ENVIRONMENTAL REGULATORY CODE

PART V. Hazardous Waste and Hazardous Materials

1995 MARCH SUPPLEMENT

EXPLANATORY NOTE:

In an attempt to better clarify which regulations are not being amended and remain as previously promulgated, we are using asterisks as shown in the following example:

§107. Benzene Storage

A. Applicability, Acceptability, and Designation of Sources

* * *

[See Prior Text in A.1 - 2]

3. This Section does not apply to storage vessels used for storing benzene at coke by-product facilities.

Authority Note: Promulgated in accordance with with R.S. 30:2014 et seq.
Historical Note: Promulgated by the Department of Environmental Qualtiy, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 19:1057 (October 1993).

This example shows the information currently located in A.1 - 2 remains unchanged.




Asterisks as shown below will only be used in definitions. The definitions have been placed in the regulations in alphabetical order.

§201. Definitions

***Btu*—British thermal unit.**

* * *

[See Prior Text]

***Hp*—horsepower**

This example shows the words defined between Btu and Hp remain unchanged.

Preface

This Supplement contains amendments to the 2nd edition of Part V. Hazardous Waste and Hazardous Materials, that became effective during the first quarter of 1995.

Linda F. Gipson, Editor
Environmental Regulatory Code

"This public document was published at a total cost of $ 13,710. One Thousand (1000) copies of this public document were published in this first printing at a cost of $ 6,550. The total cost of all printings of this document including reprints is $ 6,550. This document was published to provide a permanent record of the environmental regulations under the authority of R.S. 49:954.3. This material was printed in accordance with the standards for printing by state agencies established pursuant to R.S. 43:31 of the Louisiana Revised Statutes."

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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

§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.3]

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.

* * *

[See Prior Text in D.5-15.c]

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:

* * *

[See Prior Text in D.16.a-18]

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.

* * *

[See Prior Text in D.20-33.b]

c. non-wastewater 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

Constituent	Maximum for any single composite sample-TCLP (mg/l)
Generic Exclusion Levels for K061 and K062 Nonwastewater HTMR Residues	
Silver	0.30
Thallium	0.020
Zinc	70

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:

* * *

[See Prior Text in D.33.c.i-43.c]

d. source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended 42 U.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.

* * *

[See Prior Text in E-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 14:790-791 (November 1988), LR 15:181 (March 1989), LR 16:47 (January 1990), LR 16:217-218 (March 1990), LR 16:220 (March 1990), LR 16:398-399 (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), LR 19:1022 (August 1993), LR 21:266 (March 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]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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).

* * *

[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. 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, bonification, 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 non-excluded 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.

* * *

[See Prior Text in 2.b]

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.)

* * *

[See Prior Text in 2.d]

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.

* * *

[See Prior Text in 3-6.b]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

Pile—any non-containerized 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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

Solid Waste—

* * *

[See Prior Text in 1-4.a]

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 one 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).

* * *

[See Prior Text in 4.c-Storage Facility]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, in 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 14:790-791 (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), LR 19:626, LR 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 3. General Conditions for Treatment, Storage, and Disposal Facility Permits

§307. Effect of a Permit

A. Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with LAC 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 action plans and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

* * *

[See Prior Text in B-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 16:614 (July 1990), LR 17:658 (July 1991), LR 21:266 (March 1995).

§321. Modification of Permits

* * *

[See Prior Text in A-C.3.a.iii]

iv. provides the applicable information required by LAC 33:V.515—535, 537, 2707, and 3115.

* * *

[See Prior Text in C.3.b-C.5.d.ii.(a)]

(b). to allow treatment or storage in tanks, containers, or containment buildings in accordance with LAC 33:V.Chapter 22;

* * *

[See Prior Text in C.5.d.ii.(c)-C.7.a.iii]

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

* * *

[See Prior Text in C.7.a.v-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 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

* * *

[See Prior Text in A-B.1.b]

c. to incorporate changes associated with underlying hazardous constituents in ignitable or corrosive wastes.	[1]1
d. other changes.	2

* * *

[See Prior Text B.2-B.6.d]

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.

* * *

[See Prior Text in C-H.5.d]

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.

* * *

[See Prior Text in I-I.5.b]

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.

* * *

[See Prior Text in J-J.6.d]

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

* * *

[See Prior Text in Note-L.8]

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
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).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 5. Permit Application Contents

Subchapter C. Permit Applications: Parts I and II

§515. Part I Information Requirements

A. 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.

* * *

[See Prior Text in A.1-23]

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).

