardous Waste No. K041 Toxaphene
EPA Hazardous Waste No. K042 Hexachlorobenzene, ortho-dichlorobenzene

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. K043 2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol
EPA Hazardous Waste No. K044 N.A.
EPA Hazardous Waste No. K045 N.A.
EPA Hazardous Waste No. K046 Lead
EPA Hazardous Waste No. K047 N.A.
EPA Hazardous Waste No. K048 Hexavalent chromium, lead
EPA Hazardous Waste No. K049 Hexavalent chromium, lead
EPA Hazardous Waste No. K050 Hexavalent chromium
EPA Hazardous Waste No. K051 Hexavalent chromium, lead
EPA Hazardous Waste No. K052 Lead
EPA Hazardous Waste No. K060 Cyanide, napthalene, phenolic compounds, arsenic
EPA Hazardous Waste No. K061 Hexavalent chromium, lead, cadmium
EPA Hazardous Waste No. K062 Hexavalent chromium, lead
EPA Hazardous Waste No. K064 Lead, cadmium
EPA Hazardous Waste No. K065 Do
EPA Hazardous Waste No. K066 Do
EPA Hazardous Waste No. K069 Hexavalent chromium, lead, cadmium
EPA Hazardous Waste No. K071 Mercury
EPA Hazardous Waste No. K073 Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane
EPA Hazardous Waste No. K083 Aniline, diphenylamine, nitrobenzene, phenylenediamine
EPA Hazardous Waste No. K084 Arsenic
EPA Hazardous Waste No. K085 Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride
EPA Hazardous Waste No. K086 Lead, hexavalent chromium

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. K087 Phenol, naphthalene
EPA Hazardous Waste No. K088 Cyanide (complexes)
EPA Hazardous Waste No. K090 Chromium
EPA Hazardous Waste No. K091 Do
EPA Hazardous Waste No. K093 Phthalic anhydride, maleic anhydride
EPA Hazardous Waste No. K094 Phthalic anhydride
EPA Hazardous Waste No. K095 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane
EPA Hazardous Waste No. K096 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane
EPA Hazardous Waste No. K097 Chlordane, heptachlor
EPA Hazardous Waste No. K098 Toxaphene
EPA Hazardous Waste No. K099 2,4-dichlorophenol, 2,4,6-trichlorophenol
EPA Hazardous Waste No. K100 Hexavalent chromium, lead, cadmium
EPA Hazardous Waste No. K101 Arsenic
EPA Hazardous Waste No. K102 Arsenic
EPA Hazardous Waste No. K103 Aniline, nitrobenzene, phenylenediamine
EPA Hazardous Waste No. K104 Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine
EPA Hazardous Waste No. K105 Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol
EPA Hazardous Waste No. K106 Mercury
EPA Hazardous Waste No. K107 1,1-Dimethylhydrazine (UDMH)
EPA Hazardous Waste No. K108 1,1-Dimethylhydrazine (UDMH)
EPA Hazardous Waste No. K109 1,1-Dimethylhydrazine (UDMH)
EPA Hazardous Waste No. 110 1,1-Dimethylhydrazine (UDMH)
EPA Hazardous Waste No. K111 2,4-Dinitrotoluene
EPA Hazardous Waste No. K112 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. K113 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline
EPA Hazardous Waste No. K114 2,4-Toluenediamine, o-toluidine, p-toluidine
EPA Hazardous Waste No. K115 2,4-Toluenediamine
EPA Hazardous Waste No. K116 Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene
EPA Hazardous Waste No. K117 Ethylene dibromide
EPA Hazardous Waste No. K118 Ethylene dibromide
EPA Hazardous Waste No. K123 Ethylene thiourea
EPA Hazardous Waste No. K124 Ethylene thiourea
EPA Hazardous Waste No. K125 Ethylene thiourea
EPA Hazardous Waste No. K126 Ethylene thiourea
EPA Hazardous Waste No. K131 Dimethyl sulfate, methyl bromide
EPA Hazardous Waste No. K132 Methyl Bromide
EPA Hazardous Waste No. K136 Ethylene dibromide
EPA Hazardous Waste No. K141 Benzene benz(a)anthracene benzo(a)pyrene benzo(b)fluoranthene benzo(k)fluoranthene dibenz(a,h)anthracene indeno(1,2,3-cd)pyrene
EPA Hazardous Waste No. K142 Benzene benz(a)anthracene benzo(a)pyrene benzo(b)fluoranthene benzo(k)fluoranthene dibenz(a,h)anthracene indeno(1,2,3-cd)pyrene
EPA Hazardous Waste No. K143 Benzene benz(a)anthracene benzo(b)fluoranthene benzo(k)fluoranthene

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. K144
Benzene
benz(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
dibenz(a,h)anthracene
EPA Hazardous Waste No. K145
Benzene
benz(a)anthracene
benzo(a)pyrene
dibenz(a,h)anthracene
naphthalene
EPA Hazardous Waste No. K147
Benzene
benz(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
dibenz(a,h)anthracene
indeno(1,2,3-cd)pyrene
EPA Hazardous Waste No. K148
Benz(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
dibenz(a,h)anthracene
indeno(1,2,3-cd)pyrene
EPA Hazardous Waste No. K149
Benzotrichloride
benzyl chloride
chloroform
chloromethane
chlorobenzene
1,4-dichlorobenzene
hexachlorobenzene
pentachlorobenzene
1,2,4,5-tetrachlorobenzene
toluene
EPA Hazardous Waste No. K150
Carbon tetrachloride
chloroform
chloromethane
1,4-dichlorobenzene
hexachlorobenzene
pentachlorobenzene
1,2,4,5-tetrachlorobenzene
1,1,2,2-tetrachloroethane
tetrachloroethylene
1,2,4-trichlorobenzene

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

EPA Hazardous Waste No. 151
Benzene
carbon tetrachloride
chloroform
hexachlorobenzene
pentachlorobenzene
toluene
1,2,4,5-tetrachlorobenzene
tetrachloroethylene

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:320 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 14:426 (July 1988), LR 14:790 (November 1988), LR 15:182 (March 1989), LR 16:47 (January 1990), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 16:1057 (December 1990), LR 17:369 (April 1991), LR 17:478 (May 1991), LR 17:658 (July 1991), LR 18:723 (July 1992), LR 18:1256 (November 1992), LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995).

§4903. Category II Hazardous Wastes

A. Category II hazardous wastes are wastes designated as hazardous based on classical analytical procedures (see SW-846 for guidance on the procedures). There are four hazardous waste categories for wastes not otherwise characterized: ignitability, corrosivity, reactivity, and toxicity. LAC 33:V.Subpart 1 applies to those materials that exhibit the characteristics of ignitability, corrosivity, reactivity, and/or toxicity.

B. Ignitability. A solid waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number D001. A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

1. It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has flash point less than 60C (140F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80 or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78 or as determined by an equivalent test method approved by the administrative authority under procedures set forth in LAC 33:V.105.H and I.

2. It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

3. It is an ignitable compressed gas as defined in LDPS Regulation LAC 33:V.Subpart 2.Chapter 101 and as determined by the test methods described in that regulation or equivalent test methods LAC 33:V.105.I.

4. It is an oxidizer as defined in LDPS Regulations LAC 33:V.Subpart 2.Chapter 101.

C. Corrosivity. A solid waste that exhibits the characteristic of corrosivity has the EPA Hazardous Waste Number D002. A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

1. It is aqueous and has a pH less than or equal to two or greater than or equal to 12.5, as determined by a pH meter using either as specified in SW-846 or an equivalent test method approved by the administrative authority under procedures set forth in LAC 33:V.105.H and I. The specified test method for pH is specified as Method 5.2 in SW-846, "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods."

2. It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55C (130F) as determined by the test method specified in National Association of Corrosion Engineers (NACE) Standard TM-01-69 as standardized in SW-846, "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" or an equivalent test method approved by the administrative authority under the procedures set forth in LAC 33:V.105.H and I.

D. Reactivity. A solid waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number D003. A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

1. It is normally unstable and readily undergoes violent change without detonating.

2. It reacts violently with water.

3. It forms potentially explosive mixtures with water.

4. When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

5. It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2.0 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

6. It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

7. It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

8. It is a forbidden explosive as defined in LDPS Regulation LAC 33:V.Subpart 2.Chapter 101, or a Class A explosive as defined in LDPS Regulation LAC 33:V.Subpart 2.Chapter 101 or a Class B explosive as defined in LDPS Regulation LAC 33:V.Subpart 2.Chapter 101.

E. Toxicity Characteristic

1. A solid waste exhibits the characteristic of toxicity if, using the test methods described in Method 1311, in 40 CFR Part 268 Appendix 1, or equivalent methods approved by the administrative authority under the procedures set forth in LAC 33:V.105.H and I, the extract from a representative sample of the waste contains any of the contaminants listed in Table 5 at a concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," (EPA Publication No. SW-846), latest edition, is considered to be the extract for the purposes of this Section.

2. A solid waste that exhibits the characteristic of toxicity, but is not listed as a hazardous waste in LAC 33:V.4901, has the Hazardous Waste Number specified in Table 5 that corresponds to the toxic contaminant causing it to be hazardous.

Table 5. Maximum Concentrations of Contaminants for the Toxicity Characteristic

EPA HW No.[1]	Contaminant	CAS NO.[2]	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	[4]200.0
D024	m-Cresol	108-39-4	[4]200.0
D025	p-Cresol	106-44-5	[4]200.0
D026	Cresol	———	[4]200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5

Table 5. Maximum Concentrations of Contaminants for the Toxicity Characteristic

EPA HW No.[1]	Contaminant	CAS NO.[2]	Regulatory Level (mg/L)
D028	1,2-Dichlorethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	[3]0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	[3]0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	[3]5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

[1] Hazardous Waste Number

[2] Chemical Abstracts Service Number

[3] Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

[4] If o-, m- and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:1057 (December 1990), LR 17:369 (April 1991), LR 18:723 (July 1992), LR 18:1256 (November 1992).

§4905. Exclusions for Wastewaters

A. The following mixtures of solid wastes and hazardous wastes listed in LAC 33:V.4901 are not hazardous wastes (except by application of LAC 33:V.4903) if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater), and:

1. one or more of the following spent solvents listed in LAC 33:V.4901.A—carbon tetrachloride, tetrachloroethylene, trichloroethylene—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed one part per million; or

2. one or more of the followng* spent solvents listed in LAC33:V.4901.A—methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million and provided that the generator uses due care as a prudent operator to minimize the amount of these substances entering the wastewater treatment system; or

3. one of the following wastes listed in LAC 33:V.4901.B—heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA hazardous waste number K-050); or

4. a discarded commercial chemical product or chemical intermediate listed in LAC 33:V.4901.D and E arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this Subparagraph, "de minimis" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers; leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings, relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers rendered empty by that rinsing;

5. wastewater resulting from laboratory operations containing toxic (T) wastes listed in LAC 33:V.4901 provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

B. If the discharge under LAC 33:V.4905.A.1-E.5 is into a system not owned by the generator, approval by the owner for the discharge is required.

1. Except for laboratory wastes in LAC 33:V.4905.A.5, no waste previously separated shall be intentionally added to the wastewater for disposal.

2. The administrative authority may require analysis of a monthly grab sample indicative of the materials and hazardous degradation products for the materials covered in LAC 33:V.4905.A.1 and 2 if not covered in the water discharge permit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 14:791 (November 1988), LR 15:182 (March 1989), LR 18:723 (July 1992).

* As appeared in the published rule.

§4907. Criteria for Listing Hazardous Waste

A. The administrative authority shall list a solid waste as a hazardous waste upon determining that the solid waste meets one of the following criteria.

1. It exhibits any of the characteristics of hazardous waste identified in LAC 33:V.4903.

2. It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria will be designated Acute or Acutely Hazardous Waste.)

3. It contains any of the toxic constituents listed in LAC 33:V.3105.Table 1, and after considering the following factors, the administrative authority concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed:

a. the nature of the toxicity presented by the constituent;

b. the concentration of the constituent in the waste;

c. the potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in LAC 33:V.4907.A.3.g;

d. the persistence of the constituent or any toxic degradation product of the constituent;

e. the potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation;

f. the degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems;

g. the plausible types of improper management to which the waste could be subjected;

h. the quantities of the waste generated at individual generation sites or on a regional or national basis;

i. the nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent;

j. action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent; and

k. such other factors as may be appropriate.

Substances will be listed in LAC 33:V.3105.Table 1 only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic, or teratogenic effects on humans or other life forms. (Wastes listed in accordance with these criteria will be designated "Toxic" wastes.)

B. The administrative authority may list classes or types of solid waste as hazardous waste if he or she has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in LAC 33:V.109.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:478 (May 1991).

Appendices

Appendix A. Chemical Analysis Test Methods

Tables 8, 9, and 10 specify the appropriate analytical procedures, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," (SW-846) which shall be used to determine whether a sample contains a given toxic constituent found in LAC 33:V.4901.G.Table 6 or 3105.Table 1.

Table 8 identifies each organic constituent found in LAC 33:V.4901.G.Table 6 or 3105.Table 1 along with the approved measurement method. Table 9 identifies the corresponding methods for inorganic species. Table 10 summarizes the contents of SW-846 and supplies specific section and method numbers for sampling and analysis methods.

Prior to final sampling and analysis method selection the analyst should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

Table 8

Analysis Methods for Organic Chemicals Contained in SW-846

Compound	Method Numbers
Acetonitrile	8030, 8240
Acrolein	8030, 8240
Acrylamide	8015, 8240
Acrylonitrile	8030, 8240
2-Amino-1-methylbenzene (o-Toluidine)	8250
4-Amino-1-methylbenzene (p-Toluidine)	8250
Aniline	8250

Table 8

Analysis Methods for Organic Chemicals Contained in SW-846

Compound	Method Numbers
Benzene	8020, 8024
Benz(a)anthracene	8100, 8250, 8310
Benzo(a)pyrene	8100, 8250, 8310
Benzotrichloride	8120, 8250
Benzyl chloride	8120, 8250
Benzo(b)fluoranthene	8100, 8250, 8310
Benzo(k)fluoranthene	8100, 8250, 8270, 8310
Bis(2-chloroethoxymethane)	8010, 8240
Bis(2-chloroethyl)ether	8010, 8240
Bis(2-chloroisopropyl)ether	8010, 8240
Carbon disulfide	8015, 8240
Carbon tetrachloride	8010, 8240
Chlordane	8080, 8250
Chlorinated biphenyls	8080, 8250
Chlorinated dibenzo-p-dioxins	8280
Chlorinated dibenzofurans	8280
Chloroacetaldehyde	8010, 8240
Chlorobenzene	8020, 8240
Chloroform	8010, 8240
Chloromethane	8010, 8240
2-Chlorophenol	8040, 8250
Chrysene	8100, 8250, 8310
Creosote[1]	8100, 8250
Cresol(s)	8040, 8250
Cresylic Acid(s)	8040, 8250
Dichlorobenzene(s)	8010, 8120, 8250
Dichloroethane(s)	8010, 8240
Dichloromethane	8010, 8240
Dichlorophenoxyacetic acid	8150, 8250
Dichloropropanol	8120, 8250
Dimethyl sulfate	8250, 8270

Table 8

Analysis Methods for Organic Chemicals Contained in SW-846

Compound	Method Numbers
1,1-Dimethylhydrazine (UDMH)	8250
2,4-Dimethylphenol	8040, 8250
Dinitrobenzene	8090, 8250
4,6-Dinitro-o-cresol	8040, 8250
2,4-Dinitrotoluene	8090, 8250
2,6-Dinitrotoluene	8060, 8250
Endrin	8080, 8250
2-Ethoxyethanol	8030, 8240
Ethyl ether	8015, 8240
Ethylene dibromide	8010, 8240
Ethylene thiourea	8250, 8330
Formaldehyde	8015, 8240
Formic acid	8250
Heptachlor	8080, 8250
Hexachlorobenzene	8120, 8250
Hexachlorobutadiene	8120, 8250
Hexachloroethane	8010, 8240
Hexachlorocyclopentadiene	8120, 8250
Lindane	8080, 8250
Maleic anhydride	8250
Methanol	8010, 8240
Methomyl	8250
Methyl bromide	8010, 8240, 8260
Methyl ethyl ketone	8015, 8240
Methyl isobutyl ketone	8015, 8240
Naphthalene	8100, 8250
Naphthoquinone	8090, 8250
Nitrobenzene	8090, 8250
4-Nitrophenol	8040, 8240
2-Nitropropane	8030, 8240
Paraldehyde (trimer of acetaldehyde)	8015, 8240

Table 8

Analysis Methods for Organic Chemicals Contained in SW-846

Compound	Method Numbers
Pentachlorophenol	8040, 8250
Phenol	8040, 8250
Phorate	8140
Phosphorodithioic acid esters	8140
Phthalic anhydride	8090, 8250
2-Picoline	8090, 8250
Pyridine	8090, 8250
Tetrachlorobenzene(s)	8120, 8250
Tetrachloroethane(s)	8010, 8240
Tetrachloroethene	8010, 8240
Tetrachlorophenol	8040, 8250
Toluene	8020, 8024
Toluene diisocyanate(s)	8250
Toluenediamine	8250
2,4-Toluenediamine	8250
3,4-Toluenediamine	8250
Toxaphene	8080, 8250
Trichloroethane	8010, 8240
Trichloroethene(s)	8010, 8240
Trichlorofluoromethane	8010, 8240
Trichlorophenol(s)	8040, 8250
2,4,5-Trichlorophenoxy propionic acid	8150, 8250
Trichloropropane	8010, 8240
Vinyl chloride	8010, 8240
Vinylidene chloride	8010, 8240
Xylene	8020, 8240

Footnote:

[1] Analyze for phenanthrene and carbazole; if these are present in a ratio between 1.4:1 and 5:1 creosote should be considered present.