§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:

* * *

[See Prior Text in A-C]

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;

* * *

[See Prior Text in E-V]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et 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 1996).

Subchapter E. Specific Information Requirements

§525. Specific Part II Information Requirements for Surface Impoundments

Except as otherwise provided in LAC 33:V.105.D and 1501 and 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:

* * *

[See Prior Text in A]

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:

* * *

[See Prior Text in B.1]

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;

* * *

[See Prior Text in D-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).

§527. Specific Part II Information Requirements for Waste Piles

Except as otherwise provided in LAC 33:V.105.D, 1501, and 305.B and C, owners and operators of facilities that treat or store hazardous waste in waste piles must provide the following additional information:

* * *

[See Prior Text in A-C]

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;

* * *

[See Prior Text in C.2-D]

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.

* * *

[See Prior Text in F-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).

§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 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. 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:

* * *

[See Prior Text in B.1-C]

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.

* * *

[See Prior Text in E-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).

§535. Specific Part II Information Requirements for Commercial Boilers and Commercial Industrial Furnaces Burning Hazardous Waste for Energy or Material Recovery and not for Destruction

* * *

[See Prior Text in A-A.2.b.i]

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;

* * *

[See Prior Text in A.2.b.iv-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 15:737 (September 1989), amended LR 18:1375 (December 1992), LR 21:266 (March 1995).

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).

* * *

[See Prior Text in A-B.2.b.ii]

(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;

* * *

[See Prior Text in B.2.b.ii.(c)-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 15:737 (September 1989), amended LR 18:1375 (December 1992), LR 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 11. Generators

§1107. The Manifest System

* * *

[See Prior Text in A-A.8]

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.

* * *

[See Prior Text in B-D.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 12:319 (May 1986), LR 16:220 (March 1990), LR 17:362 (April 1991), LR 17:478 (May 1991), LR 21:267 (March 1995).

§1109. Pre-transport Requirements

* * *

[See Prior Text in A-E.1.c.i]

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.

* * *

[See Prior Text in E.2-7.d.iv.(c).(v)]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et 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 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 15. Treatment, Storage, and Disposal Facilities

§1501. Applicability

* * *

[See Prior Text in A-C.1]

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 LAC 33:V.4139, 4143, or 4145;

* * *

[See Prior Text in C.3-7]

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).

§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).

§1509. General Inspection Requirements

* * *

[See Prior Text in A-B.3]

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.

* * *

[See Prior Text in C-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 17:658 (July 1991), LR 18:1256 (November 1992), LR 21:266 (March 1995).

§1519. General Waste Analysis

* * *

[See Prior Text in A-C.2]

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.

* * *

[See Prior Text in 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 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 21:266 (March 1995).

§1529. Operating Record and Reporting Requirements

* * *

[See Prior Text in A-B.8]

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.

* * *

[See Prior Text in B.10-E.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 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 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 18. Containment Buildings

§1801. Applicability

A. 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 one 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).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 22. Prohibitions on Land Disposal

§2201. Purpose and Applicability

* * *

[See Prior Text in A-B]

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.

* * *

[See Prior Text in D-H.2]

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 one 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

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

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.

* * *

[See Prior Text]

AUTHORITY NOTE: Promulgated in accordance with R.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

* * *

[See Prior Text in A]

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.

* * *

[See Prior Text in A.3-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 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

* * *

[See Prior Text in A]

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).

§2219. Waste-specific Prohibitions - Third Wastes

List of wastes evaluated prior to January 1, 1991, to determine if they are inappropriate for land disposal.

* * *

[See Prior Text in A-G.1]

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.

* * *

[See Prior Text in J-O]

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

* * *

[See Prior Text in A-B]

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 and 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(e) 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

* * *

[See Prior Text in A]

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.

* * *

[See Prior Text in C-D]

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 those 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 No. 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

* * *

[See Prior Text in A-C.4]

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 21:266 (March 1995).

§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

* * *

[See Prior Text in A-B]

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.

* * *

[See Prior Text in D-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 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

§2237. Exemption for Surface Impoundments Treating Hazardous Waste

* * *

[See Prior Text in A-A.2.d]

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.

* * *

[See Prior Text in A.3-B]

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 compliance with the requirements of LAC 33:Chapter 43.E within 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).

§2242. Exemptions to Allow Land Disposal of a Prohibited Waste by Deep Well Injections

* * *

[See Prior Text in A-C.2.a]

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 engineer (PE) or by a master-level or senior-level Certified Hazardous Materials Manager (CHMM) who is in good standing with their professional organization.