Table 9

Analysis Methods for Inorganic Chemicals and Miscellaneous Groups of Analytes Contained in SW-846[a]

Compound	Third Edition Method(s)	Second Edition Method(s)
Aluminum	6010	
Antimony	6010	7040, 7041
Arsenic	6010	7060,7061
Barium	6010	7080, 7081
Beryllium	6010, 7090, 7091	
Boron	6010	
Cadmium	6010	7130, 7131
Calcium	6010	
Chromium	6010	7190, 7191
Chromium, Hexavalent	7198	7195, 7196, 7197
Cobalt	6010	
Copper	6010, 7210, 7211	
Iron	6010, 7380, 7381	
Lead	6010	7420, 7421
Magnesium	6010	
Manganese	6010, 7460, 7461	
Mercury	7470, 7471	
Molybdenum	6010	
Nickel	6010	7520, 7521
Osmium	7550	
Potassium	6010	
Selenium	6010	7740, 7741
Silicon	6010	
Silver	6010	7760, 7761
Sodium	6010, 7770	
Thallium	6010, 7840, 7841	
Vanadium	6010, 7910, 7911	
Zinc	6010, 7950,7951	
Cyanides	9010	
Total Organic Halides	9022	9020

Table 9

Analysis Methods for Inorganic Chemicals and Miscellaneous Groups of Analytes Contained in SW-846[a]

Compound	Third Edition Method(s)	Second Edition Method(s)
Sulfides	9030	
Sulfates	9035, 9036, 9038	
Total Organic Carbon	9060	
Phenolics	9065, 9066[b], 9067	
Oil and Grease	9070, 9071	
Total Coliform	9131, 9132	
Nitrate	9200	
Chlorides	9250, 9251, 9252	
Gross Alpha and Gross Beta	9310	
Alpha-Emitting Radium Isotopes	9315	
Radium-228	9320	

Footnote:

[a] The Third Edition of SW-846 and its Revision I are available from the Government Printing Office, Superintendent of Documents, Washington, DC 20402, (202) 783-3238, document number 955-001-00000-1.

Footnote:

[b] When Method 9066 is used it must be preceded by the manual distillation specified in procedure 7.1 of Method 9065. Just prior to distillation in method 9065, adjust the sulfuric acid-preserved sample to pH 4 with 1+9 NaOH. After the manual distillation is completed, the autoanalyzer manifold is simplified by connecting the re-sample line directly to the sampler.

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
Quality Control	1.0		10.0	
Introduction	1.1		10.1	
Quality Control	1.2			
Method Detection Limit	1.3			
Data Reporting	1.4			
Quality Control Documentation	1.5			

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
References	1.6			
Choosing the Correct Procedure	2.0			
Purpose	2.1			
Required Information	2.2			
Implementing the Guidance	2.3			
Characteristics	2.4			
Ground Water	2.5			
References	2.6			
Metallic Analytes	3.0			
Sampling Considerations	3.1			
Sample Preparation Methods	3.2			
Acid Digestion of Waters for Total Recoverable or Dissolved Metals for Analysis by Flame AAS or ICP	3.2	3005		
Acid Digestion of Aqueous Samples and Extracts for Total Metals for Analysis by Flame AAS or ICP	3.2	3010	4.1	3010
Acid Digestion of Aqueous Samples and Extracts for Total Metals for Analysis by Furnace AAS	3.2	3020	4.1	3020
Dissolution Procedure for Oils, Greases, or Waxes	3.2	3040	4.1	3040
Acid Digestion of Sediments, Sludges and Soils	3.2	3050	4.1	3050
Methods for the Determination of Metals	3.3			
Inductively Coupled Plasma Atomic Emissions Spectroscopy	3.3	* 6010		
Atomic Absorption Methods	3.3	7000		
Aluminum, Flame AAS	3.3	7020		
Antimony, Flame AAS	3.3	7040	7.0	7040
Antimony, Furnace AAS	3.3	7041	7.0	7041
Arsenic, Furnace AAS	3.3	7060	7.0	7060
Arsenic, Gaseous Hydride AAS	3.3	7061	7.0	7061

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
Barium, Flame AAS	3.3	7080	7.0	7080
Barium, Furnace AAS	3.3	7081	7.0	7081
Beryllium, Flame AAS	3.3	*7090		
Beryllium, Furnace AAS	3.3	*7091		
Cadmium, Flame AAS	3.3	7130	7.0	7130
Cadmium, Furnace AAS	3.3	7131	7.0	7131
Calcium, Flame AAS	3.3	7140		
Chromium, Flame AAS	3.3	7190	7.0	7190
Chromium, Furnace AAS	3.3	7191	7.0	7191
Chromium, Hexavalent, Coprecipitation	3.3	7195	7.0	7195
Chromium, Hexavalent, Colorimetric	3.3	7196	7.0	7196
Chromium, Hexavalent, Chelation/Extraction	3.3	7197	7.0	7197
Chromium, Hexavalent, Differential Pulse Polarography	3.3	*7198		
Cobalt, Flame AAS	3.3	7200		
Cobalt, Furnace AAS	3.3	7201		
Copper, Flame AAS	3.3	*7210		
Copper, Furnace AAS	3.3	*7211		
Iron, Flame AAS	3.3	*7380		
Iron, Furnace AAS	3.3	*7381		
Lead, Flame AAS	3.3	7420	7.0	7420
Lead, Furnace AAS	3.3	7421	5.0	7421
Magnesium, Flame AAS	3.3	7450		
Manganese, Flame AAS	3.3	*7460		
Manganese, Furnace AAS	3.3	*7461		
Mercury in Liquid Waste, Manual Cold Vapor Technique	3.3	7470	7.0	7470
Mercury in Solid or Semisolid Waste, Manual Cold Vapor Technique	3.3	7471	7.0	7471
Molybdenum, Flame AAS	3.3	7480		
Molybdenum, Furnace AAS	3.3	7481		

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
Nickel, Flame AAS	3.3	7520	7.0	7520
Osmium, Flame AAS	3.3	*7550		
Potassium, Flame AAS	3.3	7610		
Selenium, Furnace AAS	3.3	7740	7.0	7740
Selenium, Gaseous Hydride AAS	3.3	7741	7.0	7741
Silver, Flame AAS	3.3	7760	7.0	7760
Sodium, Flame AAS	3.3	*7770		
Thallium, Flame AAS	3.3	*7840		
Thallium, Furnace AAS	3.3	*7841		
Tin, Flame AAS	3.3	7870		
Vanadium, Flame AAS	3.3	*7910		
Vanadium, Furnace AAS	3.3	*7911		
Zinc, Flame AAS	3.3	*7950		
Zinc, Furnace AAS	3.3	*7951		
Organic Analytes	4.0		8.0	
Sampling Considerations	4.1			
Sample Preparation Methods	4.2			
Extractions and Preparations	4.2.1			
Organic Extraction and Sample Preparation	4.2.1	3500		
Separatory Funnel Liquid-Liquid Extraction	4.2.1	3510	4.2	3510
Continuous Liquid-Liquid Extraction	4.2.1	3520	4.2	3520
Soxhlet Extraction	4.2.1	3540	4.2	3540
Ultrasonic Extraction	4.2.1	3550	4.2	3550
Waste Dilution	4.2.1	3580		
Purge-and-Trap	4.2.1	5030	5.0	5030
Protocol for Analysis of Sorbent Cartridges from VOST	4.2.1	*5040		
Cleanup	4.2.2			
Cleanup	4.2.2	3600		
Alumina Column Cleanup	4.2.2	3610		

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
Alumina Column Cleanup and Separation of Petroleum Wastes	4.2.2	*3611		
Florisil Column Cleanup	4.2.2	3620		
Silica Gel Cleanup	4.2.2	3630		
Gel-Permeation Cleanup	4.2.2	3640		
Acid-Base Partition Cleanup	4.2.2	3650	4.2	3530
Sulfur Cleanup	4.2.2	3660		
Determination of Organic Analytes	4.3			
Gas Chromatographic Methods	4.3.1		8.1	
Gas Chromatography	4.3.1	8000		
Halogenated Volatile Organics	4.3.1	8010	8.1	8010
EDB and DBCP	4.3.1	8011		
Nonhalogenated Volatile Organics	4.3.1	8015	8.1	8015
Aromatic Volatile Organics	4.3.1	8020	8.1	8020
Volatile Organic Compounds in Water by Purge-and-Trap Capillary Column GC with PID and Electrolytic Conductivity Detector in Series	4.3.1	8021		
Acrolein, Acrylonitrile, Acetonitrile	4.3.1	8030	8.1	8030
Phenols	4.3.1	8040	8.1	8040
Phthalate Esters	4.3.1	8060	8.1	8060
Nitrosamines	4.3.1	8070		
Organochlorine Pesticides and PCBs as Aroclors	4.3.1	8080	8.1	8080
Nitroaromatics and Cyclic Ketones	4.3.1	8090	8.1	8090
Polynuclear Aromatic Hydrocarbons	4.3.1	8100	8.1	8100
Haloethers	4.3.1	8110		
Chlorinated Hydrocarbons	4.3.1	8120	8.1	8120
Organophosphorus Pesticides	4.3.1	8140	8.1	8140
Organophosphorus Pesticides: Capillary Column	4.3.1	8141		
Chlorinated Herbicides	4.3.1	8150	8.1	8150

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
Gas Chromatographic/Mass Spectroscopic Methods	4.3.2		8.2	
GC/MS Volatiles	4.3.2	8240	8.2	8240
GC/MS Semivolatiles, Packed Column	4.3.2	8250	8.2	8250
GC/MS for Volatiles Capillary Column	4.3.2	8260		
GC/MS Semivolatiles, Capillary Column	4.3.2	8270	8.2	8270
Analysis of Chlorinated Dioxins and Dibenzofurans	4.3.2	8280		
High Performance Liquid Chromatographic Methods (HPLC)	4.3.3		8.3	
Polynuclear Aromatic Hydrocarbons	4.3.3	8310	8.3	8310
Miscellaneous Screening Methods	4.4			
Headspace	4.4	3810	5.0	5020
Hexadecane Extraction and Screening of Purgeable Organics	4.4	3820		
Miscellaneous Test Methods	5.0		9.0	
Total and Amenable Cyanide (Colorimetric, Manual)	5.0	9010	9.0	9010
Total and Amenable Cyanide (Colorimetric, Automated)	5.0	9012		
Total Organic Halides (TOX)	5.0	9020	9.0	9020
Purgeable Organic Halides (POX)	5.0	9021		
Total Organic Halides (TOX) by Neutron Activation Analysis	5.0	*9022		
Acid-Soluble and Acid-Insoluble Sulfides	5.0	9030	9.0	9030
Extractable Sulfides	5.0	9031		
Sulfate, (Colorimetric, Automated, Chloranilate)	5.0	*9035		
Sulfate, (Colorimetric, Automated, Methylthymol Blue, AA II)	5.0	*9036		
Sulfate, (Turbidimetric)	5.0	*9038		
Total Organic Carbon	5.0	*9060		

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
Phenolics, (Spectrophotometric, Manual 4-AAP)	5.0	*9065		
Phenolics, (Colorimetric, Automated 4-AAP)	5.0	*9066		
Phenolics, (Spectrophotometric, MBTH)	5.0	*9067		
Total Recoverable Oil and Grease (Gravimetric, Separatory Funnel Extraction)	5.0	*9070		
Oil and Grease Extraction Method for Sludge Samples	5.0	*9071		
Total Coliform: Multiple Tube Fermentation	5.0	*9131		
Total Coliform: Membrane Filter	5.0	*9132		
Nitrate	5.0	*9200		
Chloride (Colorimetric, Automated Ferricyanide AAI)	5.0	*9250		
Chloride (Colorimetric, Automated Ferricyanide AAII)	5.0	*9251		
Chloride (Titrimetric, Mercuric Nitrate)	5.0	*9252		
Properties	6.0			
Multiple Extraction Procedure	6.0	*1320		
Extraction Procedure for Oily Wastes	6.0	*1330		
pH Electrometric Measurement	6.0	9040	9.0	9040
pH Paper Method	6.0	9041		
Soil pH	6.0	9045		
Specific Conductance	6.0	9050		
Cation-Exchange Capacity of Soils (Ammonium Acetate)	6.0	*9080		
Cation-Exchange Capacity of Soils (Sodium Acetate)	6.0	*9081		
Compatibility Test for Wastes and Membrane Liners	6.0	9090		
Paint Filter Liquids Test	6.0	9095	9.0	9095
Saturated Hydraulic Conductivity, Saturated Leachate Conductivity, and Intrinsic Permeability	6.0	*9100		

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
Gross Alpha and Gross Beta	6.0	*9310		
Alpha-Emitting Radium Isotopes	6.0	*9315		
Radium-228	6.0	*9320		
Introduction and Regulatory Definitions	7.0		2.0	
Ignitability	7.1		2.1.1	
Corrosivity	7.2		2.1.2	
Reactivity	7.3		2.1.3	
Test Method to Determine Hydrogen Cyanide Released from Wastes	7.3			
Test Method to Determine Hydrogen Sulfide Released from Wastes	7.3			
Extraction Procedure Toxicity	7.4		2.1.4	
Methods for Determining Characteristics	8.0		2.0	
Ignitability	8.1		2.1.1	
Pensky-Martens Closed-Cup Method	8.1	1010	2.1.1	1010
Setaflash Closed-Cup Method	8.1	1020	2.1.1	1020
Corrosivity	8.2		2.1.2	
Corrosivity Toward Steel	8.2	1110	2.1.2	1110
Reactivity	8.3		2.1.3	
Toxicity	8.4		2.1.4	
Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test	8.4	1310	2.1.4	1310
Sampling Plan	9.0		1.0	
Design and Development	9.1		1.0, 1.1	
Implementation	9.2		1.2, 1.3, 1.4	
Sampling Methods	10.0			
Modified Method 5 Sampling Train, Appendix A and B	10.0	*0010		
Source Assessment Sampling System (SASS)	10.0	*0020		
Volatile Organic Sampling Train	10.0	*0030		

Table 10

Sampling and Analysis Methods Contained in SW-846[a]

Title	Third Edition		Second Edition	
	Section Number	Method Number	Section Number	Method Number
Ground Water Monitoring	11.0			
Background and Objectives	11.1			
Relationship to the Regulations and to Other Documents	11.2			
Revisions and Additions	11.3			
Acceptable Designs and Practices	11.4			
Unacceptable Designs and Practices	11.5			
Land Treatment Monitoring	12.0			
Background	12.1			
Treatment Zone	12.2			
Regulatory Definition	12.3			
Monitoring and Sampling Strategy	12.4			
Analysis	12.5			
References and Bibliography	12.6			
Incineration	13.0			
Introduction	13.1			
Regulatory Definition	13.2			
Waste Characterization Strategy	13.3			
Stack-Gas Effluent Characterization Strategy	13.4			
Additional Effluent Characterization Strategy	13.5			
Selection of Specific Sampling and Analysis Methods	13.6			
References	13.7			

Footnote:

[a] The Third Edition of SW-846 and its Revision 1 are available from the Government Printing Office, Superintendent of Documents, Washington, DC 20402, (202) 738-3238, document number 955-001-00000-1.

Footnote:

[b] This method may be used in conjunction with or in addition to the methods found in the Second Edition of SW-846 as amended by Updates I and II.

Footnote:

[c] When Method 9066 is used it must be preceded by the manual distillation specified in procedure 7.1 of Method 9065. Just prior to distillation in Method 9065, adjust the sulfuric acid-preserved sample to pH 4

with 1+9 NaOH. After the manual distillation is completed, the autoanalyzer manifold is simplified by connecting the resample line directly to the sampler.

Appendix B. Method 1311
Toxicity Characteristic Leaching Procedure (TCLP)

1.0 Scope and Application

1.1 The TCLP is designed to determine the mobility of both organic and inorganic analytes present in liquid, solid, and multiphasic wastes.

1.2 If a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run.

1.3 If an analysis of any one of the liquid fractions of the TCLP extract indicates that a regulated compound is present at such high concentrations that, even after accounting for dilution from the other fractions of the extract, the concentration would be equal to or above the regulatory level for that compound, then the waste is hazardous and it is not necessary to analyze the remaining fractions of the extract.

1.4 If an analysis of extract obtained using a bottle extractor shows that the concentration of any regulated volatile analyte equals or exceeds the regulatory level for that compound, then the waste is hazardous and extraction using the ZHE is not necessary. However, extract from a bottle extractor cannot be used to demonstrate that the concentration of volatile compounds is below the regulatory level.

2.0 Summary of Method

2.1 For liquid wastes (i.e., those containing less than 0.5 percent dry solid material), the waste, after filtration through a 0.6 to 0.8 μm glass fiber filter, is defined as the TCLP extract.

2.2 For wastes containing greater than or equal to 0.5 percent solids, the liquid, if any, is separated from the solid phase and stored for later analysis; the particle size of the solid phase is reduced, if necessary. The solid phase is extracted with an amount of extraction fluid equal to 20 times the weight of the solid phase. The extraction fluid employed is a function of the alkalinity of the solid phase of the waste. A special extractor vessel is used when testing for volatile analytes (see Table 1 for a list of volatile compounds). Following extraction, the liquid extract is separated from the solid phase by filtration through a 0.6 to 0.8 μm glass fiber filter.

2.3 If compatible (i.e., multiple phases will not form on combination), the initial liquid phase of the waste is added to the liquid extract, and these are analyzed together. If incompatible, the liquids are analyzed separately and the results are mathematically combined to yield a volume-weighted average concentration.

3.0 Interferences

3.1 Potential interferences that may be encountered during analysis are discussed in the individual analytical methods.

4.0 Apparatus and Materials

4.1 Agitation apparatus: The agitation apparatus must be capable of rotating the extraction vessel in an end-over-end fashion (see Figure 1) at 30 $\pm$2 rpm. Suitable devices known to EPA are identified in Table 2.

4.2 Extraction Vessels.

4.2.1 Zero-Headspace Extraction Vessel (ZHE). This device is for use only when the waste is being tested for the mobility of volatile analytes (i.e., those listed in Table 1). The ZHE (depicted in Figure 2) allows for liquid/solid separation within the device, and effectively precludes headspace. This type of vessel allows for initial liquid/solid separation, extraction, and final extract filtration without opening the vessel (see 4.3.1 of this appendix). The vessels shall have an internal volume of 500-600 mL, and be equipped to accommodate a 90-110 mm filter. The devices contain VITON(R) O-rings which should be replaced frequently. Suitable ZHE devices known to EPA are identified in Table 3.