* * *

[See Prior Text in C.3-D.3.c]

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.

* * *

[See Prior Text in E-G.2]

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.

* * *

[See Prior Text in I-Z]

AUTHORITY NOTE: Promulgated in accordance with R.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).

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 No. 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 No. 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.

* * *

[See Prior Text in B-B.1]

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 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 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.

* * *

[See Prior Text in C.1-1.a]

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;

* * *

[See Prior Text in C.1.c-D.3]

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:

* * *

[See Prior Text in E.1-J]

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 21:266-267 (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.

* * *

[See Prior Text in B-C]

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.

* * *

[See Prior Text in D.1]

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."

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:1057 (December 1990), amended LR 17:658 (July 1991), LR 21:266 (March 1995).

§2247. Owners or Operators of Treatment or Disposal Facilities: Testing, Waste Minimization, Recordkeeping, and Notice Requirements

* * *

[See Prior Text in A-A.3]

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.

* * *

[See Prior Text in C.1-G.3]

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.

AUTHORITY NOTE: Promulgated in accordance with R.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).

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]
* * * [See Prior Text in D001-D017]				
F001 - Spent halogenated solvents used in degreasing[e]	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]
	Trichloromono-fluoromethane	33	0.96	0.02[f]
F002 - Spent halogenated solvents[e]	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]
	* * * [See Prior Text]			
	Trichloroethylene	5.6	0.091	0.054[f]
	1,1,2-Trichloro-1,2,2-trifluoromethane	28	0.96	0.057[f]
	Trichloromono-fluoromethane	33	0.96	0.02[f]
F003 - Spent nonhalogenated solvents[e]	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[a]	Cresols (and cresylic acid)	—	0.75	2.82[f]
	Nitrobenzene	14	0.125	0.068[f]
F005 - Spent nonhalogenated solvents[a]	Benzene	3.7[g]	—	0.070
	Carbon disulfide	—	4.80	1.05[f]
* * * [See Prior Text]				
	Methyl ethyl ketone	36	0.75	0.28[f]
* * * [See Prior Text]				
	Pyridine	16	0.33	0.014[f]
	Toluene	28	0.33	0.08[f]
* * * [See Prior Text in F006-F028]				
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-ethyl-hexyl)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
	Xlyene(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-ethyl-hexyl)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	---
	* * * [See Prior Text in F039-K014]			
K015 - Still bottoms from the distillation of benzyl chloride	Anthracene	3.4[a]	---	0.059
	* * * [See Prior Text]			
	Sum of Benzo(b)fluor-anthene and Benzo(k) fluoranthene	3.4	---	0.055
	Phenanthrene	3.4[a]	---	0.059
	Toluene	6.0[a]	---	0.08
	* * * [See Prior Text]			
K016 - Heavy ends or distillation residues from the production of carbon tetrachloride	Hexachlorobenzene	28[a]	---	0.055[a]

	Hexachlorobutadiene	5.6[a]	---	0.055[a]
	Hexachlorocyclo-pentadiene	5.6[a]	---	0.057[a]
	Hexachloroethane	28[a]	---	0.055[a]
	Tetrachloroethane	6.0[a]	---	0.056[a]
	* * * [See Prior Text in K017]			
K018 - Heavy ends from the fractionation column in ethyl chloride production	Chloroethane	6.0[a]	---	0.27[a]
	Chloromethane	---	---	0.19[a]
	1,1-Dichloroethane	6.0[a]	---	0.059[a]
	1,2-Dichloroethane	6.0[a]	---	0.21[a]
	Hexachlorobenzene	28[a]	---	0.055[a]
	Hexachlorobutadiene	5.6[a]	---	0.055[a]
	Hexachloroethane	28[a]	---	0.055
	Pentachloroethane	5.6[a]	---	[c]
	1,1,1-Trichloroethane	6.0[a]	---	0.054[a]

	Hexachlorobutadiene	5.6[g]	---	0.055[g]
	Hexachlorocyclo-pentadiene	5.6[g]	---	0.057[g]
	Hexachloroethane	28[g]	---	0.055[g]
	Tetrachloroethane	6.0[g]	---	0.056[g]
	* * * [See Prior Text in K017]			
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]	---	[h]
	1,1,1-Trichloroethane	6.0[g]	---	0.054[g]

K019 - Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production	Chlorobenzene	6.0[a]	—	0.057[a]
	bis(2-Chloroethyl)ether	5.6[a]	—	0.033[a]
	Chloroform	6.0[a]	—	0.046[a]
	p-Dichlorobenzene	—	—	0.09[a]
	1,2-Dichloroethane	6.0[a]	—	0.21[a]
	Fluorene	—	—	0.059[a]
	Hexachloroethane	28[a]	—	0.055[a]
	Naphthalene	5.6[a]	—	0.059[a]
	Phenanthrene	5.6[a]	—	0.059[a]
	1,2,4,5-Tetrachlorobenzene	—	—	0.055[a]
	1,1,1-Trichloroethane	6.0[a]	—	0.54[a]
	Tetrachloroethene	6.0[a]	—	0.056[a]
	1,2,4-Trichlorobenzene	19[a]	—	0.055[a]
K020 - Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	1,2-Dichloroethane	6.0[a]	—	0.21[a]

	1,1,2,2-Tetrachloroethane	5.6[g]	---	0.057[g]
	Tetrachloroethene	6.0[g]	---	0.056[g]
* * * [See Prior Text in K021-K022]				
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]
* * * [See Prior Text in K025-K027]				
K028 - Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	1,1-Dichloroethane trans-1,2-	6.0[g]	---	0.059[g]
	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[a]	—	0.057[a]
	Tetracholorethylene	6.0[a]	—	0.056[a]
	1,1,1-Tricholorethane	6.0[a]	—	0.054[a]
	1,1,2-Trichloroethane	6.0[a]	—	0.054[a]
	• • • [See Prior Text in K029]			
K030 - Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	o-Dichlorobenzene	—	—	0.088[a]
	p-Dichlorobenzene	—	—	0.09[a]
	Hexachlorobutadiene	5.6[a]	—	0.055[a]
	Hexachloroethane	28[a]	—	0.055[a]
	• • • [See Prior Text]			
	Pentachloroethane	5.6[a]	—	—
	1,2,4,5-Tetrachlorobenzene	14[a]	—	0.055[a]
	Tetrachloroethene	6.0[a]	—	0.056[a]
	1,2,4-Trichlorobenzene	19[a]	—	0.055[a]

* * *				
[See Prior Text in K031-K042]				
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]
	Hexachlorodibenzo-furans	0.001[g]	—	0.000063[g]
	Pentachlorodibenzo-p-dioxins	0.001[g]	—	0.000063[g]
	Pentachlorodibenzo-furans	0.001[g]	—	0.000063[g]
	Tetrachlorodibenzo-p-dioxins	0.001[g]	—	0.000063[g]
	Tetrachlorodibenzo-furans	0.001[g]	—	0.000063[g]
* * *				
[See Prior Text in K044-K047]				

K048 - Dissolved air flotation (DAF) float from the petroleum refining industry	Benzene	14[a]	---	0.14[a]
	Benzo(a)pyrene	12[a]	---	0.061[a]
	Bis(2-ehylhexyl) phthalate	7.3[a]	---	0.28[a]
	Chrysene	15[a]	---	0.059[a]
	Di-n-butyl phthalate	3.6[a]	---	0.057[a]
	Ethylbenzene	14[a]	---	0.057[a]
	Fluorene	---	---	0.059[a]
	Naphthalene	42[a]	---	0.059[a]
	Phenanthrene	34[a]	---	0.059[a]
	Phenol	3.6[a]	---	0.039[a]
	Pyrene	36[a]	---	0.067[a]
	Toluene	14[a]	---	0.08[a]
	Xylene(s)	22[a]	---	0.32[a]
	Cyanides (Total)	1.8[a]	---	0.028[a]
	* * * [See Prior Text]			

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]
	* * * [See Prior Text]			

K050 - Heat exchanger bundle cleaning sludge from the petroleum refining industry	Benzo(a)pyrene	12[a]	—	0.061[a]
	Phenol	3.6[a]	—	0.039[a]
	* * * [See Prior Text]			
K051 - API separator sludge from the petroleum refining industry	Acenaphthene	—	—	0.059[a]
	Anthracene	28[a]	—	0.059[a]
	Benzene	14[a]	—	0.14[a]
	Benzo(a)anthracene	20[a]	—	0.059[a]
	Benzo(a)pyrene	12[a]	—	0.061[a]
	Bis(2-ethylhexyl) phthalate	7.3[a]	—	0.28[a]
	Chrysene	15[a]	—	0.059[a]
	Di-n-butyl phthalate	3.6[a]	—	0.057[a]
	Ethylbenzene	14[a]	—	0.057[a]
	Fluorene	—	—	0.059[a]
	Naphthalene	42[a]	—	0.059[a]