Note: VITON(R) is a registered trademark of DuPont.

For the ZHE to be acceptable for use, the piston within the ZHE should be able to be moved with approximately 15 pounds per square inch (psi) or less. If it takes more pressure to move the piston, the O-rings in the device should be replaced. If this does not solve the problem, the ZHE is unacceptable for TCLP analyses and the manufacturer should be contacted.

The ZHE should be checked for leaks after every extraction. If the device contains a built-in pressure gauge, pressurize the device to 50 psi, allow it to stand unattended for 1 hour, and recheck the pressure. If the device does not have a built-in pressure gauge, pressurize the device to 50 psi, submerge it in water, and check for the presence of air bubbles escaping from any of the fittings. If pressure is lost, check all fittings and inspect and replace O-rings, if necessary. Retest the device. If leakage problems cannot be solved, the manufacturer should be contacted.

Some ZHEs use gas pressure to actuate the ZHE piston, while others use mechanical pressure (see Table 3). Whereas the volatiles procedures (see 7.3 of this appendix) refers to pounds per square inch (psi), for the mechanically actuated piston, the pressure applied is measured in torque-inch-pounds. Refer to the manufacturer's instructions as to the proper conversion.

4.2.2 Bottle Extraction Vessel. When the waste is being evaluated using the nonvolatile extraction, a jar with sufficient capacity to hold the sample and the extraction fluid is needed. Headspace is allowed in this vessel.

The extraction bottles may be constructed from various materials, depending on the analytes to be analyzed and the

nature of the waste (see 4.3.3 of this appendix). It is recommended that borosilicate glass bottles be used instead of other types of glass, especially when inorganics are of concern. Plastic bottles, other than polytetrafluoroethylene, shall not be used if organics are to be investigated. Bottles are available from a number of laboratory suppliers. When this type of extraction vessel is used, the filtration device discussed in 4.3.2 of this appendix is used for initial liquid/solid separation and final extract filtration.

4.3 Filtration Devices: It is recommended that all filtrations be performed in a hood.

4.3.1 Zero-Headspace Extractor Vessel (ZHE): When the waste is evaluated for volatiles, the zero-headspace extraction vessel described in 4.2.1 of this appendix is used for filtration. The device shall be capable of supporting and keeping in place the glass fiber filter and be able to withstand the pressure needed to accomplish separation (50 psi).

Note: When it is suspected that the glass fiber filter has been ruptured, an in-line glass fiber filter may be used to filter the material within the ZHE.

4.3.2 Filter Holder: When the waste is evaluated for other than volatile analytes, any filter holder capable of supporting a glass fiber filter and able to withstand the pressure needed to accomplish separation may be used. Suitable filter holders range from simple vacuum units to relatively complex systems capable of exerting pressures of up to 50 psi or more. The type of filter holder used depends on the properties of the material to be filtered (see 4.3.3 of this appendix). These devices shall have a minimum internal volume of 300 mL and be equipped to accommodate a minimum filter size of 47 mm (filter holders having an internal capacity of 1.5 L or greater, and equipped to accommodate a 142 mm diameter filter, are recommended). Vacuum filtration can only be used for wastes with low solids content (<10 percent) and for highly granular, liquid-containing wastes. All other types of wastes should be filtered using positive pressure filtration. Suitable filter holders known to EPA are shown in Table 4.

4.3.3 Materials of Construction: Extraction vessels and filtration devices shall be made of inert materials which will not leach or absorb waste components. Glass, polytetrafluoroethylene (PTFE), or type 316 stainless steel equipment may be used when evaluating the mobility of both organic and inorganic components. Devices made of high density polyethylene (HDPE), polypropylene (PP), or polyvinyl chloride (PVC) may be used only when evaluating the mobility of metals. Borosilicate glass bottles are recommended for use over other types of glass bottles, especially when inorganics are analytes of concern.

4.4 Filters: Filters shall be made of borosilicate glass fiber, shall contain no binder materials, and shall have an effective pore size of 0.6 to 0.8 μm, or equivalent. Filters known to EPA which meet these specifications are identified in Table 5. Pre-filters must not be used. When evaluating the mobility of metals, filters shall be acid-washed prior to use by rinsing with 1N nitric acid followed by three consecutive rinses with deionized distilled water (a minimum of 1 L per rinse is recommended). Glass fiber filters are fragile and should be handled with care.

4.5 pH Meters: The meter should be accurate to ± 0.05 units at 25°C.

4.6 ZHE Extract Collection Devices: TEDLAR® bags or glass, stainless steel or PTFE gag-tight syringes are used to collect the initial liquid phase and the final extract of the waste when using the ZHE device. The devices listed are recommended for use under the following conditions:

4.6.1 If a waste contains an aqueous liquid phase or if a waste does not contain a significant amount of nonaqueous liquid (i.e., <1 percent of total waste), the TEDLAR® bag or a 600 mL syringe should be used to collect and combine the initial liquid and solid extract.

4.6.2 If a waste contains a significant amount of nonaqueous liquid in the initial liquid phase (i.e., >1 percent of total waste), the syringe or the TEDLAR® bag may be used for both the initial solid/liquid separation and the final extract filtration. However, analysts should use one or the other, not both.

4.6.3 If the waste contains no initial liquid phase (is 100 percent solid) or has no significant solid phase (is 100 percent liquid), either the TEDLAR® bag or the syringe may be used. If the syringe is used, discard the first 5 mL of liquid expressed from the device. The remaining aliquots are used for analysis.

Note: TEDLAR® is a registered trademark of Dupont.

4.7 ZHE Extraction Fluid Transfer Devices: Any device capable of transferring the extraction fluid into the ZHE without changing the nature of the extraction fluid is acceptable (e.g., a positive displacement or peristaltic pump, a gas tight syringe, pressure filtration unit (see 4.3.2 of this appendix), or other ZHE device).

4.8 Laboratory Balance: Any laboratory balance accurate to within ± 0.01 grams may be used (all weight measurements are to be within ± 0.1 grams).

4.9 Beaker or Erlenmeyer flask, glass, 500 mL.

4.10 Watchglass, appropriate diameter to cover beaker or erlenmeyer flask.

4.11 Magnetic stirrer.

5.0 Reagents

5.1 Reagent grade chemicals shall be used in all tests. Unless otherwise indicated, it is intended that all reagents shall conform to the specifications of the Committee on Analytical Reagents of the American Chemical Society, where such specifications are available. Other grades may be used, provided it is first ascertained that the reagent is of sufficiently

high purity to permit its use without lessening the accuracy of the determination.

5.2 Reagent water. Reagent water is defined as water in which an interferant is not observed at or above the methods detection limit of the analyte(s) of interest. For nonvolatile extractions, ASTM Type II water or equivalent meets the definition of reagent water. For volatile extractions, it is recommended that reagent water be generated by any of the following methods. Reagent water should be monitored periodically for impurities.

5.2.1 Reagent water for volatile extractions may be generated by passing tap water through a carbon filter bed containing about 500 grams of activated carbon (Calgon Corp., Filtrasorb-300 or equivalent).

5.2.2 A water purification system (Millipore Super-Q or equivalent) may also be used to generate reagent water for volatile extractions.

5.2.3 Reagent water for volatile extractions may also be prepared by boiling water for 15 minutes. Subsequently, while maintaining the water temperature at 90 + 5 degrees C, bubble a contaminant-free inert gas (e.g., nitrogen) through the water for 1 hour. While still hot, transfer the water to a narrow mouth screw-cap bottle under zero-headspace and seal with a Teflon-lined septum and cap.

5.3 Hydrochloric acid (1N), HCl, made from ACS reagent grade.

5.4 Nitric acid (1N), HNO_3, made from ACS reagent grade.

5.5 Sodium hydroxide (1N), NaOH, made from ACS reagent grade.

5.6 Glacial acetic acid, CH_3CH_2OOH, ACS reagent grade.

5.7 Extraction fluid.

5.7.1 Extraction fluid Number 1: Add 5.7 mL glacial CH_3CH_2OOH to 500 mL of reagent water (see 5.2 of this appendix), add 64.3 mL of 1N NaOH, and dilute to a volume of 1 liter. When correctly prepared, the pH of this fluid will be 4.93 ± 0.05.

5.7.2 Extraction fluid Number 2: Dilute 5.7 mL glacial CH_3CH_2OOH with reagent water (See 5.2 of this appendix) to a volume of 1 liter. When correctly prepared, the pH of this fluid will be 2.88 ± 0.05.

Note: These extraction fluids should be monitored frequently for impurities. The pH should be checked prior to use to ensure that these fluids are made up accurately. If impurities are found or the pH is not within the above specifications, the fluid shall be discarded and fresh extraction fluid prepared.

5.8 Analytical standards shall be prepared according to the appropriate analytical method.

6.0 Sample Collection, Preservation, and Handling

6.1 All samples shall be collected using an appropriate sampling plan.

6.2 The TCLP may place requirements on the minimal size of the field sample, depending upon the physical state or states of the waste and the analytes of concern. An aliquot is needed for preliminary evaluation of which extraction fluid is to be used for the nonvolatile analyte extraction procedure. Another aliquot may be needed to actually conduct the nonvolatile extraction (see 1.4 of this appendix concerning the use of this extract for volatile organics). If volatile organics are of concern, another aliquot may be needed. Quality control measures may require additional aliquots. Further, it is always wise to collect more samples just in case something goes wrong with the initial attempt to conduct the test.

6.3 Preservatives shall not be added to samples before extraction.

6.4 Samples may be refrigerated unless refrigeration results in irreversible physical change to the waste. If precipitation occurs, the entire sample (including precipitate) should be extracted.

6.5 When the waste is to be evaluated for volatile analytes, care shall be taken to minimize the loss of volatiles. Samples shall be collected and stored in a manner intended to prevent the loss of volatile analytes (e.g., samples should be collected in Teflon-lined septum capped vials and stored at 4°C. Samples should be opened only immediately prior to extraction).

6.6 TCLP extracts should be prepared for analysis and analyzed as soon as possible following extraction. Extracts or portions of extracts for metallic analyte determinations must be acidified with nitric acid to a pH <2, unless precipitation occurs (see 7.2.14 of this appendix if precipitation occurs). Extracts should be preserved for other analytes according to the guidance given in the individual analysis methods. Extracts or portions of extracts for organic analyte determinations shall not be allowed to come into contact with the atmosphere (i.e., no headspace) to prevent losses. See 8.0 of this appendix (QA requirements) for acceptable sample and extract holding times.

7.0 Procedure

7.1 Preliminary Evaluations. Perform preliminary TCLP evaluations on a minimum 100 gram aliquot of waste. This aliquot may not actually undergo TCLP extraction. These preliminary evaluations include: (1) Determination of the percent solids (7.1.1 of this appendix); (2) determination of whether the waste contains insignificant solids and is, therefore, its own extract after filtration (7.1.2 of this appendix); (3) determination of whether the solid portion of the waste requires particle size reduction (7.1.3 of this appendix); and (4) determination of which of the two extraction fluids are to be used for the nonvolatile TCLP extraction of the waste (7.1.4 of this appendix).

7.1.1 Preliminary determination of percent solids: Percent solids is defined as that fraction of a waste sample (as a percentage of the total sample) from which no liquid may be forced out by an applied pressure, as described below.

7.1.1.1 If the waste will obviously yield no liquid when subjected to pressure filtration (i.e., is 100 percent solids) proceed to 7.1.3 of this appendix.

7.1.1.2 If the sample is liquid or multiphasic, liquid/solid separation to make a preliminary determination of percent solids is required. This involves the filtration device described in 4.3.2 of this appendix and is outlined in 7.1.1.3 through 7.1.1.9 of this appendix.

7.1.1.3 Pre-weigh the filter and the container that will receive the filtrate.

7.1.1.4 Assemble the filter holder and filter following the manufacturer's instructions. Place the filter on the support screen and secure.

7.1.1.5 Weigh out a subsample of the waste (100 gram minimum) and record the weight.

7.1.1.6 Allow slurries to stand to permit the solid phase to settle. Wastes that settle slowly may be centrifuged prior to filtration. Centrifugation is to be used only as an aid to filtration. If used, the liquid should be decanted and filtered followed by filtration of the solid portion of the waste through the same filtration system.

7.1.1.7 Quantitatively transfer the waste sample to the filter holder (liquid and solid phases). Spread the waste sample evenly over the surface of the filter. If filtration of the waste at 4°C reduces the amount of expressed liquid over what would be expressed at room temperature then allow the sample to warm up to room temperature in the device before filtering.

Note: If waste material (>1 percent of original sample weight) has obviously adhered to the container used to transfer the sample to the filtration apparatus, determine the weight of this residue and subtract it from the sample weight determined in 7.1.1.5 of this appendix to determine the weight of the waste sample that will be filtered.

Gradually apply vacuum or gentle pressure of 1-10 psi, until air or pressurizing gas moves through the filter. If this point is not reached under 10 psi, and if no additional liquid has passed through the filter in any 2 minute interval, slowly increase the pressure in 10 psi increments to a maximum of 50 psi. After each incremental increase of 10 psi, if the pressurizing gas has not moved through the filter, and if no additional liquid has passed through the filter in any 2 minute interval, proceed to the next 10 psi increment. When the pressurizing gas begins to move through the filter, or when liquid flow has ceased at 50 psi (i.e., filtration does not result in any additional filtrate within any 2 minute period), stop the filtration.

Note: Instantaneous application of high pressure can degrade the glass fiber filter and may cause premature plugging.

7.1.1.8 The material in the filter holder is defined as the solid phase of the waste, and the filtrate is defined as the liquid phase.

Note: Some wastes, such as oily wastes and some paint wastes, will obviously contain some material that appears to be a liquid. Even after applying vacuum or pressure filtration, as outlined in 7.1.1.7 of this appendix, this material may not filter. If this is the case, the material within the filtration device is defined as a solid. Do not replace the original filter with a fresh filter under any circumstances. Use only one filter.

7.1.1.9 Determine the weight of the liquid phase by subtracting the weight of the filtrate container (see 7.1.1.3 of this appendix) from the total weight of the filtrate-filled container. Determine the weight of the solid phase of the waste sample by subtracting the weight of the liquid phase from the weight of the total waste sample, as determined in 7.1.1.5 or 7.1.1.7 of this appendix.

Record the weight of the liquid and solid phases. Calculate the percent solids as follows:

$$\text{Percent solids} = \frac{\text{Weight of solid (section 7.1.1.9)}}{\text{Total weight of waste (section 7.1.1.5 or 7.1.1.7)}} \times 100$$

7.1.2 If the percent solids determined in 7.1.1.9 of this appendix is equal to or greater than 0.5 percent, then proceed either to 7.1.3 of this appendix to determine whether the solid material requires particle size reduction or to 7.1.2.1 of this appendix if it is noticed that a small amount of the filtrate is entrained in wetting of the filter. If the percent solids determined in 7.1.1.9 of this appendix is less than 0.5 percent, then proceed to 7.2.9 of this appendix if the nonvolatile TCLP is to be performed and to 7.3 of this appendix with a fresh portion of the waste if the volatile TCLP is to be performed.

7.1.2.1 Remove the solid phase and filter from the filtration apparatus.

7.1.2.2 Dry the filter and solid phase at 100± 20°C until two successive weighings yield the same value within ± 1 percent. Record the final weight.

Note: Caution should be taken to ensure that the subject solid will not flash upon heating. It is recommended that the drying oven be vented to a hood or other appropriate device.

7.1.2.3 Calculate the percent dry solids as follows:

$$\%\ \text{dry solids} = \frac{\text{(Weight of dry waste+filter)} - \text{tared weight of filter}}{\text{Initial weight of waste (section 7.1.1.5 or 7.1.1.7)}} \times 100$$

7.1.2.4 If the percent dry solids is less than 0.5 percent, then proceed to 7.2.9 of this appendix if the

nonvolatile TCLP is to be performed, and to 7.3 of this ·ppendix if the volatile TCLP is to be performed. If the .rcent dry solids is greater than or equal to 0.5 percent, and if the nonvolatile TCLP is to be performed, return to 7.1 of this appendix and, with a fresh portion of waste, determine whether particle size reduction is necessary (7.1.3 of this appendix) and determine the appropriate extraction fluid (7.1.4 of this appendix). If only the volatile TCLP is to be performed, see the note in 7.1.4 of this appendix.

7.1.3 Determination of whether the waste requires particle size reduction (particle size is reduced during this step): Using the solid portion of the waste, evaluate the solid for particle size. Particle size reduction is required, unless the solid has a surface area per gram of material equal to or greater than 3.1 cm^2, or is smaller than 1 cm in its narrowest dimension (i.e., is capable of passing through a 9.5 mm (0.375 inch) standard sieve). If the surface area is smaller or the particle size larger than described above, prepare the solid portion of the waste for extraction by crushing, cutting, or grinding the waste to a surface area or particle size as described above. If the solids are prepared for organic volatiles extraction, special precautions must be taken (see 7.3.6 of this appendix).

Note: Surface area criteria are meant for filamentous (e.g., paper, cloth, and similar) waste materials. Actual measurement of surface area is not required, nor is it recommended. For materials that do not obviously meet the criteria, sample-specific methods would need to be developed and employed to measure the surface area. Such methodology is currently not available.

7.1.4 Determination of appropriate extraction fluid: If the solid content of the waste is greater than or equal to 0.5 percent and if the sample will be extracted for nonvolatile constituents (7.2 of this appendix), determine the appropriate fluid (5.7 of this appendix) for the nonvolatiles extraction as follows:

Note: TCLP extraction for volatile constituents uses only extraction fluid Number 1 (5.7.1 of this appendix). Therefore, if TCLP extraction for nonvolatiles is not required, proceed to 7.3 of this appendix.

7.1.4.1 Weigh out a small subsample of the solid phase of the waste, reduce the solid (if necessary) to a particle size of approximately 1 mm in diameter or less, and transfer 5.0 grams of the solid phase of the waste to a 500 mL beaker or Erlenmeyer flask.

7.1.4.2 Add 96.5 mL of reagent water to the beaker, cover with a watchglass, and stir vigorously for 5 minutes using a magnetic stirrer. Measure and record the pH. If the pH is <5.0, use extraction fluid Number 1. Proceed to 7.2 of this appendix.

7.1.4.3 If the pH from 7.1.4.2 of this appendix is >5.0, add 3.5 mL 1N NCl, slurry briefly, cover with a watchglass, heat to 50°C, and hold at 50°C for 10 minutes.

7.1.4.4 Let the solution cool to room temperature and record the pH. If the pH is <5.0, use extraction fluid Number 1. If the pH is >5.0, use extraction fluid Number 2. Proceed to 7.2 of this appendix.

7.1.5 If the aliquot of the waste used for the preliminary evaluation (7.1.1-7.1.4 of this appendix) was determined to be 100 percent solid at 7.1.1.1 of this appendix, then it can be used for the 7.2 extraction of this appendix (assuming at least 100 grams remain), and the 7.3 extraction of this appendix (assuming at least 25 grams remain). If the aliquot was subjected to the procedure in 7.1.1.7 of this appendix, then another aliquot shall be used for the volatile extraction procedure in 7.3 of this appendix. The aliquot of the waste subjected to the procedure in 7.1.1.7 of this appendix might be appropriate for use for the 7.2 extraction of this appendix if an adequate amount of solid (as determined by 7.1.1.9 of this appendix) was obtained. The amount of solid necessary is dependent upon whether a sufficient amount of extract will be produced to support the analyses. If an adequate amount of solid remains, proceed to 7.2.10 of the nonvolatile TCLP extraction of this appendix.

7.2 Procedure When Volatiles are not Involved. A minimum sample size of 100 grams (solid and liquid phases) is recommended. In some cases, a larger sample size may be appropriate, depending on the solids content of the waste sample (percent solids, see 7.1.1 of this appendix), whether the initial liquid phase of the waste will be miscible with the aqueous extract of the solid, and whether inorganics, semivolatile organics, pesticides, and herbicides are all analytes of concern. Enough solids should be generated for extraction such that the volume of TCLP extract will be sufficient to support all of the analyses required. If the amount of extract generated by a single TCLP extraction will not be sufficient to perform all of the analyses, more than one extraction may be performed and the extracts from each combined and aliquoted for analysis.

7.2.1 If the waste will obviously yield no liquid when subjected to pressure filtration (i.e., is 100 percent solid, see 7.1.1 of this appendix), weigh out a subsample of the waste (100 gram minimum) and proceed to 7.2.9 of this appendix.

7.2.2 If the sample is liquid or multiphasic, liquid/solid separation is required. This involves the filtration device described in 4.3.2 of this appendix and is outlined in 7.2.3 to 7.2.8 of this appendix.

7.2.3 Pre-weigh the container that will receive the filtrate.

7.2.4 Assemble the filter holder and filter following the manufacturer's instructions. Place the filter on the support screen and secure. Acid-wash the filter if evaluating the mobility of metals (see 4.4 of this appendix).

Note: Acid-washed filters may be used for all nonvolatile extractions even when metals are not of concern.

7.2.5 Weigh out a subsample of the waste (100 gram minimum) and record the weight. If the waste contains <0.5 percent dry solids (7.1.2 of this appendix), the liquid portion of the waste, after filtration, is defined as the TCLP extract. Therefore, enough of the sample should be filtered so that the amount of filtered liquid will support all of the analyses required of the TCLP extract. For wastes containing >0.5 percent dry solids (7.1.1 or 7.1.2 of this appendix), use the percent solids information obtained in 7.1.1 of this appendix to determine the optimum sample size (100 gram minimum) for filtration. Enough solids should be generated by filtration to support the analyses to be performed on the TCLP extract.

7.2.6 Allow slurries to stand to permit the solid phase to settle. Wastes that settle slowly may be centrifuged prior to filtration. Use centrifugation only as an aid to filtration. If the waste is centrifuged, the liquid should be decanted and filtered followed by filtration of the solid portion of the waste through the same filtration system.

7.2.7 Quantitatively transfer the waste sample (liquid and solid phases) to the filter holder (see 4.3.2 of this appendix). Spread the waste sample evenly over the surface of the filter. If filtration of the waste at 4°C reduces the amount of expressed liquid over what would be expressed at room temperature, then allow the sample to warm up to room temperature in the device before filtering.

Note: If waste material (>1 percent of the original sample weight) has obviously adhered to the container used to transfer the sample to the filtration apparatus, determine the weight of this residue and subtract it from the sample weight determined in 7.2.5 of this appendix, to determine the weight of the waste sample that will be filtered.

Gradually apply vacuum or gentle pressure of 1-10 psi, until air or pressurizing gas moves through the filter. If this point is reached under 10 psi, and if no additional liquid has passed through the filter in any 2 minute interval, slowly increase the pressure in 10 psi increments to a maximum of 50 psi. After each incremental increase of 10 psi, if the pressurizing gas has not moved through the filter, and if no additional liquid has passed through the filter in any 2 minute interval, proceed to the next 10 psi increment. When the pressurizing gas begins to move through the filter, or when the liquid flow has ceased at 50 psi (i.e., filtration does not result in any additional filtrate within a 2 minute period), stop the filtration.

Note: Instantaneous application of high pressure can degrade the glass fiber filter and may cause premature plugging.

7.2.8 The material in the filter holder is defined as the solid phase of the waste, and the filtrate is defined as the liquid phase. Weigh the filtrate. The liquid phase may now be either analyzed (see 7.2.12 of this appendix) or stored at 4°C until time of analysis.

Note: Some wastes, such as oily wastes and some paint wastes, will obviously contain some material that appears to be a liquid. Even after applying vacuum or pressure filtration, as outlined in 7.2.7 of this appendix, this material may not filter. If this is the case, the material within the filtration device is defined as a solid and is carried through the extraction as a solid. Do not replace the original filter with a fresh filter under any circumstances. Use only one filter.

7.2.9 If the waste contains <0.5 percent dry solids (see 7.1.2 of this appendix), proceed to 7.2.13 of this appendix. If the waste contains >0.5 percent dry solids (see 7.1.1 or 7.1.2 of this appendix), and if particle size reduction of the solid was needed in 7.1.3 of this appendix, proceed to 7.2.10 of this appendix. If the waste as received passes a 9.5 mm sieve, quantitatively transfer the solid material into the extractor bottle along with the filter used to separate the initial liquid from the solid phase, and proceed to 7.2.11 of this appendix.

7.2.10 Prepare the solid portion of the waste for extraction by crushing, cutting, or grinding the waste to a surface area or particle size as described in 7.1.3 of this appendix. When the surface area or particle size has been appropriately altered, quantitatively transfer the solid material into an extractor bottle. Include the filter used to separate the initial liquid from the solid phase.

Note: Sieving of the waste is not normally required. Surface area requirements are meant for filamentous (e.g., paper, cloth) and similar waste materials. Actual measurement of surface area is not recommended. If sieving is necessary, a Teflon-coated sieve should be used to avoid contamination of the sample.

7.2.11 Determine the amount of extraction fluid to add to the extractor vessel as follows:

$$\text{Weight of extraction fluid} = \frac{20 \times \text{percent solids (section 7.1.1)} \times \text{weight of waste filtered (section 7.2.5 or 7.2.7)}}{100}$$

Slowly add this amount of appropriate extraction fluid (see 7.1.4 of this appendix) to the extractor vessel. Close the extractor bottle tightly (it is recommended that Teflon tape be used to ensure a tight seal), secure in rotary agitation device, and rotate at 30 ± 2 rpm for 18 ± 2 hours. Ambient temperature (i.e., temperature of room in which extraction takes place) shall be maintained at 23 ± 2°C during the extraction period.

Note: As agitation continues, pressure may build within the extractor bottle for some types of wastes (e.g., limed or calcium carbonate containing waste may evolve gases such as carbon dioxide). To relieve excess pressure, the extractor bottle may be periodically opened (e.g., after 15 minutes, 30 minutes, and 1 hour) and vented into a hood.

7.2.12 Following the 18 ± 2 hour extraction, separate the material in the extractor vessel into its component liquid and solid phases by filtering through a new glass fiber filter, as outlined in 7.2.7 of this appendix. For final filtration of the TCLP extract, the glass fiber filter may be changed, if necessary, to facilitate filtration. Filter(s) shall be acid-washed (see 4.4 of this appendix) if evaluating the mobility of metals.

7.2.13 Prepare the TCLP extract as follows:

7.2.13.1 If the waste contained no initial liquid phase, the filtered liquid material obtained from 7.2.12 of this appendix is defined as the TCLP extract. Proceed to 7.2.14 of this appendix.

7.2.13.2 If compatible (e.g., multiple phases will not result on combination), combine the filtered liquid resulting from 7.2.12 of this appendix with the initial liquid phase of the waste obtained in 7.2.7 of this appendix. This combined liquid is defined as the TCLP extract. Proceed to 7.2.14 of this appendix.

7.2.13.3 If the initial liquid phase of the waste, as obtained from 7.2.7 of this appendix, is not or may not be compatible with the filtered liquid resulting from 7.2.12 of this appendix, do not combine these liquids. Analyze these liquids, collectively defined as the TCLP extract, and combine the results mathematically, as described in 7.2.14 of this appendix.

7.2.14 Following collection of the TCLP extract, the pH of the extract should be recorded. Immediately aliquot and preserve the extract for analysis. Metals aliquots must be acidified with nitric acid to pH <2. If precipitation is observed upon addition of nitric acid to a small aliquot of the extract, then the remaining portion of the extract for metals analyses shall not be acidified and the extract shall be analyzed as soon as possible. All other aliquots must be stored under refrigeration (4°C) until analyzed. The TCLP extract shall be prepared and analyzed according to appropriate analytical methods. TCLP extracts to be analyzed for metals shall be acid digested except in those instances where digestion causes loss of metallic analytes. If an analysis of the undigested extract shows that the concentration of any regulated metallic analyte exceeds the regulatory level, then the waste is hazardous and digestion of the extract is not necessary. However, data on undigested extracts alone cannot be used to demonstrate that the waste is not hazardous. If the individual phases are to be analyzed separately, determine the volume of the individual phases (to ± 0.5 percent), conduct the appropriate analyses, and combine the results mathematically by using a simple volume-weighted average:

$$\textit{Concentration Final Analyte} = \frac{(V_1)(C_1) + (V_2)(C_2)}{V_1 + V_2}$$

where:

V_1 = The volume of the first phase (L).

C_1 = The concentration of the analyte of concern in the first phase (mg/L).

V_2 = The volume of the second phase (L).

C_2 = The concentration of the analyte of concern in the second phase (mg/L).

7.2.15 Compare the analyte concentrations in the TCLP extract with the levels identified in the appropriate regulations. Refer to 8.0 of this appendix for quality assurance requirements.

7.3 Procedure When Volatiles are Involved. Use the ZHE device to obtain TCLP extract for analysis of volatile compounds only. Extract resulting from the use of the ZHE shall not be used to evaluate the mobility of nonvolatile analytes (e.g., metals, pesticides, etc.).

The ZHE device has approximately a 500 mL internal capacity. The ZHE can thus accommodate a maximum of 25 grams of solid (defined as that fraction of a sample from which no additional liquid may be forced out by an applied pressure of 50 psi), due to the need to add an amount of extraction fluid equal to 20 times the weight of the solid phase.

Charge the ZHE with sample only once and do not open the device until the final extract (of the solid) has been collected. Repeated filling of the ZHE to obtain 25 grams of solid is not permitted.

Do not allow the waste, the initial liquid phase, or the extract to be exposed to the atmosphere for any more time than is absolutely necessary. Any manipulation of these materials should be done when cold (4°C) to minimize loss of volatiles.

7.3.1 Pre-weigh the (evacuated) filtrate collection container (see 4.6 of this appendix) and set aside. If using a TEDLAR® bag, express all liquid from the ZHE device into the bag, whether for the initial or final liquid/solid separation, and take an aliquot from the liquid in the bag for analysis. The containers listed in 4.6 of this appendix are recommended for use under the conditions stated in 4.6.1-4.6.3 of this appendix.

7.3.2 Place the ZHE piston within the body of the ZHE (it may be helpful first to moisten the piston O-rings slightly with extraction fluid). Adjust the piston within the ZHE body to a height that will minimize the distance the piston will have to move once the ZHE is charged with sample (based upon sample size requirements determined from 7.3 of this appendix, 7.1.1 of this appendix and/or 7.1.2 of this appendix). Secure the gas inlet/outlet flange (bottom flange) onto the ZHE body in accordance with the manufacturer's instructions. Secure the glass fiber filter between the support screens and set aside. Set liquid inlet/outlet flange (top flange) aside.

7.3.3 If the waste is 100 percent solid (see 7.1.1 of this appendix), weigh out a subsample (25 gram maximum) of the waste, record weight, and proceed to 7.3.5 of this appendix.

7.3.4 If the waste contains <5 percent dry solids (7.1.2 of this appendix), the liquid portion of waste, after filtration, is defined as the TCLP extract. Filter enough of the sample so that the amount of filtered liquid will support all of the volatile analyses required. For wastes containing >5 percent dry solids (7.1.1 and/or 7.1.2 of this appendix), use the percent solids information obtained in 7.1.1 of this appendix to determine the optimum sample size to charge into the ZHE. The recommended sample size is as follows:

7.3.4.1 For wastes containing <5 percent solids (see 7.1.1 of this appendix), weigh out a 500 gram subsample of waste and record the weight.

7.3.4.2 For wastes containing >5 percent solids (see 7.1.1 of this appendix), determine the amount of waste to charge into the ZHE as follows:

$$\text{Weight of waste to charge ZHE} = \frac{25}{\text{percent solids (Section 7.1.1)}} \times 100$$

Weigh out a subsample of the waste of the appropriate size and record the weight.

7.3.5 If particle size reduction of the solid portion of the waste was required in 7.1.3 of this appendix, proceed to 7.3.6 of this appendix. If particle size reduction was not required in 7.1.3 of this appendix, proceed to 7.3.7 of this appendix.

7.3.6 Prepare the waste for extraction by crushing, cutting, or grinding the solid portion of the waste to a surface area or particle size as described in 7.1.3.1 of this appendix. Wastes and appropriate reduction equipment should be refrigerated, if possible, to 4°C prior to particle size reduction. The means used to effect particle size reduction must not generate heat in and of itself. If reduction of the solid phase of the waste is necessary, exposure of the waste to the atmosphere should be avoided to the extent possible.

Note: Sieving of the waste is not recommended due to the possibility that volatiles may be lost. The use of an appropriately graduated ruler is recommended as an acceptable alternative. Surface area requirements are meant for filamentous (e.g., paper, cloth) and similar waste materials. Actual measurement of surface area is not recommended.

When the surface area or particle size has been appropriately altered, proceed to 7.3.7 of this appendix.

7.3.7 Waste slurries need not be allowed to stand to permit the solid phase to settle. Do not centrifuge wastes prior to filtration.

7.3.8 Quantitatively transfer the entire sample (liquid and solid phases) quickly to the ZHE. Secure the filter and support screens onto the top flange of the device and secure the top flange to the ZHE body in accordance with the manufacturer's instructions. Tighten all ZHE fittings and place the device in the vertical position (gas inlet/outlet flange on the bottom). Do not attach the extract collection device to the top plate.

Note: If waste material (>1 percent of original sample weight) has obviously adhered to the container used to transfer the sample to the ZHE, determine the weight of this residue and subtract it from the sample weight determined in 7.3.4 of this appendix to determine the weight of the waste sample that will be filtered.

Attach a gas line to the gas inlet/outlet valve (bottom flange) and, with the liquid inlet/outlet valve (top flange) open, begin applying gentle pressure of 1-10 psi (or more if necessary) to force all headspace slowly out of the ZHE device into a hood. At the first appearance of liquid from the liquid inlet/outlet valve, quickly close the valve and discontinue pressure. If filtration of the waste at 4°C reduces the amount of expressed liquid over what would be expressed at room temperature, then allow the sample to warm up to room temperature in the device before filtering. If the waste is 100 percent solid (see 7.1.1 of this appendix), slowly increase the pressure to a maximum of 50 psi to force most of the headspace out of the device and proceed to 7.3.12 of this appendix.

7.3.9 Attach the evacuated pre-weighed filtrate collection container to the liquid inlet/outlet valve and open the valve. Begin applying gentle pressure of 1-10 psi to force the liquid phase of the sample into the filtrate collection container. If no additional liquid has passed through the filter in any 2 minute interval, slowly increase the pressure in 10 psi increments to a maximum of 50 psi. After each incremental increase of 10 psi, if no additional liquid has passed through the filter in any 2 minute interval, proceed to the next 10 psi increment. When liquid flow has ceased such that continued pressure filtration at 50 psi does not result in any additional filtrate within a 2 minute period, stop the filtration. Close the liquid inlet/outlet valve, discontinue pressure to the piston, and disconnect and weigh the filtrate collection container.

Note: Instantaneous application of high pressure can degrade the glass fiber filter and may cause premature plugging.

7.3.10 The material in the ZHE is defined as the solid phase of the waste and the filtrate is defined as the liquid phase.

Note: Some wastes, such as oily wastes and some paint wastes, will obviously contain some material that appears to be a liquid. Even after applying pressure filtration, this material will not filter. If this is the case, the material within the filtration device is defined as a solid and is carried through the TCLP extraction as a solid.

If the original waste contained <0.5 percent dry solids (see 7.1.2 of this appendix), this filtrate is defined as the

TCLP extract and is analyzed directly. Proceed to 7.3.15 of this appendix.

7.3.11 The liquid phase may now be either analyzed immediately (See 7.3.13 through 7.3.15 of this appendix) or stored at 4°C under minimal headspace conditions until time of analysis.

Determine the weight of extraction fluid Number 1 to add to the ZHE as follows:

$$\text{weight of extraction fluid} = \frac{20 \times \text{percent solids (section 7.1.1)} \times \text{weight of waste filtered (section 7.3.4 or 7.3.8)}}{100}$$

7.3.12 The following sections detail how to add the appropriate amount of extraction fluid to the solid material within the ZHE and agitation of the ZHE vessel. Extraction fluid Number 1 is used in all cases (See 5.7 of this appendix).