	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]
	* * * *[See Prior Text]			
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]	---	0.0110.11[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]
* * *[See Prior Text in K060]				
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[j]
	Selenium	—	0.16	0.046[j]
	Silver	—	0.3	0.055[j]
	Thallium	—	0.078	0.056[j]
	Zinc	—	5.3	0.054[j]
* * *[See Prior Text in K062-K086]				

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]
* * *[See Prior Text]				
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]
* * *[See Prior Text in K095-K106]				

K107 - Column bottoms from product separation from the production of 1,1-dimethylhydra-zine (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-dimethylhydra-zine (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-dimethylhydra-zine (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-dimethylhydra-zine (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.
K117 - Wastewater production from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethylene	Ethylene dibromide	15	—	0.028
	Methyl bromide	15	—	0.11
	Chloroform	5.6	—	0.046
K118 - Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromation of ethylene.	Ethylene dibromide	15	—	0.028
	Methyl bromide	15	—	0.11
	Chloroform	5.6	—	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	15	---	0.028
	Methyl bromide	15	---	0.11
	Chloroform	5.6	---	0.046
* * *[See Prior Text in P001-U027]				
U028 - Bis-(2-ethylhexyl) phthalate	Bis-(2-ethylhexyl) phthalate	28[a]	---	0.28[a]
* * *[See Prior Text in U029-U068]				
U069	Di-n-butyl phthalate	28[a]	---	0.057[a]
* * *[See Prior Text in U070-U087]				
U088 - Diethyl phthalate	Diethyl phthalate	28[a]	---	0.2[a]
* * *[See Prior Text in U089-U101]				
U102 - Dimethyl phthalate	Dimethyl phthalate	28[a]	---	0.047[a]
* * *[See Prior Text in U103-U106]				
U107 - Di-n-octyl phthalate	Di-n-octyl phthalate	28[a]	---	0.017[a]
* * *[See Prior Text in U108-U189]				
U190 - Phthalic anhydride	Phthalic anhydride (measured as phthalic acid)	28[a]	---	0.069[a]

* * *[See Prior Text in U191-U249]				
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-ethanol	2-ethoxy-ethanol	INCIN; or FSUBS.	—	INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN.

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		
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[5]. 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 five 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 five 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].
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		
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

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[4].	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 five 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 contaminents 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 STANDARDS

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)		
		Lead	57-12-5	1.8
		Mercury		
		Nickel		
		Selenium	7439-92-1	0.37
		Silver	7439-97-6	0.009
		Thallium	7440-02-0	5.0
		Zinc	7782-49-2	0.16
			7440-22-4	0.30
				0.078
			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		
		Mercury	7439-92-1	0.37
		Nickel	7439-97-6	0.009
		Selenium	7440-02-0	5.0
		Silver	7782-49-2	0.16
		Thallium	7440-22-4	0.30
		Zinc		0.078
			7440-66-6	5.3

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 23. Waste Piles

§2303. Design and Operating Requirements

* * *

[See Prior Text in A-B.4]

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 three feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-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 one 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 two 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 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.

K. 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 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).

§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 exceedance 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).

§2309. Monitoring and Inspection

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[See Prior Text in A-B.4]

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).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 25. Landfills

§2503. Design and Operating Requirements

* * *

[See Prior Text in A-B]

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 must 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 five 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 five 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. non-halogenated 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 non-halogenated 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 commenced 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 three feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-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 ft (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 two 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—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 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.).

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.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).

§2507. Monitoring and Inspection

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[See Prior Text in A-C.4]

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).

§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 (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 non-containerized 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 No. 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, in LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 21:266 (March 1995).

§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:

* * *

[See Prior Text in A]

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;

* * *

[See Prior Text in D-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, in LR 10:200 (March 1984), amended LR 16:1057 (December 1990), LR 21:266 (March 1995).

§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.Chapter 43;

* * *

[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 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 26. Corrective Action Management Units and Temporary Units

§2601. 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, in 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 department-initiated permit modifications under LAC 33: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, in LR 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
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Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 28. Drip Pads

§2805. Design and Operating Requirements

* * *

[See Prior Text in A-Note]

B. A new drip pad or an existing drip pad, after the deadline established in LAC 33:V.2803.B must have:

* * *

[See Prior Text in B.1-D]

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.