7.3.12.1 With the ZHE in the vertical position, attach a line from the extraction fluid reservoir to the liquid inlet/outlet valve. The line used shall contain fresh extraction fluid and should be preflushed with fluid to eliminate any air pockets in the line. Release gas pressure on the ZHE piston (from the gas inlet/outlet valve), open the liquid inlet/outlet valve, and begin transferring extraction fluid (by pumping or similar means) into the ZHE. Continue pumping extraction fluid into the ZHE until the appropriate amount of fluid has been introduced into the device.

7.3.12.2 After the extraction fluid has been added, immediately close the liquid inlet/outlet valve and disconnect the extraction fluid line. Check the ZHE to ensure that all valves are in their closed positions. Manually rotate the device in an end-over-end fashion 2 or 3 times. Reposition the ZHE in the vertical position with the liquid inlet/outlet valve on top. Pressurize the ZHE to 5-10 psi (if necessary) and slowly open the liquid inlet/outlet valve to bleed out any headspace (into a hood) that may have been introduced due to the addition of extraction fluid. This bleeding shall be done quickly and shall be stopped at the first appearance of liquid from the valve. Re-pressurize the ZHE with 5-10 psi and check all ZHE fittings to ensure that they are closed.

7.3.12.3 Place the ZHE in the rotary agitation apparatus (if it is not already there) and rotate at 30 ± 2 rpm for 18 ± 2 hours. Ambient temperature (i.e., temperature of room in which extraction occurs) shall be maintained at 22 ± 3°C during agitation.

7.3.13 Following the 18 ± 2 hour agitation period, check the pressure behind the ZHE piston by quickly opening and closing the gas inlet/outlet valve and noting the escape of gas. If the pressure has not been maintained (i.e., no gas release observed), the device is leaking. Check the ZHE for leaking as specified in 4.2.1 of this appendix, and perform the extraction again with a new sample of waste. If the pressure within the device has been maintained, the material in the extractor vessel is once again separated into its component liquid and solid phases. If the waste contained an initial liquid phase, the liquid may be filtered directly into the same filtrate collection container (i.e., TEDLAR® bag) holding the initial liquid phase of the waste. A separate filtrate collection container must be used if combining would create multiple phases, or there is not enough volume left within the filtrate collection container. Filter through the glass fiber filter, using the ZHE device as discussed in 7.3.9 of this appendix. All extract shall be filtered and collected if the TEDLAR® bag is used, if the extract is multiphasic, or if the waste contained an initial liquid phase (see 4.6 and 7.3.1 of this appendix).

Note: An in-line glass fiber filter may be used to filter the material within the ZHE if it is suspected that the glass fiber filter has been ruptured.

7.3.14 If the original waste contained no initial liquid phase, the filtered liquid material obtained from 7.3.13 of this appendix is defined as the TCLP extract. If the waste contained an initial liquid phase, the filtered liquid material obtained from 7.3.13 of this appendix and the initial liquid phase (7.3.9 of this appendix) are collectively defined as the TCLP extract.

7.3.15 Following collection of the TCLP extract, immediately prepare the extract for analysis and store with minimal headspace at 4°C until analyzed. Analyze the TCLP extract according to the appropriate analytical methods. If the individual phases are to be analyzed separately (i.e., are not miscible), determine the volume of the individual phases (to 0.5 percent), conduct the appropriate analyses, and combine the results mathematically by using a simple volume-weighted average:

$$\text{Final Analyte Concentration} = \frac{(V_1)(C_1) + (V_2)(C_2)}{V_1 + V_2}$$

where:

V_1 = The volume of the first phases (L).

C_1 = The concentration of the analyte of concern in the first phase (mg/L).

V_2 = The volume of the second phase (L).

C_2 = The concentration of the analyte of concern in the second phase (mg/L).

7.3.16 Compare the analyte concentrations in the TCLP extract with the levels identified in the appropriate regulations. Refer to 8.0 of this appendix for quality assurance requirements.

8.0 Quality Assurance

8.1 A minimum of one blank (using the same extraction fluid as used for the samples) must be analyzed for every 20 extractions that have been conducted in an extraction vessel.

8.2 A matrix spike shall be performed for each waste type (e.g., wastewater treatment sludge, contaminated soil, etc.) unless the result exceeds the regulatory level and the data is

being used solely to demonstrate that the waste property exceeds the regulatory level. A minimum of one matrix spike must be analyzed for each analytical batch. The bias determined from the matrix spike determination shall be used to correct the measured values. (See 8.2.4 and 8.2.5. of this appendix) As a minimum, follow the matrix spike addition guidance provided in each analytical method.

8.2.1 Matrix spikes are to be added after filtration of the TCLP extract and before preservation. Matrix spikes should not be added prior to TCLP extraction of the sample.

8.2.2 In most cases, matrix spikes should be added at a concentration equivalent to the corresponding regulatory level. If the analyte concentration is less than one half the regulatory level, the spike concentration may be as low as one half of the analyte concentration, but may not be not less than five times the method detection limit. In order to avoid differences in matrix effects, the matrix spikes must be added to the same nominal volume of TCLP extract as that which was analyzed for the unspiked sample.

8.2.3 The purpose of the matrix spike is to monitor the performance of the analytical methods used, and to determine whether matrix interferences exist. Use of other internal calibration methods, modification of the analytical methods, or use of alternate analytical methods may be needed to accurately measure the analyte concentration of the TCLP extract when the recovery of the matrix spike is below the expected analytical method performance.

8.2.4 Matrix spike recoveries are calculated by the following formula:

$$\%R(\%Recovery) = 100(X_s - X_u)/K$$

where:

X_s = measured value for the spiked sample,

X_u = measured value for the unspiked sample, and

K = known value of the spike in the sample.

8.2.5 Measured values are corrected for analytical bias using the following formula:

$$X_c = 100(X_u/\%R)$$

where:

X_c = corrected value, and

X_u = measured value of the unspiked sample.

8.3 All quality control measures described in the appropriate analytical methods shall be followed.

8.4 Samples must undergo TCLP extraction within the following time periods:

Sample Maximum Holding Times (Days)

	From: Field collection to: TCLP extraction	From: TCLP extraction to: Preparative extraction	From: preparative extraction to: determinative analysis	Total elapsed time
Volatiles	14	NA	14	28
Semivolatiles	14	7	40	61
Mercury	28	NA	28	56
Metals, except mercury	180	NA	180	360

Note: NA=Not applicable.

If sample holding times are exceeded, the values obtained will be considered minimal concentrations. Exceeding the holding time is not acceptable in establishing that a waste does not exceed the regulatory level. Exceeding the holding time will not invalidate characterization if the waste exceeds the regulatory level.

Table 1. Volatile Analytes [1, 2]

Compound	CAS Number
Acetone	67-64-1
Benzene	71-43-2
n-Butyl alcohol	71-36-3
Carbon disulfide	75-15-0
Carbon tetrachloride	56-23-5
Chlorobenzene	108-90-7
Chloroform	67-66-3
1,2-Dichloroethane	107-06-2
1,1-Dichloroethylene	75-35-4
Ethyl acetate	141-78-6
Ethyl benzene	100-41-4
Ethyl ether	60-29-7
Isobutanol	78-83-1
Methanol	67-56-1
Methylene chloride	75-09-2
Methyl ethyl ketone	78-93-3
Methyl isobutyl ketone	108-10-1
Tetrachloroethylene	127-18-4
Toluene	108-88-3
1,1,1,-Trichloroethane	71-55-6
Trichloroethylene	79-01-6
Trichlorofluoromethane	75-69-4
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1
Vinyl chloride	75-01-4
Xylene	1330-20-7

[1] When testing for any or all of these analytes, the zero-headspace extractor vessel shall be used instead of the bottle extractor.

[2] Benzene, carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorethane, 1,1-dichloroethylene, methyl ethyl ketone, tetrachloroethylene, trichloroethylene, and vinyl chloride are toxicity characteristic constituents.

Table 2. Suitable Rotary Agitation Apparatus [3]

Company	Location	Model Number
Analytical Testing and Consulting Services, Inc.	Warrington, PA, (215) 343-4490	4-vessel (DC20S), 8-vessel (DC20), 12-vessel (DC20B)
Associated Design and Manufacturing Company	Alexandria VA, (703) 549-5999	2-vessel (3740-2), 4-vessel (3740-4), 6-vessel (3740-6), 8-vessel (3740-8), 12-vessel (3740-12), 24-vessel (3740-24)
Environmental Machine and Design, Inc.	Lynchburg, VA, (804) 845-6424	8-vessel (08-00-00) 4-vessel (04-00-00)
IRA Machine Shop and Laboratory	Santurce, PR, (809) 752-4004	8-vessel (011001)
Lars Lande Manufacturing	Whitmore Lake, MI, (313) 449-4116	10-vessel (01VRE), 5-vessel (5VRE)
Millipore Corporation	Bedford, MA, (800) 225-3384	4-ZHE or 4 1-liter, bottle extractor, (YT30ORAHW)

[3] Any device that rotates the extraction vessel in an end-over-end fashion at 30 ± 2 rpm is acceptable.

Table 3. Suitable Zero-Headspace Extractor Vessels [4]

Company	Location	Model Number
Analytical Testing and Consulting Services, Inc.	Warrington, PA, (215) 343-4490.	C102, Mechanical Pressure Device
Associated Design and Manufacturing Company	Alexandria VA, (703) 549-5999	3745-ZHE, Gas Pressure Device.
Lars Lande Manufacturing [5]	Whitmore Lake, MI, (313) 449-4116	ZHE-11, Gas Pressure Device
Millipore Corporation	Bedford, MA, (800) 225-3384	YT30090HW, Gas Pressure Device
Environmental Machine and Design, Inc.	Lynchburg, VA, (804) 845-6424	VOLA-TOX1, Gas Pressure Device

[4] Any device that meets the specifications listed in section 4.2.1 of the method is acceptable.

[5] This device uses a 110 mm filter.

Table 4. Suitable Filter Holders [6]

Company	Location	Model/Catalogue No.	Size
Nucleopore Corporation.	Pleasanton, CA, (800) 882-7711	425910 410400	142mm, 47 mm
Micro Filtration Systems	Dublin, CA, (800) 334-7132, (415) 828-6010	302400 311400	142 mm, 47 mm
Millipore Corporation	Bedford, MA, (800) 225-3384	YT30142HW XX1004700	142 mm, 47 mm

[6] Any device capable of separating the liquid from the solid phase of the waste is suitable, providing that it is chemically compatible with the waste and the constituents to be analyzed. Plastic devices (not listed above) may be used when only inorganic analytes are of concern. The 142 mm size filter holder is recommended.

Table 5. Suitable Filter Media [7]

Company	Location	Model	Pore Size (μm)
Millipore Corporation	Bedford, MA, (800) 225-3384	AP40	0.7
Nucleopore Corporation.	Pleasanton, CA, (415) 463-2530	211625	0.7
Whatman Laboratory Products, Inc.	Clifton, NJ, (201) 773-5800	GFF	0.7
Micro Filtration Systems	Dublin, CA, (800) 334-7132, (415) 828-6010	GF75	0.7

[7] Any filter that meets the specifications in section 4.4 of the Method is suitable.

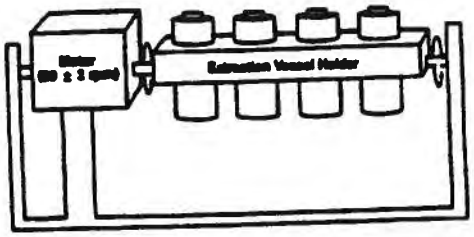


Figure 1. Rotary Agitation Apparatus

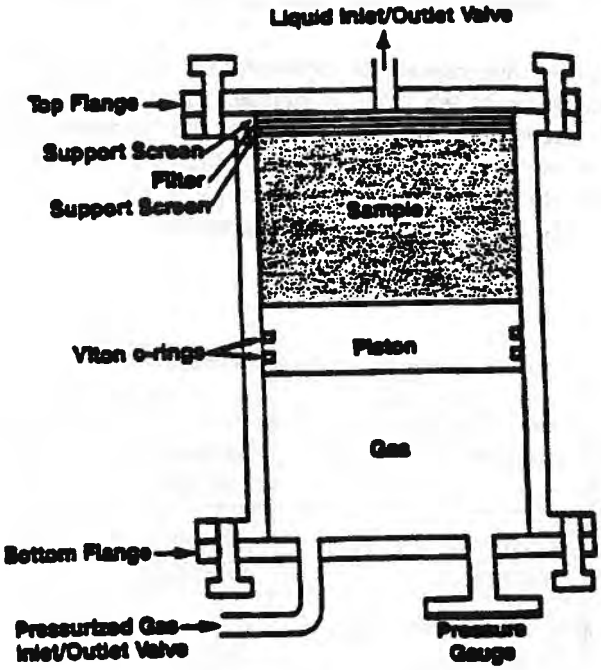
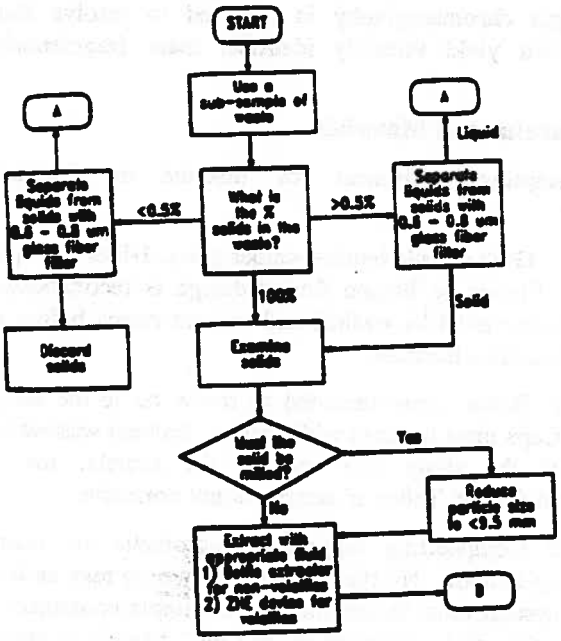


Figure 2. Zero-Headspace Extractor (ZHE)

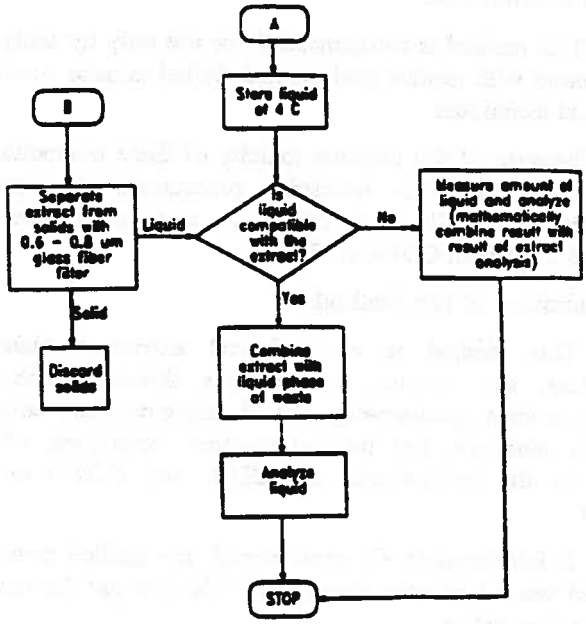
Method 1311

Toxicity Characteristic Leachate Procedure



Method 1311 (Continued)

Toxicity Characteristic Leachate Procedure



[55 FR 26987, June 29, 1990]

Appendix C. Method of Analysis for Chlorinated Dibenzo-p-dioxins and -Dibenzofurans[8,9,10,11,12] Method 8280

1. Scope and Application

1.1 This method measures the concentration of chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans in chemical wastes including still bottoms, filter aids, sludges, spent carbon, and reactor residues, and in soils.

1.2 The sensitivity of this method is dependent upon the level of interferences.

1.3 This method is recommended for use only by analysts experienced with residue analysis and skilled in mass spectral analytical techniques.

1.4 Because of the extreme toxicity of these compounds, the analyst must take necessary precautions to prevent exposure to himself, or to others, of materials known or believed to contain CDDs or CDFs.

2. Summary of the Method

2.1 This method is an analytical extraction cleanup procedure, and capillary column gas chromatograph-low resolution mass spectrometry method, using capillary column GC/MS conditions and internal standard techniques, which allow for the measurement of PCDDs and PCDFs in the extract.

2.2 If interferences are encountered, the method provides selected general purpose cleanup procedures to aid the analyst in their elimination.

3. Interferences

3.1 Solvents, reagents, glassware, and other sample processing hardware may yield discrete artifacts and/or elevated baselines causing misinterpretation of gas chromatograms. All of these materials must be demonstrated to be free from interferences under the conditions of the analysis by running method blanks. Specific selection of reagents and purification of solvents by distillation in all-glass systems may be required.

3.2 Interferences co-extracted from the samples will vary considerably from source to source, depending upon the diversity of the industry being sampled. PCDD is often associated with other interfering chlorinated compounds such as PCB's which may be at concentrations several orders of magnitude higher than that of PCDD. While general cleanup techniques are provided as part of this method, unique samples may require additional cleanup approaches to achieve the sensitivity stated in Table 1.

Table 1. Gas Chromatography of TCDD

Column	Retention time (min.)	Detection limit (µg/kg)[13]
Glass capillary	9.5	0.003

3.3 The other isomers of tetrachlorodibenzo-p-dioxin may interfere with the measurement of 2,3,7,8-TCDD. Capillary column gas chromatography is required to resolve those isomers that yield virtually identical mass fragmentation patterns.

4. Apparatus and Materials

4.1 Sampling equipment for discrete or composite sampling.

4.1.1 Grab sample bottle—amber glass, 1-liter or 1-quart volume. French or Boston Round design is recommended. The container must be washed and solvent rinsed before use to minimize interferences.

4.1.2 Bottle caps—threaded to screw on to the sample bottles. Caps must be lined with Teflon. Solvent washed foil, used with the shiny side towards the sample, may be substituted for the Teflon if sample is not corrosive.

4.1.3 Compositing equipment—automatic or manual composing system. No tygon or rubber tubing may be used, and the system must incorporate glass sample containers for the collection of a minimum of 250 ml. Sample containers must be kept refrigerated after sampling.

4.2 Water bath—heated, with concentric ring cover, capable of temperature control (±2°C). The bath should be used in a hood.