* * *

[See Prior Text in F-L]

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:.

* * *

[See Prior Text in M.1-O]

AUTHORITY NOTE: Promulgated in accordance with R.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).

§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).

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ENVIRONMENTAL QUALITY
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Chapter 29. Surface Impoundments

§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.]

* * *

[See Prior Text in A-B.4]

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 1×10^{-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 two percent or more;

b. constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-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 3×10^{-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 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 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 21:266 (March 1995), LR 21:267 (March 1995).

§2904. 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).

§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).

Title 33
ENVIRONMENTAL QUALITY
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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.

* * *

[See Prior Text B]

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;

* * *

[See Prior Text in B.2]

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 39; and

* * *

[See Prior Text in B.4-C]

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):

* * *

[See Prior Text in C.1.a-a.iv]

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

* * *

[See Prior Text in C.1.c-C.2]

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.

* * *

[See Prior Text In D-E]

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

* * *

[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 and 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 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

* * *

[See Prior Text in A-B]

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.

* * *

[See Prior Text in B.2-E.6.b.ii.(a)]

(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

* * *

[See Prior Text in E.6.b.iii-d.i]

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 compliance testing for metal emissions.

* * *

[See Prior Text in E.6.d.iii-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 closure of the facility.

* * *

[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).

§3007. Interim Status Standards for Burners

* * *

[See Prior Text in A-A.2]

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.

* * *

[See Prior Text in A.4.a-4.h]

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:

* * *

[See Prior Text in A.5.a.-5.a.iii]

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.

* * *

[See Prior Text in A.5.b]

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.

* * *

[See Prior Text in A.7-B.2.a.v]

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:

* * *

[See Prior Text in B.2.b.i-iv]

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);

* * *

[See Prior Text in B.2.d-3.b.i]

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

* * *

[See Prior Text in B.3.b.iii-d]

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.

* * *

[See Prior Text in B.4-5.a]

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

* * *

[See Prior Text in B.5.a.ii-5.b.ii.(a)]

(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.

* * *

[See Prior Text in B.5.c]

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:

* * *

[See Prior Text in B.6.a-g]

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;

* * *

[See Prior Text in B.6.i-B.9]

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:

* * *

[See Prior Text in C.1.a-b]

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.

* * *

[See Prior Text in C.1.b.ii-iii]

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;

* * *

[See Prior Text in C.1.d-e]

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;

* * *

[See Prior Text in C.1.g]

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:

* * *

[See Prior Text in C.1.i.i-C.3]

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.

* * *

[See Prior Text in C.3.b-4.d.iii.(b).(i)]

(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 1-hour block average is the arithmetic mean of the 1-minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour; and

* * *

[See Prior Text in C.4.d.iii.(c)-4.e]

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 of LAC 33:V.3009.F and requesting a time extension under LAC 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.

* * *

[See Prior Text in C.6-7.a.i]

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 23, 1993; or

* * *

[See Prior Text in C.7.a.iii-7.b.i]

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:

* * *

[See Prior Text in C.7.b.ii.(a)-D]

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.

* * *

[See Prior Text in F-J.4]

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.

* * *

[See Prior Text in L]

[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, amended LR 18:1375 (December 1992), 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:

* * *

[See Prior Text in A-A.1]

$$DRE = \left[1 - \frac{W_{out}}{W_{in}}\right] x\ 100$$

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.

* * *

[See Prior Text in A.2-B.1]

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.

* * *

[See Prior Text in B.3-C.2]

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.

* * *

[See Prior Text in C.4-E]

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;

* * *

[See Prior Text in E.2-4]

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.

* * *

[See Prior Text in F.2-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, amended LR 18:1375 (December 1992), LR 21:266 (March 1995).

§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).

* * *

[See Prior Text in B-B.2]

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".

* * *

[See Prior Text in B.2.b-B.2.b.i]

ii. an averaging period of 2 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.

* * *

[See Prior Text in B.3-6]

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:

* * *

[See Prior Text in B.7.a-8]

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.

* * *

[See Prior Text in C.1]

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".

* * *

[See Prior Text in C.3-C.5.c]

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.

* * *

[See Prior Text in D.2]

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

* * *

[See Prior Text in D.4]

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.

* * *

[See Prior Text in D.6]

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.

* * *

[See Prior Text in F-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 18:1375 (December 1992), amended LR 21:266 (March 1995).

§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.

* * *

[See Prior Text in B-B.1]

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.

* * *

[See Prior Text in B.3-D.2]

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.

* * *

[See Prior Text in F-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 18:1375 (December 1992), amended LR 21:266 (March 1995).

§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:

* * *

[See Prior Text in A.1-Table]

2. the maximum hazardous waste firing rate does not exceed at any time one 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;

* * *

[See Prior Text in A.3-B]

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:

$$\sum_{i=1}^{n} \frac{Actual\ Quantity\ Burned_{(i)}}{Allowable\ Quantity\ Burned_{(i)}} \leq 1.0$$

* * *

[See Prior Text in where:-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).

§3019. Low Risk Waste Exemption

* * *

[See Prior Text in A-A.1]

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;

* * *

[See Prior Text in A.1.b-2.c.ii]

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.

* * *

[See Prior Text in B-B.1]

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;

* * *

[See Prior Text in B-F.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 18:1375 (December 1992), amended LR 21:266 (March 1995).

§3023. Standards for Direct Transfer

* * *

[See Prior Text in A-D.1]

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—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

* * *

[See Prior Text in D.3-E.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 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:

* * *

[See Prior Text in A]

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;

* * *

[See Prior Text in A.2-B]

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*p1620Xbad or statistically-derived concentrations of toxic constituents i 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

* * *

[See Prior Text in B.2]

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 40 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

* * *

[See Prior Text in B.2.b]

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; and

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:

* * *

[See Prior Text in C.1-2.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 18:1375 (December 1992), amended LR 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 33. Groundwater Protection

§3322. Corrective Action

* * *

[See Prior Text in A]

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.

* * *

[See Prior Text in 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 16:614 (July 1990), LR 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 35. Closure and Post-closure

§3501. Applicability

* * *

[See Prior Text in A-C]

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).

§3507. Closure Performance Standards

Pursuant to LAC 33:V.3509, the owner or operator must close his facility in a manner that:

* * *

[See Prior Text in A-B]

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).

§3511. Closure Plan; Amendment of Plan

* * *

[See Prior Text in A-A.1]

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.

* * *

[See Prior Text in B-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 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), LR 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 37. Financial Requirements

§3701. Applicability

* * *

[See Prior Text in A-B.1]

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).

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—3517 and applicable closure requirements in LAC 33:V.1803, 1915, 2117, 2315, 2521, 2719, 2911, 3121, and 3203—3207.

* * *

[See Prior Text in A.1-D]

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Subchapter F. Financial and Insurance Instruments

§3719. Wording of the Instruments

* * *

[See Prior Text in A-I.1.b.iii]

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.

* * *

[See Prior Text in I.1.b.v-J.2.c]

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.

* * *

[See Prior Text in J.2.e-N.2]

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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), 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).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality-Hazardous Waste

Chapter 40. Used Oil

§4001. 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 non-earthen 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 one 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 one 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 used oil is generated on-site and is not being sent off-site to a burner 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 unless the presumption is rebutted. However, the rebuttable presumption does not apply to certain metalworking oils/fluids and certain used oils removed from refrigeration units.

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§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 Tanks (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.

AUTHORITY NOTE: Promulgated in accordance with R.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).

§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.

AUTHORITY NOTE: Promulgated in accordance with R.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).

§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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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

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.

AUTHORITY NOTE: Promulgated in accordance with R.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).

§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.

AUTHORITY NOTE: Promulgated in accordance with R.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).

§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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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266-267 (March 1995).

§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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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§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/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 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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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

§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 tanks, whether or not the used oil exhibits any characteristics of 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 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 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.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266-267 (March 1995).

§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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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266-267 (March 1995).

§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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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995).

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 meets 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.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.
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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-reners 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 more fully spelled out in LAC 33:V.4045.B.6. Applicable responsibilities 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 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-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.

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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).

§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 Tanks (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.

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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).

§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.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266-267 (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.

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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).

§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.

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266-267 (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 surface 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 storage 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 21:266-267 (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 H. 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 used 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 meets 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 21:266-267 (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 LAC 33:V.4087.A must be maintained for three years from the 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 I. 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).

Subchapter J. Standards for Use as a Dust Suppressant and Disposal of Used Oil

§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 21:266-267 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 41. Recyclable Materials

§4105. Requirements for Recyclable Material

Recyclable materials are subject to additional regulation as follows:

* * *

[See Prior Text in A-B.2]

3. Reserved

* * *

[See Prior Text in B.4-C.2]

3. recyclable materials from which precious metals are reclaimed; and

4. spent lead-acid batteries that are being reclaimed.