4.3 Gas chromatograph/mass spectrometer data system.

4.3.1 Gas chromatograph: An analytical system with a temperature-programmable gas chromatograph and all required accessories including syringes, analytical columns, and gases.

4.3.2 Column: SP-2250 coated on a 30 m long x 0.25 mm I.D. glass column (Supelco Number 2-3714 or equivalent). Glass capillary column conditions: Helium carrier gas at 30 cm/sec linear velocity run splitless. Column temperature is 210°C.

4.3.3 Mass spectrometer: Capable of scanning from 35 to 450 amu every 1 sec or less, utilizing 70 volts (nominal) electron energy in the electron impact ionization mode and producing a mass spectrum which meets all the criteria in Table 2 when 50 ng of decafluorotriphenyl-phosphine (DFTPP) is injected through the GC inlet. The system must also be capable of selected ion monitoring (SIM) for at least 4 ions simultaneously, with a cycle time of 1 sec or less.

Minimum integration time for SIM is 100 ms. Selected ion monitoring is verified by injecting .015 ng of TCDD Cl^{37} to ive a minimum signal to noise ratio of 5 to 1 at mass 328.

Table 2. DFTPP Key Ions and Ion Abundance Criteria[14]

Mass	Ion Abundance Criteria
51	30-60% of mass 198
68	Less than 2% of mass 69
70	Less than 2% of mass 69
127	40-60% of mass 198
197	Less than 1% of mass 198
198	Base peak, 100% relative abundance
199	5-9% of mass 198
275	10-30% of mass 198
365	Greater than 1% of mass 198
441	Present but less than mass 443
442	Greater than 40% of mass 198
443	17-23% of mass 442

4.3.4 GC/MS interface: Any GC-to-MS interface that gives acceptable calibration points at 50 ng per injection for each compound of interest and achieves acceptable tuning performance criteria (see 6.1 through 6.3 of this appendix) may be used. GC-to-MS interfaces constructed of all glass or glass-lined materials are recommended. Glass can be deactivated by silanizing with dichlorodimethylsilane. The interface must be capable of transporting at least 10 ng of the components of interest from the GC to the MS.

4.3.5 Data system: A computer system must be interfaced to the mass spectrometer. The system must allow the continuous acquisition and storage on machine-readable media of all mass spectra obtained throughout the duration of the chromatographic program. The computer must have software that can search any GC/MS data file for ions of a specific mass and that can plot such ion abundances versus time or scan number. This type of plot is defined as an Extracted Ion Current Profile (EICP). Software must also be able to integrate the abundance, in any EICP, between specified time or scan number limits.

4.4 Pipettes-Disposable, Pasteur, 150 mm long x 5 mm ID (Fisher Scientific Co., Number 13-678-6A or equivalent).

4.5 Flint glass bottle (Teflon-lined screw cap).

4.6 Reacti-vial (silanized) (Pierce Chemical Co.).

5. Reagents

5.1 Potassium hydroxide-(ACS), 2 percent in distilled water.

5.2 Sulfuric acid-(ACS), concentrated.

5.3 Methylene chloride, hexane, benzene, petroleum ether, methanol, tetradecane-pesticide quality or equivalent.

5.4 Prepare stock standard solutions of TCDD and ^{37}Cl-TCDD (molecular weight 328) in a glove box. The stock solutions are stored in a glovebox, and checked frequently for signs of degradation or evaporation, especially just prior to the preparation of working standards.

5.5 Alumina-basic, Woelm; 80/200 mesh. Before use activate overnight at 600°C, cool to room temperature in a desiccator.

5.6 Prepurified nitrogen gas

6.0 Calibration

6.1 Before using any cleanup procedure, the analyst must process a series of calibration standards through the procedure to validate elution patterns and the absence of interferences from reagents.

6.2 Prepare GC/MS calibration standards for the internal standard technique that will allow for measurement of relative response factors of at least three CDD/^{37}CDD ratios. Thus, for TCDDs, at least three TCDD/^{37}Cl-TCDD and TCDF/^{37}Cl-TCDF must be determined.[15] The ^{37}Cl-TCDD/F concentration in the standard should be fixed and selected to yield a reproducible response at the most sensitive setting of the mass spectrometer. Response factors for PCDD and HxCDD may be determined by measuring the response of the tetrachloro-labelled compounds relative to that of the unlabelled 1,2,3,4- or 2,3,7,8-TCDD, 1,2,3,4,7-PCDD or 1,2,3,4,7,8-HxCDD, which are commercially available.[16]

6.3 Assemble the necessary GC/MS apparatus and establish operating parameters equivalent to those indicated in 11.1 of this appendix of this method. Calibrate the GC/MS system according to Eichelberger, et al. (1975) by the use of decafluorotriphenyl phosphine (DFTPP). By injecting calibration standards, establish the response factors for CDDs vs. ^{37}Cl-TCDD, and for CDFs vs. ^{37}Cl-TCDF. The detection limit provided in Table 1 should be verified by injecting .015 ng of ^{37}Cl-TCDD which should give a minimum signal to noise ratio of 5 to 1 at mass 328.

7. Quality Control

7.1 Before processing any samples, the analyst should demonstrate through the analysis of a distilled water method blank, that all glassware and reagents are interference-free. Each time a set of samples is extracted, or there is a change in reagents, a method blank should be processed as a safeguard against laboratory contamination.

7.2 Standard quality assurance practices must be used with this method. Field replicates must be collected to measure the

precision of the sampling technique. Laboratory replicates must be analyzed to establish the precision of the analysis. Fortified samples must be analyzed to establish the accuracy of the analysis.

8. Sample Collection, Preservation, and Handling

8.1 Grab and composite samples must be collected in glass containers. Conventional sampling practices should be followed, except that the bottle must not be prewashed with sample before collection. Composite samples should be collected in glass containers in accordance with the requirements of the RCRA program. Sampling equipment must be free of tygon and other potential sources of contamination.

8.2 The samples must be iced or refrigerated from the time of collection until extraction. Chemical preservatives should not be used in the field unless more than 24 hours will elapse before delivery to the laboratory. If an aqueous sample is taken and the sample will not be extracted within 48 hours of collection, the sample should be adjusted to a pH range of 6.0-8.0 with sodium hydroxide or sulfuric acid.

8.3 All samples must be extracted within 7 days and completely analyzed within 30 days of collection.

9. Extraction and Cleanup Procedures

9.1 Use an aliquot of 1-10 g sample of the chemical waste or soil to be analyzed. Soils should be dried using a stream of prepurified nitrogen and pulverized in a ball-mill or similar device. Perform this operation in a clear area with proper hood space. Transfer the sample to a tared 125 ml flint glass bottle (Teflon-lined screw cap) and determine the weight of the sample. Add an appropriate quantity of ^{37}Cl-labelled 2,3,7,8-TCDD (adjust the quantity according to the required minimum detectable concentration), which is employed as an internal standard.

9.2 Extraction

9.2.1 Extract chemical waste samples by adding 10 ml methanol, 40 ml petroleum ether, 50 ml doubly distilled water, and then shaking the mixture for 2 minutes. Tars should be completely dissolved in any of the recommended neat solvents. Activated carbon samples must be extracted with benzene using method 3540 in SW-846 (Test Methods for Evaluating Solid Waste—Physical/Chemical Methods, available from G.P.O. Stock Number 055-022-81001-2). Quantitatively transfer the organic extract or dissolved sample to a clean 250 ml flint glass bottle (Teflon lined screw cap), add 50 ml doubly distilled water and shake for 2 minutes. Discard the aqueous layer and proceed with Step 9.3.

9.2.2 Extract soil samples by adding 40 ml of petroleum ether to the sample, and then shaking for 20 minutes. Quantitatively transfer the organic extract to a clean 250 ml flint glass bottle (Teflon-lined screw cap), add 50 ml doubly distilled water and shake for 2 minutes. Discard the aqueous layer and proceed with Step 9.3.

9.3 Wash the organic layer with 50 ml of 20 percent aqueous potassium hydroxide by shaking for 10 minutes and then remove and discard the aqueous layer.

9.4 Wash the organic layer with 50 ml of doubly distilled water by shaking for 2 minutes, and discard the aqueous layer.

9.5 Cautiously add 50 ml concentrated sulfuric acid and shake for 10 minutes. Allow the mixture to stand until layers separate (approximately 10 minutes), and remove and discard the acid layer. Repeat acid washing until no color is visible in the acid layer.

9.6 Add 50 ml of doubly distilled water to the organic extract and shake for 2 minutes. Remove and discard the aqueous layer and dry the organic layer by adding 10g of anhydrous sodium sulfate.

9.7 Concentrate the extract to incipient dryness by heating in a 55° C water bath and simultaneously flowing a stream of prepurified nitrogen over the extract. Quantitatively transfer the residue to an alumina microcolumn fabricated as follows:

9.7.1 Cut off the top section of a 10 ml disposable Pyrex pipette at the 4.0 ml mark and insert a plug of silanized glass wool into the tip of the lower portion of the pipette.

9.7.2 Add 2.8g of Woelm basic alumina (previously activated at 600° C overnight and then cooled to room temperature in a desiccator just prior to use).

9.7.3 Transfer sample extract with a small volume of methylene chloride.

9.8 Elute the microcolumn with 10 ml of 3 percent methylene chloride-in-hexane followed by 15 ml of 20 percent methylene chloride-in-hexane and discard these effluents. Elute the column with 15 ml of 50 percent methylene chloride-in-hexane and concentrate this effluent (55° C water bath, stream of prepurified nitrogen) to about 0.3-0.5 ml.

9.9 Quantitatively transfer the residue (using methylene chloride to rinse the container) to a silanized Reacti-Vial (Pierce Chemical Co.). Evaporate, using a stream of prepurified nitrogen, almost to dryness, rinse the walls of the vessel with approximately 0.5 ml methylene chloride, evaporate just to dryness, and tightly cap the vial. Store the vial at 5° C until analysis, at which time the sample is reconstituted by the addition of tridecane.

9.10 Approximately 1 hour before GC-MS (HRGC-LRMS) analysis, dilute the residue in the micro-reaction vessel with an appropriate quantity of tridecane. Gently swirl the tridecane on the lower portion of the vessel to ensure dissolution of the CDDs and CDFs. Analyze a sample by GC/EC to provide insight into the complexity of the problem, and to determine the manner in which the mass spectrometer should be used. Inject an appropriate aliquot of the sample into the GC-MS instrument, using a syringe.

9.11 If, upon preliminary GC-MS analysis, the sample appears to contain interfering substances which obscure the analyses for CDDs and CDFs, high performance liquid

chromatographic (HPLC) cleanup of the extract is accomplished, prior to further GC-MS analysis.

). HPLC Cleanup Procedure[17]

10.1 Place approximately 2 ml of hexane in a 50 ml flint glass sample bottle fitted with a Teflon-lined cap.

10.2 At the appropriate retention time, position sample bottle to collect the required fraction.

10.3 Add 2 ml of 5 percent (w/v) sodium carbonate to the sample fraction collected and shake for one minute.

10.4 Quantitatively remove the hexane layer (top layer) and transfer to a micro-reaction vessel.

10.5 Concentrate the fraction to dryness and retain for further analysis.

11. GC/MS Analysis

11.1 The following column conditions are recommended: Glass capillary column conditions: SP-2250 coated on a 30 m long x 0.25 mm I.D. glass column (Supelco Number 2-3714, or equivalent) with helium carrier gas at 30 cm/sec linear velocity, run splitless. Column temperature is 210°C. Under these conditions the retention time for TCDDs is about 9.5 minutes. Calibrate the system daily with, a minimum, three injections of standard mixtures.

11.2 Calculate response factors for standards relative to ^{37}Cl-TCDD/F (see 12 of this appendix).

11.3 Analyze samples with selected ion monitoring of at least two ions from Table 3. Proof of the presence of CDD or CDF exists if the following conditions are met:

11.3.1 The retention time of the peak in the sample must match that in the standard, within the performance specifications of the analytical system.

11.3.2 The ratio of ions must agree within 10 percent with that of the standard.

11.3.3 The retention time of the peak maximum for the ions of interest must exactly match that of the peak.

Table 3. List of Accurate Masses Monitored Using GC Selected-Ion Monitoring, Low Resolution, Mass Spectrometry for Simultaneous Determination of Tetra-, Penta-, and Hexachlorinated Dibenzo-p-Dioxins and Dibenzofurans

Class of chlorinated dibenzodioxin or dibenzofuran	Number of chlorine constituents (x)	Monitored m/z for dibenzodioxins $C_{12}H_{8-x}O_2Cl_x$	Monitored m/z for dibenzofurans $C_{12}H_{8-x}OCl_x$	Approximate theoretical ratio expected on basis of isotopic abundance
Tetra	4	^{18}319.897	^{1}303.902	0.74
		321.894	305.903	1.00
		^{19}327.885	^{2}311.894	0.21
		^{20}256.933		0.20
		^{3}258.930		
Penta	5	^{1}353.858	^{1}337.863	0.57
		355.855	339.860	1.00
Hexa	6	389.816	373.821	1.00
		391.813	375.818	0.87

11.4 Quantitate the CDD and CDF peaks from the response relative to the ^{37}Cl-TCDD/F internal standards. Recovery of the internal standard should be greater than 50 percent.

11.5 If a response is obtained for the appropriate set of ions, but is outside the expected ratio, a co-eluting impurity may be suspected. In this case, another set of ions characteristic of the CDD/CDF molecules should be analyzed. For TCDD a good choice of ions is m/e 257 and m/e 259. For TCDF a good choice of ions is m/e 241 and 243. These ions are useful in characterizing the molecular structure to TCDD or TCDF. For analysis of TCDD good analytical technique would require using all four ions, m/e 257, 320, 322, and 328, to verify detection and signal to noise ratio of 5 to 1. Suspected impurities such as DDE, DDD, or PCB residues can be confirmed by checking for their major fragments. These materials can be removed by the cleanup columns. Failure to meet criteria should be explained in the report, or the sample reanalyzed.

11.6 If broad background interference restricts the sensitivity of the GC/MS analysis, the analyst should employ cleanup procedures and reanalyze by GC/MS. See 10.0 of this appendix.

11.7 In those circumstances where these procedures do not yield a definitive conclusion, the use of high resolution mass spectrometry is suggested.

12. Calculations

12.1 Determine the concentration of individual compounds according to the formula:

$$\text{Concentration, } \mu g/gm = \frac{A \times A_s}{G \times A_{is} \times R_f}$$

where:

A = μg of internal standard added to the sample[21]

G = gm of sample extracted

A_s = area of characteristic ion of the compound being quantified.

A_{is} = area of characteristic ion of the internal standard

R_f = response factor[22]

Response factors are calculated using data obtained from the analysis of standards according to the formula:

$$Rf \quad \frac{A_{is} \times C_{is}}{A_s \times C_s}$$

where:

C_{is} = concentration of the internal standard

C_s = concentration of the standard compound

12.2 Report results in micrograms per gram without correction for recovery data. When duplicate and spiked samples are analyzed, all data obtained should be reported.

12.3 Accuracy and Precision. No data are available at this time.

[8] This method is appropriate for the analysis of tetra-, penta-, and hexachlorinated dibenzo-p-dioxins and -dibenzofurans.

[9] Analytical protocol for determination of TCDDs in phenolic chemical wastes and soil samples obtained from the proximity of chemical dumps. T.O. Tiernan and M. Taylor. Brehm Laboratory, Wright State University, Dayton, OH 45435.

[10] Analytical protocol for determination of chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans in river water. T.O. Tiernan and M. Taylor. Brehm Laboratory, Wright State University, Dayton, OH 45435.

[11] In general, the techniques that should be used to handle these materials are those which are followed for radioactive or infectious laboratory materials. Assistance in evaluating laboratory practices may be obtained from industrial hygienists and persons specializing in safe laboratory practices. Typical infectious waste incinerators are probably not satisfactory devices for disposal of materials highly contaminated with CDDs or CDFs. Safety instructions are outlined in EPA Test Method 613(4.0).

[12] See also: (1) "Program for monitoring potential contamination in the laboratory following the handling and analyses of chlorinated dibenzo-p-dioxins and dibenzofurans" by F.D. Hileman et al., In: Human and Environmental Risks of Chlorinated Dioxins and Related Compounds, R.E. Tucker, et al, eds., Plenum Publishing Corp., 1983. 2) Safety procedures outlined in EPA Method 613, *Federal Register* volume 44, No. 233, December 3, 1979.

[13] Detection limit for liquid samples is 0.003 μg/l. This is calculated from the minimum detectable GC response being equal to five times the GC background noise assuming a 1 ml effective final volume of the 1 liter sample extract, and a GC injection of 5 microliters. Detection levels apply to both electron capture and GC/MS detection. For further details see 44 FR 69526 (December 3, 1979).

[14] J.W. Eichelberger, L.E. Harris, and W.L. Budde. 1975. Reference compound to calibrate ion abundance measurement in gas chromatography-mass spectrometry. Analytical Chemistry 47:995.

[15] ^{37}Cl-labelled 2,3,7,8-TCDD and 2,3,7,8-TCDF are available from K.O.R. Isotopes, and Cambridge Isotopes, Inc., Cambridge, MA. Proper standardization requires the use of a specific labelled isomer for each congener to be determined. However, the only labelled isomers readily available are ^{37}Cl-2,3,7,8-TCDD and ^{37}Cl-2,3,7,8-TCDF. This method therefore uses these isomers as surrogates for the CDDs and CDFs. When other labelled CDDs and CDFs are available, their use will be required.

[16] This procedure is adopted because standards are not available for most of the CDDs and CDFs, and assumes that all the congeners will show the same response as the unlabelled congener used as a standard. Although this assumption may not be true in all cases, the error will be small.

[17] For cleanup see also method #8320 or #8330, SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (1982).

[18] Molecular ion peak.

[19] Cl_4—labelled standard peaks.

[20] Ions which can be monitored in TCDD analyses for confirmation purposes.

[21] The proper amount of standard to be used is determined from the calibration curve (See 6.0 of this appendix).

[22] If standards for PCDDs/Fs and HxCDDs/Fs are not available, response factors for ions derived from these congeners are calculated relative to ^{37}Cl-TCDD/F. The analyst may use response factors for 1,2,3,4- or 2.3.7.8-

TCDD, 1,2,3,4,7-PeCDD, or 1,2,3,4,7,8-HxCDD for quantitation of TCDDs/Fs, PeCDDs/Fs and HxCDDs/Fs, respectively. Implicit in this requirement is the assumption that the same response is obtained from PCDDs/Fs containing the same numbers of chlorine atoms.