* * *

[See Prior Text in D-D.2.d.iii]

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 16:219-220 (March 1990), LR 17:362 (April 1991), repromulgated LR 18:1256 (November 1992), amended LR 18:1375 (December 1992), LR 21:266 (March 1995).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality — Hazardous Waste

Chapter 43. Interim Status

§4301. Purpose and Applicability

* * *

[See Prior Text in A-B.2]

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.

* * *

[See Prior Text in D-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 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 21:266 (March 1995).

§4303. Changes During Interim Status

* * *

[See Prior Text in A-B.5]

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.

* * *

[See Prior Text in B.7]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et 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).

Subchapter A. General Facility Standards

§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. 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).

§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).

§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)

§4357. Operating Record

* * *

[See Prior Text in A-B.5]

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;

* * *

[See Prior Text B.7-14]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et 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 21:266 (March 1995).

§4369. Groundwater Monitoring System

* * *

[See Prior Text in A-A.2]

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.

* * *

[See Prior Text in B-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 21:266 (March 1995).

Subchapter F. Closure and Post-closure

§4377. Applicability

Execept as LAC 33:V.105.D provides otherwise:

* * *

[See Prior Text in A]

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:

* * *

[See Prior Text in A-B]

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 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

* * *

[See Prior Text in A-D.1]

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.

* * *

[See Prior Text in D.3-3.b]

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.

* * *

[See Prior Text in 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 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:

* * *

[See Prior Text in A.1-3]

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:

* * *

[See Prior Text in B.1-E.7.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 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 21:266 (March 1995).

Subchapter G. Financial Requirements

§4397. Applicability

* * *

[See Prior Text in A]

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.

* * *

[See Prior Text in 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 13:433 (August 1987), LR 13:651 (November 1987), LR 21:266 (March 1995).

§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 through 4395 and applicable closure requirements in LAC 33:V.2117, 1911, 4457, 4489, 4501, 4521, 4531, 4543, and 4705.

* * *

[See Prior Text in A.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 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).

§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).

§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

* * *

[See Prior Text in A-B.1]

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).

Subchapter J. Surface Impoundments

§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."

* * *

[See Prior Text in B]

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.

* * *

[See Prior Text in D-E]

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 two feet (60 cm) of freeboard.

G. A freeboard level less than two 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 21:266 (March 1995).

§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)

§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)

§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)

§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).

§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)

§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.

* * *

[See Prior Text in B-B.2]

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.

* * *

[See Prior Text in C-D]

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;

* * *

[See Prior Text in D.2]

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 damaging 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 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.

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)

Subchapter M. Landfills

§4507. Special Requirements for Liquid Waste

A. Bulk or non-containerized 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 non-containerized 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).

§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:

* * *

[See Prior Text in A]

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.4321.B;

* * *

[See Prior Text in D-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 16:1057 (December 1990), LR 18:723 (July 1992), LR 21:266 (March 1995).

§4512. Design 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".

* * *

[See Prior Text in B]

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.

* * *

[See Prior Text in D]

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.

* * *

[See Prior Text in D.2-E]

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 21:266 (March 1995).

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).

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.4593.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 one 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 (in 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 7 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).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 49. Lists of Hazardous Wastes

§4901. Category I Hazardous Wastes

* * *

[See Prior Text in A-B.3.a]

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 waste 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
* * * [See Prior Text]		
Organic Chemicals		
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.
* * * [See Prior Text]		

TABLE 2. HAZARDOUS WASTES FROM SPECIFIC SOURCES		
Industry and EPA Hazardous Waste No.	Hazard Code	Hazardous Waste
Coking		
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.

* * *

[See Prior Text in D-G]

TABLE 6.

Table of Constituents that Serve as a Basis for Listing Hazardous Waste

* * *

[See Prior Text in F001-K136]

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

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

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 17:268 (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 21:266 (March 1995).

* * *

[See Prior Text in Appendices A-C]

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.

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
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Chapter 51. Fee Schedules

§5136. Manifest Form Fee

These fees cover the costs associated with printing, handling, data entry, and other administrative activities.

A. The fee for manifest forms acquired according to LAC 33:V.1107.A.9 and LAC 33:V.Chapter 40 shall be $1.50 per form.

B. The fee for continuation sheets acquired according to LAC 33:V.1107.A.9 shall be $2.50 per form.

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 21:267 (March 1995).