Appendix D. Representative Sampling Methods

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed below, for sampling waste with properties similar to the indicated materials, will be considered by the department to be representative of the waste.

Extremely viscous liquid—ASTM Standard D140-70; Crushed or powdered material—ASTM Standard D346-75; Soil or rock-like material—ASTM Standard D420-69; Soil-like material—ASTM Standard D1452-65;

Fly Ash-like material—ASTM Standard D2234-76 (ASTM Standards are available from ASTM, 1916 Race St., Philadelphia, PA 19103);

Containerized liquid wastes—"COLIWASA" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods,"[1] U.S. Environmental Protection Agency, Office of Solid Waste, Washington, D.C. 20460. (Copies may be obtained from Solid Waste Information, U.S. Environmental Protection Agency, 26 W. St. Clair St., Cincinnati, Ohio 45268)

Liquid waste in pits, ponds, lagoons, and similar reservoirs—"Pond Sampler" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods."[1] This manual also contains additional information on application of these protocols.

ENDNOTE: [1]These methods are also described in "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2-80-018, January 1980.

Chapter 51. Fee Schedules

§5101. Applicability

The regulations in this Chapter apply to generators of hazardous waste as well as treaters, storers, and disposers of hazardous waste except as provided in LAC 33:V.1101 and LAC 33:V.1501.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:533 (May 1985), LR 12:676 (October 1986), LR 18:724 (July 1992).

§5103. Scope and Purpose

It is the purpose of these regulations to establish a fee system for funding the monitoring, investigation, and other activities required to be conducted for the maintenance of a safe and healthful environment by the Department of Environmental Quality in accordance with the Louisiana Environmental Quality Act (R.S. 30:2014 et seq.). Fees are required for all permits, licenses, registrations, and variances authorized by the Act.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:533 (May 1985), LR 12:676 (October 1986), LR 18:724 (July 1992).

§5105. Authority

These regulations provide fees as required by R.S. 30:1065.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:533 (May 1985), LR 12:676 (October 1986).

§5107. Definitions

(See LAC 33:V.109)

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:533 (May 1985), LR 12:676 (October 1986).

§5109. Application Fees

Treaters, Storers, and/or Disposers

A. A one-time application fee is charged to cover application, evaluation, and other related program costs.

B. Each application thereto for which a fee is prescribed shall be accompanied by a remittance in the full amount of the fee. No application or amendments thereto shall be accepted or processed prior to payment of the full amount specified unless approved by the administrative authority. Major amendments of applications for operating permits, closure/post-closure permits, and modifications of permits may be considered as separate applications for purposes of calculating fees.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 10:200 (March 1984), amended LR 11:533 (May 1985), LR 12:676 (October 1986), LR 16:684 (August 1990), LR 18:724 (July 1992).

§5111. Calculation of Application Fees

A. The applicant is required to calculate his appropriate application fee and research and development fee according to

PRICE: $34.25

LOUISIANA ADMINISTRATIVE CODE

Title 33 ENVIRONMENTAL QUALITY

Part V. Hazardous Waste and Hazardous Materials

Certified by the Office of the State Register

Amendments for: July 1995 - March 1996
(Last amended February 1996)

M.J. "Mike" Foster, Jr.
Governor

Mark C. Drennen
Commissioner of Administration

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Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste and Hazardous Materials

Chapter 1. General Provisions and Definitions

~~§105. Program Scope~~

These rules and regulations apply to owners and operators of all facilities that generate, transport, treat, store, or dispose of hazardous waste, except as specifically provided otherwise herein. The procedures of these regulations also apply to denial of a permit for the active life of a hazardous waste management facility or TSD unit under LAC 33:V.706. Definitions appropriate to these rules and regulations, including "solid waste" and "hazardous waste", appear in LAC 33:V.109. Those wastes which are excluded from regulation are found in LAC 33:V.105.

* * *

[See Prior Text in A-D.33.c."Generic Exclusion Levels for F006 Nonwastewater HTMR Residues" Chart]

A one-time notification and certification must be placed in the facility's files and sent to the administrative authority for K061, K062, or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to subtitle D units. The notification and certification that is placed in the generators' or treaters' files must be updated if the process or operation generating the waste changes and/or if the subtitle D unit receiving the waste changes. However, the generator or treater needs only to notify the EPA region or an authorized state on an annual basis if such changes occur. Such notification and certification should be sent to the EPA region or authorized state by the end of the calendar year, but no later than December 31. The notification must include the following information:

* * *

[See Prior Text in D.33.c.i-M.10]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790 (November 1988), LR 15:181 (March 1989), LR 16:47 (January 1990), LR 16:217 (March 1990), LR 16:220 (March 1990), LR 16:398 (May 1990), LR 16:614 (July 1990), ~~LR 17:362 (April 1991), LR 17:368 (April 1991), LR 17:478 (May 1991), LR 17:883 (September 1991), LR 18:723 (July 1992),~~ LR 18:1256 (November 1992), LR 18:1375 (December 1992), amended by the Office of the Secretary, ~~LR~~ 19:1022 (August 1993), amended by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 20:1000 (September 1994), LR 21:266 (March ~~1995), LR 21:944 (September 1995).~~

§109. Definitions

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

* * *

[See Prior Text]

Designated Facility—a hazardous waste treatment, storage, or disposal facility that:

1. has received a permit (or interim status) in accordance with the requirements of LAC 33:V.Chapters 1, 3, 5, 7, 27, 31, and 43;

2. has received a permit (or interim status) from a state authorized in accordance with 40 CFR 271; or

3. is regulated under the applicable sections of 40 CFR 266, LAC 33:V.Chapter 41, or equivalent regulation of other states; and

4. that has been designated on the manifest by the generator pursuant to LAC 33:V.105.H.

If a waste is destined for a facility in an authorized state that has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving state to accept such waste.

* * *

[See Prior Text]

~~*Hazardous Waste*—a solid waste, as defined in LAC~~ 33:V.109, is a hazardous waste if:

* * *

[See Prior Text in 1-2.a]

b. it is listed in LAC 33:V.4901 and has not been excluded from the lists in LAC 33:V.4901 by the Environmental Protection Agency or the administrative authority.

* * *

~~[See Prior Text in 2.c-5]~~

~~6. Any solid waste described in LAC 33:V.105.D.33 or~~ 9.*Hazardous Waste*.5 is not a hazardous waste if it meets the following criteria:

a. in the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in LAC 33:V.4903 (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of LAC 33:V.Chapter 22, even if they no longer exhibit a characteristic at the point of land disposal);

b. in the case of a waste which is a listed waste under LAC 33:V.4901, contains a waste listed under LAC 33:V.4901, or is derived from a waste listed in LAC 33:V.4901, it also has been excluded from LAC 33:V.105.D.33 or 109.*Hazardous Waste*.5 under LAC ~~33:V.105.H and M.~~

* * *

[See Prior Text]

Partial Closure—the closure of a hazardous waste management unit in accordance with the applicable closure requirements of LAC 33:V.Chapters 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 23, and 43 at a facility that contains other active hazardous waste management units. For example, a partial closure may include the closure of a tank (including its associated piping and underlying containment systems), ndfill cell, surface impoundment, waste pile, or other nazardous waste management unit, while other units of the same facility continue to operate.

* * *

[See Prior Text]

Solid Waste— * * *

[See Prior Text 1-5.c]

d. inherently waste-like materials listed in LAC 33:V.109.*Solid Waste*.4.

* * *

[See Prior Text]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790 (November 1988), LR 15:378 (May 1989), LR 15:737 (September 1989), LR 16:47 (January 1990), LR 16:220 (March 1990), LR 16:399 (May 1990), LR 16:614 (July 1990), LR 16:683 (August 1990), LR 17:362 (April 1991), LR 17:478 (May 1991), LR 18:723 (July 1992), LR 18:1375 (December 1992), repromulgated LR 19:626 (May 1993), amended LR 20:1000 September 1994), LR 20:1109 (October 1994), LR 21:266 (March 1995), LR 21:944 (September 1995).

Chapter 3. General Conditions for Treatment, Storage, and Disposal Facility Permits

§305. Scope of the Permit

A. A permit is required for the treatment, storage, and disposal of any hazardous waste as identified or listed in LAC 33:V.Chapter 49. The terms "treatment," "storage," "disposal," and "hazardous waste" are defined in LAC 33:V.109. Owners and operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit. Owners or operators of surface impoundments, landfills, land treatment units, and waste pile units that received wastes after July 26, 1982, or that certified closure (according to LAC 33:V.4387) after January 26, 1983, must have post-closure permits, unless they demonstrate closure by removal as provided under LAC 33:V.305.F and G. If a post-closure permit is required, the permit must address applicable groundwater monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements. The denial of a permit for the active life of a hazardous waste management facility or unit does not affect the requirement to obtain a post-closure permit under this Section.

* * *

[See Prior Text in B-G.3]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 17:658 (July 1991), LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:944 (September 1995).

§309. Conditions Applicable to All Permits

Each permit shall include permit conditions necessary to achieve compliance with the act and these regulations, including each of the applicable requirements specified in LAC 33:V.Subpart 1. In satisfying this provision, the administrative authority may incorporate applicable requirements of LAC 33:V.Subpart 1 directly into the permit or establish other permit conditions that are based on LAC 33:V.Subpart 1. The following conditions apply to all hazardous waste permits. All conditions applicable to permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations must be given in the permit.

* * *

[See Prior Text in A-L.3.a]

b. the administrative authority has inspected the newly modified or newly constructed facility and finds it is in compliance with the conditions of the permit or within 15 days of the date of receipt of the letter in LAC 33:V.303.I.1, the permittee has not received notice from the administrative authority of his or her intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

* * *

[See Prior Text in L.4-12]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 21:944 (September 1995).

§321. Modification of Permits

* * *

[See Prior Text in A-C.2.h]

i. In the case of an automatic authorization under LAC 33:V.321.C.2.h, or a temporary authorization under LAC 33:V.321.C.2.f.iv or C.2.g.iv, if the administrative authority has not made a final approval or denial of the modification request by the date 50 days prior to the end of the temporary or automatic authorization, the permittee must within seven days of that time send a notification to persons on the facility mailing list, and make a reasonable effort to notify other persons who submitted written comments on the modification request, that:

i. the permittee has been authorized temporarily to conduct the activities described in the permit modification request; and

ii. unless the administrative authority acts to give final approval or denial of the request by the end of the authorization period, the permittee will receive authorization to conduct such activities for the life of the permit.

* * *

[See Prior Text in C.2.j-C.8]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August, 1987), LR 15:378 (May 1989), LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 21:944 (September 1995).

~~**§322. Classification of Permit Modifications**~~

~~The following is a listing of classifications of permit modifications made at the request of the permittee.~~

~~Modifications~~ ~~Class~~

* * *

[See Prior Text in A-D.1.e]

f. extensions of the closure period to allow a landfill, surface impoundment, or land treatment unit to receive nonhazardous wastes after final receipt of hazardous wastes under LAC 33:V.3513.D and E 2

* * *

[See Prior Text in D.2-N.2]

~~Class 1 modifications requiring prior administrative authority approval.~~

~~AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.~~

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:614 (July 1990), LR 17:658 (July 1991), LR 21:266 (March 1995), LR 21:944 (September 1995).

§323. Suspension, Modification or Revocation and Reissuance, and Termination of Permits

* * *

[See Prior Text in A-B.2.d]

e. Suitability of the facility location will not be considered a cause for permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance.

* * *

[See Prior Text in B.3-4.b.iii]

c. The total cost of the caretaker management shall be borne by the operator, by revenues from operation, or by calling upon the closure fund set up for this purpose.

~~d. If the operator does not voluntarily agree to the~~ caretaker management, appropriate legal action shall be taken by the administrative authority to institute the management operations to protect the public interest.

e. After exhausting all other remedies, the administrative authority shall request the attorney general to secure court authority to close the site, using closure funds for this purpose.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 14:790 (November 1988), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 18:1256 (November 1992), LR 20:1109 (October 1994), LR 21:944 (September 1995).

Chapter 5. Permit Application Contents

Subchapter E. Specific Information Requirements

§533. Specific Part II Information Requirements for Landfills

Except as otherwise provided in LAC 33:V.105.D, 1501, and 305.B and C, owners and operators of facilities that dispose of hazardous waste in landfills must provide the following additional information:

* * *

[See Prior Text in A-B]

1. the liner system (except for an existing portion of a landfill), if the landfill must meet the requirements of LAC 33:V.2503.A. If an exemption from the requirement for a liner is sought as provided by LAC 33:V.2503.L, submit detailed plans and engineering and hydrogeological reports, as appropriate, describing alternate designs and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the groundwater or surface water at any future time;

2. the double liner and leak (leachate) detection, collection, and removal system, if the landfill must meet the requirements of LAC 33:V.2503.K. If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by LAC 33:V.2503.L or M, submit appropriate information;

3. if the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation and the location of the saturated zone in relation to the leak detection system;

4. the construction quality assurance (CQA) plan if required under LAC 33:V.1504;

5. proposed action leakage rate, with rationale, if

required under LAC 33:V.2504, and response action plan, if required under LAC 33:V.2508;

6. control of run-on;

7. control of runoff;

8. management of collection and holding facilities associated with run-on and runoff control systems; and

9. control of wind dispersal of particulate matter, where applicable;

* * *

[See Prior Text in C-J.4]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 16:220 (March 1990), LR 21:266 (March 1995), LR 21:944 (September 1995).

Chapter 7. Administrative Procedures for Treatment, Storage, and Disposal Facility Permits

Subchapter A. Permits

§706. Permit Denial

The administrative authority may, pursuant to the procedures in LAC 33:V.Chapter 7, deny the permit application either in its entirety or as to the active life of a hazardous waste management facility or TSD unit only.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:614 (July 1990), amended LR 21:944 (September 1995).

Chapter 11. Generators

§1101. Applicability

* * *

[See Prior Text in A]

B. Any person who imports hazardous waste from a foreign country into the state of Louisiana must comply with the standards applicable to generators established in this Chapter.

* * *

[See Prior Text in C-F]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:398 (May 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 22:20 (January 1996).

~~### §1113. Exports of Hazardous Waste~~

A. Applicability. Any person who exports hazardous waste to a foreign country, from a point of departure in the state of Louisiana, must comply with the requirements of this Chapter and with the special requirements of LAC 33:V.1113. LAC 33:V.1113 establishes requirements applicable to exports of hazardous waste. A primary exporter of hazardous waste must comply with the special requirements of LAC 33:V.1113, and a transporter who transports hazardous waste for export must comply with applicable requirements of LAC 33:V.Chapter 13.

* * *

[See Prior Text in B-D.1.b.viii]

2. Notification shall be sent to the Louisiana Department of Environmental Quality with "Attention: Notification to Export" prominently displayed on the front of the envelope. [Note: This does not relieve the regulated community from the requirement of submitting notification to the Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), EPA, as required by 40 CFR 262.53(b).]

* * *

[See Prior Text in D.3-G.1.f]

2. Reports shall be sent to the administrative authority of the Louisiana Department of Environmental Quality. [Note: This does not relieve the regulated community from the requirement of submitting annual reports to the Office of Waste Programs Enforcement, RCRA Enforcement Division (OS-520), EPA.]

* * *

[See Prior Text in H-H.2]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:944 (September 1995), LR 22:20 (January 1996).

§1123. Imports of Foreign Hazardous Waste

A. Any person who imports hazardous waste from a foreign country into the state of Louisiana must comply with this Chapter and the special requirements of LAC 33:V.1123.

B. When importing hazardous waste from a foreign country into the state of Louisiana, a person must meet all the requirements of LAC 33:V.1107 for the manifest except that:

1. the name and address of the foreign generator and the importer's name, address, and EPA identification number must replace the generator's name, address, and EPA identification number;

2. the U.S. importer or his agent must sign and date the certification and obtain the signature of the initial transporter ~~to replace the generator's signature on the certification~~

Chapter 25. Landfills

§2521. Closure and Post-closure Care

* * *

[See Prior Text in A-B.1]

2. maintain and monitor the leak detection system in accordance with LAC 33:V.2503.L.4.d, 2503.L.5, and 2507.D, where such a system is present between double liner systems and comply with all other applicable leak detection system requirements of LAC 33:V.Subpart 1;

* * *

[See Prior Text in B.3-C]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 21:944 (September 1995).

Chapter 26. Corrective Action Management Units and Temporary Units

§2603. Temporary Units (TU)

* * *

[See Prior Text in A-F]

1. approved in accordance with the procedures for department-initiated permit modifications under LAC 33:V.323; or

* * *

[See Prior Text in F.2-G]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), amended LR 21:944 (September 1995).

Chapter 28. Drip Pads

§2801. Applicability

* * *

[See Prior Text in A]

B. The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither runoff nor run-on is generated is not subject to regulation under LAC 33:V.2805.F or G, as appropriate.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:944 (September 1995).

§2803. Assessment of Existing Drip Pad Integrity

A. For each existing drip pad as defined in LAC 33:V.2801, the owner or operator must evaluate the drip pad and determine that it meets all of the requirements of this Chapter, except the requirements for liners and leak detection systems of LAC 33:V.2805.C. No later than the effective date of this rule, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and re-certified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of LAC 33:V.2805 are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of LAC 33:V.2805, except the standards for liners and leak detection systems, specified in LAC 33:V.2805.C, and must document the age of the drip pad to the extent possible, to document compliance with LAC 33:V.2803.B.

B. The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of LAC 33:V.2805.C and submit the plan to the administrative authority no later than two years before the date that all repairs, upgrades, and modifications will be complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of LAC 33:V.2805 and must document the age of the drip pad to the extent possible. The plan must be reviewed and certified by an independent qualified, registered professional engineer.

C. Upon completion of all upgrades, repairs, and modifications, the owner or operator must submit to the administrative authority the as-built drawings for the drip pad together with a certification by an independent, qualified registered professional engineer attesting that the drip pad conforms to the drawings.

D. If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of LAC 33:V.2805.N or close the drip pad in accordance with LAC 33:V.2809.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:944 (September 1995).

§2804. Design and Installation of New Drip Pads

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with LAC 33:V.2804.A or B:

A. All of the requirements of LAC 33:V.2805 (except

LAC 33:V.2805.A.4 and B), 2807, and 2809 must be met.

B. All of the requirements of LAC 33:V.2805 (except LAC 33:V.2805.C), 2807, and 2809 must be met.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:944 (September 1995).

§2805. Design and Operating Requirements

Owners and operators of drip pads must ensure that the pads are designed, installed, and operated in accordance with LAC 33:V.2805.A or C.

* * *

[See Prior Text in A-A.3]

4. have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with LAC 33:V.2805 (except LAC 33:V.2805.A.4 and B), 2807, and 2809 instead of LAC 33:V.2805 (except LAC 33:V.2805.C), 2807, and 2809; and

5. be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

Note: The administrative authority will generally consider applicable standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) or the American Society of Testing Materials (ASTM) in judging the structural integrity requirement of this Subsection.

B. The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated, and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this Section, except for LAC 33:V.2805.C.

C. If an owner or operator elects to comply with all of the requirements of LAC 33:V.2805 (except LAC 33:V.2805.C), 2807 and 2809 instead of LAC 33:V.2805 (except LAC 33:V.2805.A.4 and B), 2807, and 2809, the drip pad must have:

1. a synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must be:

a. constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

b. placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

c. installed to cover all surrounding earth that could come in contact with the waste or leakage; and

2. a leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system must be:

a. constructed of materials that are:

i. chemically resistant to the waste managed in the drip pad and the leakage that might be generated;

ii. of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad;

b. designed and operated to function without clogging through the scheduled closure of the drip pad; and

c. designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time; and

3. a leakage collection system immediately above the liner that is designed, constructed, maintained, and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.

D. Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

Note: See LAC 33:V.2805.N for remedial action required if deterioration or leakage is detected.

E. The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent runoff.

F. Unless protected by a structure, as described in LAC 33:V.2801.B, the owner or operator must design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any runoff that might enter the system.

G. Unless protected by a structure or cover, as described in LAC 33:V.2801.B, the owner or operator must design, construct, operate and maintain a runoff management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

H. The drip pad must be evaluated to determine that it meets the requirements of LAC 33:V.2805.A-G and the owner or operator must obtain a statement from an independent, qualified registered professional engineer certifying that the drip pad design meets the requirements of this Section.

I. Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

J. The drip pad surface must be cleaned thoroughly at least once every seven days such that accumulated residues of hazardous waste or other materials are removed, using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. The owner/operator must determine if the residues are hazardous in accordance with LAC 33:V.1103 and if so must manage them in accordance with LAC 33:V.Subpart 1.

K. Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

L. After being removed from the treatment vessel, treated wood from pressure and nonpressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with this requirement.

M. Collection and holding units associated with run-on and runoff control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

N. Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

1. Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must:

a. enter a record of the discovery in the facility operating log;

b. immediately remove the portion of the drip pad affected by the condition from service;

c. determine what steps must be taken to repair the drip pad and clean up any leakage from below the drip pad, and establish a schedule for accomplishing the repairs; and

d. within 24 hours after discovery of the condition, notify the administrative authority of the condition and, within 10 working days, provide written notice to the administrative authority with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

2. The administrative authority will review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.

3. Upon completing all repairs and cleanup, the owner or operator must notify the administrative authority in writing and provide a certification, signed by an independent qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with LAC 33:V.2805.N.1.d.

O. Should a permit be necessary, the administrative authority will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

P. The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), LR 21:944 (September 1995).

§2807. Inspections

* * *

[See Prior Text in A-B.3]

Note: See LAC 33:V.2805.N for remedial action required

if deterioration or leakage is detected.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:944 (September 1995).

§2809. Closure

* * *

[See Prior Text in A-B]

C. The owner or operator of an existing drip pad, as defined in LAC 33:V.2801, that does not comply with the liner requirements of LAC 33:V.2805.C.1 must:

* * *

[See Prior Text in C.1-D]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:944 (September 1995).

§2811. Design and Installation of New Drip Pads

Repealed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), repealed LR 21:944 (September 1995).

Chapter 30. Hazardous Waste Burned in Boilers and Industrial Furnaces

§3001. Applicability

A. The regulations of this Chapter apply to hazardous waste burned for energy or material recovery in a boiler or industrial furnace (as defined in LAC 33:V.109) irrespective of the purpose of burning or processing, except as provided by LAC 33:V.3001.B-D and F. In this Chapter, the term "burn" means burning for energy recovery or destruction, or processing for materials recovery or as an ingredient. The emissions standards of LAC 33:V.3009-3015 apply to facilities operating under interim status or under a hazardous waste permit as specified in LAC 33:V.3005 and 3007.

* * *

[See Prior Text in B-F.1.c]

[Note: Parts of this Section were previously promulgated in LAC 33:V:4142 which has been repealed.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), LR 21:944 (September 1995).

§3003. Management Prior to Burning

* * *

[See Prior Text in A-C]

1. Owners or operators of facilities that store hazardous waste burned in a boiler or industrial furnace are subject to the applicable provision of LAC 33:V.Chapters 1, 3, 5, 9, 15, 19, 21, 23, 25, 29, 33, 35, 37 and 43, except as provided by LAC 33:V.3003.C.2. These standards apply to storage by the burner as well as to storage facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the commercial burner.

2. Owners or operators of facilities that burn, in an on-site boiler or industrial furnace exempt from regulation under the small quantity burner provisions of LAC 33:V.3017, hazardous waste that they generate are exempt from regulation under LAC 33:V.Chapters 1, 3, 5, 9, 15, 19, 21, 23, 25, 29, 33, 35, 37, and 43 with respect to the storage of mixtures of hazardous waste and the primary fuel to the boiler or industrial furnace in tanks that feed the fuel mixture directly to the burner. Storage of hazardous waste prior to mixing with the primary fuel is subject to regulation as prescribed in LAC 33:V.3003.C.1.

[Note: Parts of this Section were previously promulgated in LAC 33:V:4142 which has been repealed.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), LR 21:944 (September 1995).

§3005. Permit Standards for Burners

* * *

[See Prior Text in A-E.7.c]

F. Monitoring and Inspections

1. The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:

a. if required by the permit, feed rates and composition of hazardous waste, of other fuels, and industrial furnace feedstocks, and feed rates of ash, metals, and total chloride and chlorine must be monitored and recorded;

* * *

[See Prior Text in F.1.b-G]

H. Recordkeeping. The owner or operator must keep in the operating record of the facility all information and data required by LAC 33:V.3005 until the facility closes or for not less than three years, whichever comes later.

* * *

~~[See Prior Text in I]~~

[Note: Parts of this Section were previously promulgated in LAC 33:V.4142 which has been repealed.]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

~~HISTORICAL NOTE: Promulgated by the Department of~~ Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), LR 21:944 (September 1995).

§3017. Small Quantity On-site Burner Exemption

* * *

[See Prior Text in A-A.1]

Exempt Quantities for Small Quantity Burner Exemption			
Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/month)	Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/month)
0 to 3.9	0	40.0 to 44.9	210
4.0 to 5.9	13	45.0 to 49.9	260
6.0 to 7.9	18	50.0 to 54.9	330
8.0 to 9.9	27	55.0 to 59.9	400
10.0 to 11.9	40	60.0 to 64.9	490
12.0 to 13.9	48	65.0 to 69.9	610
14.0 to 15.9	59	70.0 to 74.9	680
16.0 to 17.9	69	75.0 to 79.9	760
18.0 to 19.9	76	80.0 to 84.9	850
20.0 to 21.9	84	85.0 to 89.9	960
22.0 to 23.9	93	90.0 to 94.9	1,100
24.0 to 25.9	100	95.0 to 99.9	1,200
26.0 to 27.9	110	100.0 to 104.9	1,300
28.0 to 29.9	130	105.0 to 109.9	1,500
30.0 to 34.9	140	110.0 to 114.9	1,700
35.0 to 39.9	170	115.0 or greater	1,900

* * *

[See Prior Text in A.2-E]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended ~~LR 21:266 (March 1995), LR 21:944 (September 1995).~~

Chapter 31. Incinerators

§3105. Applicability

* * *

[See Prior Text in A-E]

Table 1. Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste Number
	* * *		
	[See Prior Text in Acetonitrile-Sodium cyanide]		
Streptozotocin	D-Glucose, 2 deoxy-2[[methylnitroso-amine)carbonyl]amino]-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
	* * *		
	[See Prior Text in Strychnine salts-Zinc phosphide]		

[1]The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this table.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:1139 (December 1985), LR 13:433 (August 1987), LR 14:424 (July 1988), LR 15:737 (September 1989), LR 16:399 (May 1990), LR 18:1256 (November 1992), LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 21:944 (September 1995).

Chapter 41. Recyclable Materials
Subchapter A. Special Requirements for Group I Recyclable Materials

§4115. Owners and Operators of Facilities that Store or Recycle Recyclable Materials

A. Owners and operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of LAC 33:V.Chapters 3, 5, 9, 11, 15, 19, 21, 22, 23, 29, 33, 35, 37, and Subchapters A-K of LAC 33:V.Chapter 43 and the notification requirements under LAC 33:V.105.A, except as provided in LAC 33:V.4105.A. (The recycling process itself is exempt from regulations, except as provided in LAC 33:V.4115.C.)

* * *

[See Prior Text in A-B.3]

C. Owners or operators subject to LAC 33:V.Subpart 1 permitting requirements with hazardous waste management units that recycle hazardous wastes are subject to the requirements of LAC 33:V.Chapter 17 and Subchapters Q-R of LAC 33:V.Chapter 43.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 15:378 (May 1989), LR 16:220 (March 1990), LR 17:658 (July 1991), LR 18:1256 (November 1992), LR 21:944 (September 1995), LR 22:21 (January 1996).

§4139. Recyclable Materials Used in a Manner Constituting Disposal

* * *

[See Prior Text in A-B.1]

2. Owners and operators of facilities that store recyclable materials that are to be used in a manner that constitutes disposal but who are not the ultimate users of the materials are regulated under all applicable provisions of LAC 33:V.Chapters 5, 9, 11, 15, 19, 21, 23, 33, 35, and 37; Subchapters A-K of LAC 33:V.Chapters 43; and LAC 33:V.105.A.

3. Owners and operators of facilities that use recyclable materials in a manner that constitutes disposal are regulated under all applicable provisions of LAC 33:V.Chapters 1, 3, 5, 7, 9, 11, 15, 19, 21, 23, 25, 27, 29, 31, 33, 35 and 37; Subchapters A-M of Chapter 43; and the notification requirement under section 3010 of RCRA. (These requirements do not apply to products which contain these recyclable materials under the provisions of LAC 33:V.4139.A.2.)

* * *

[See Prior Text in B.4]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 11:988 (October 1985), amended LR 11:1139 (December 1985), LR 15:378 (May 1989), LR 16:220 (March 1990), LR 17:362 (April 1991), LR 17:658 (July 1991), LR 20:1000 (September 1994), LR 22:21 (January 1996), repromulgated LR 22:100 (February 1996).

~~Chapter 43. Interim Status~~

Subchapter A. General Facility Standards

§4307. Applicability

The regulations of LAC 33:V.Chapter 43 apply to owners and operators of all hazardous waste facilities except as LAC 33:V.105.D and LAC 33:V.1501.C provide otherwise.

AUTHORITY NOTE: Promulgated in accordance with R.S.30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR ~~21:944 (September 1995).~~

~~Subchapter T. Containment Buildings~~

§4701. Applicability

~~C. The requirements of this Subchapter apply to owners or operators who store or treat hazardous waste in units designed~~ and operated under LAC 33:V.4703. These provisions will become effective on February 18, 1993, although the owner or operator may notify the administrative authority or EPA of his intent to be bound by this Subchapter or its federal equivalent at an earlier time. The owner or operator is not subject to the definition of land disposal in RCRA section 3004(k) provided that the unit:

* * *

[See Prior Text in A.1-5]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), amended LR ~~21:944 (September 1995).~~

Chapter 49. Lists of Hazardous Wastes

§4901. Category I Hazardous Wastes

* * *

[See Prior Text in A-G]

Table 6. Table of Constituents that Serve as a Basis for Listing Hazardous Waste

* * * [See Prior Text in F001-K041]
EPA Hazardous Waste No. K042 Hexachlorobenzene ortho-dichlorobenzene
* * * [See Prior Text in K043-K150]
EPA Hazardous Waste No. K151 Benzene carbon tetrachloride chloroform hexachlorobenzene pentachlorobenzene toluene 1,2,4,5-tetrachlorobenzene tetrachloroethylene

AUTHORITY NOTE: Promulgated in accordance with R.S.30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:320 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 14:426 (July 1988), LR 14:790 (November 1988), LR 15:182 (March 1989), LR 16:47 (January 1990), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 16:1057 (December 1990), LR 17:268 (April 1991), LR 17:478 (May 1991), LR 17:658 (July 1991), LR 18:723 (July 1992), LR 18:1256 (November 1992), LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 21:944 (September 1995).

Apendices

Appendix A. Chemical Analysis Test Methods

Tables 8, 9, and 10 specify the appropriate analytical procedures, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," (SW-846) which shall be used to determine whether a sample contains a given toxic constituent found in LAC 33:V.4901.G.Table 6 or 3105.Table 1.

Table 8 identifies each organic constituent found in LAC 33:V.4901.G.Table 6 or 3105.Table 1 along with the approved measurement method. Table 9 identifies the corresponding methods for inorganic species. Table 10 summarizes the contents of SW-846 and supplies specific section and method numbers for sampling and analysis methods.

Prior to final sampling and analysis method selection the analyst should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

Table 8

Analysis Methods for Organic Chemicals Contained in SW-846

Compound	Method Numbers
* * *	
[See Prior Text in Acetonitrile through 2,4-Toluenediamine]	
2,6-Toluenediamine	8250
* * *	
[See Prior Text in 3,4-Toluenediamine through Xylene]	

Footnote:

[1] Analyze for phenanthrene and carbazole; if these are present in a ratio between 1.4:1 and 5:1 creosote should be considered present.

* * *

[See Prior Text in Table 9-Table 10.Footnotes]

Appendix B. Method 1311
Toxicity Characteristic Leaching Procedure (TCLP)

* * *

[See Prior Text in 1.0-8.1]

8.2 A matrix spike shall be performed for each waste type (e.g., wastewater treatment sludge, contaminated soil, etc.) unless the result exceeds the regulatory level and the data are being used solely to demonstrate that the waste property exceeds the regulatory level. A minimum of one matrix spike must be analyzed for each analytical batch. As a minimum, follow the matrix spike addition guidance provided in each analytical method.

* * *

[See Prior Text in 8.2.1-8.2.4]

8.2.5 The use of internal calibration quantitation methods shall be employed for a metallic contaminant if: (1) Recovery of the contaminant from the TCLP extract is not at least 50 percent and the concentration does not exceed the regulatory level, and (2) The concentration for the contaminant measured in the extract is within 20 percent of the appropriate regulatory level.

8.2.5.1 The method of standard additions shall be employed as the internal calibration quantitation method for each metallic contaminant.

8.2.5.2 The method of standard additions requires preparing calibration standards in the sample matrix rather than reagent water or blank solution. It requires taking four identical aliquots of the solution and adding known amounts of standard to three of these aliquots. The fourth aliquot is the unknown. Preferably, the first addition should be prepared so that the resulting concentration is approximately 50 percent of the expected concentration of the sample. The second and third additions should be prepared so that the concentrations are approximately 100 percent and 150 percent of the expected concentration of the sample. All four aliquots are maintained at the same final volume by adding reagent water or a blank solution, and may need dilution adjustment to maintain the signals in the linear range of the instrumental technique. All four aliquots are analyzed.

8.2.5.3 Prepare a plot, or subject data to linear regression, of instrumental signals or external-calibration-derived concentrations as the dependent variable (y-axis) versus concentrations of the additions of standard as the independent variable (x-axis). Solve for the intercept of the abscissa (the independent variable, x-axis) which is the concentration in the unknown.

8.2.5.4 Alternately, subtract the instrumental signal or

external-calibration-derived concentration of the unknown unspiked) sample from the instrumental signals or external-calibration-derived concentrations of the standard additions. Plot or subject data to linear regression of the corrected instrumental signals or external-calibration-derived versus the independent variable. Derive concentrations for unknowns using the internal calibration curve as if it were an external calibration curve.

* * *

[See Prior Text in 8.3-Toxicity Characteristic Leachate Procedure]

Chapter 51. Fee Schedules

§5125. Annual Monitoring and Maintenance Fee

* * *

[See Prior Text in A-B]

C. All annual fees provided by this Chapter shall be paid by the due date indicated on the invoice.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:533 (May 1985), LR 12:321 (May 1986), LR 12:676 (October 1986), LR 13:433 (August 1987), LR 15:378 (May 1989), LR 17:658 (July 1991), amended by the Department of Environmental Quality, Office of Management and Finance, Fiscal Services Division, LR 22:18 (January 1996).

§5127. Payment

All fee payments 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.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:533 (May 1985), LR 12:676 (October 1986), LR 18:725 (July 1992), amended by the Department of Environmental Quality, Office of Management and Finance, Fiscal Services Division, LR 22:18 (January 1996).

§5129. Late Payment

Fees not received within 15 days of the due date will be charged an additional 10 percent per month of the original assessed fee. The late fee shall be calculated starting from the due date indicated on the invoice.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 11:533 (May 1985), LR 12:676 (October 1986), LR 18:725 (July 1992), amended by the Department of Environmental Quality, Office of Management and Finance, Fiscal Services Division, LR 22:18 (January 1996).

§5141. Incinerator and Boiler/Industrial Furnace Inspection and Monitoring Fee

* * *

[See Prior Text in A-A.1]

2. This fee will be billed following completion of the trial burn or test burn and must be paid by the due date indicated on the invoice.

* * *

[See Prior Text in B]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2014 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR:16:1057 (December 1990), amended LR 18:1375 (December 1992), amended by the Department of Environmental Quality, Office of Management and Finance, Fiscal Services Division, LR 22:18 (January 1996).