

**RULE**

**Department of Environmental Quality  
Office of Solid and Hazardous Waste  
Hazardous Waste Division**

**EPA Documents**

(LAC 33:V.Chapters 1, 3, 5, 11, 15, 17,  
19, 22, 25, 30, 31, 40, 43, and 49)(HW053)

Under the authority of the Louisiana Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950, et seq., the secretary has amended the Hazardous Waste Division regulations, LAC 33:V.Chapters 1, 3, 5, 11, 15, 17, 19, 22, 25, 30, 31, 40, 43, and 49 (HW053).

This rule adopts EPA guidance documents by reference, adopts 40 CFR 266.Appendices relating to boilers and industrial furnaces by reference, and refers to the EPA publication SW-846 for TCLP, Chemical Analysis Test Methods, Method of Analysis for Chlorinated Dibenzo-p-dioxins and Dibenzofurans, and Extraction Toxicity Test.

These revisions are being made to maintain authorization from the Environmental Protection Agency to manage the Hazardous Waste Program. These revisions will also provide consistency between the state regulations and the federal regulations.

This rule is identical to a federal law or regulation which is applicable in Louisiana, therefore, no fiscal or economic impact will result from the proposed rule. The rule is being promulgated in accordance with R.S. 49:953(F)(3) and (4).

**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 this Section.

\* \* \*

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

c. comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication Number SW-846, as incorporated by reference at LAC 33:V.110;

\* \* \*

[See Prior Text in I.2.d-M.3.a]

i. does not contain the constituent or constituents (as defined in LAC 33:V.4901.G.Table 6) that caused the

administrative authority to list the waste, using the appropriate test methods prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110; or

\* \* \*

[See Prior Text in M.3.a.ii-10]

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

**HISTORICAL NOTE:** Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790 (November 1988), LR 15:181 (March 1989), LR 16:47 (January 1990), LR 16:217 (March 1990), LR 16:220 (March 1990), LR 16:398 (May 1990), LR 16:614 (July 1990), LR 17:362 (April 1991), LR 17:368 (April 1991), LR 17:478 (May 1991), LR 17:883 (September 1991), LR 18:723 (July 1992), LR 18:1256 (November 1992), LR 18:1375 (December 1992), amended by the Office of the Secretary, LR 19:1022 (August 1993), amended by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 21:944 (September 1995), LR 22:813 (September 1996).

**§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]

*Sorbent*—a material that is used to soak up free liquids by either adsorption or absorption, or both. Sorb means to either adsorb or absorb, or both.

\* \* \*

[See Prior Text]

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

**HISTORICAL NOTE:** Promulgated by the Department of Environmental Quality, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790 (November 1988), LR 15:378 (May 1989), LR 15:737 (September 1989), LR 16:47 (January 1990), LR 16:220 (March 1990), LR 16:399 (May 1990), LR 16:614 (July 1990), LR 16:683 (August 1990), LR 17:362 (April 1991), LR 17:478 (May 1991), LR 18:723 (July 1992), LR 18:1375 (December 1992), repromulgated LR 19:626 (May 1993), amended LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:266 (March 1995), LR 21:944 (September 1995), LR 22:814 (September 1996).

**§110. References**

A. When used in LAC 33:V the following publications are incorporated by reference:

1. "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester," ASTM Standard D-3278-78, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;
2. "ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester," ASTM Standard D-93-79 or D-93-80. D-93-80 is available from American Society for Testing and Materials, 1916 Race Street, Philadelphia,

PA 19103;

3. "ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography," ASTM Standard D 1946-82, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;

4. "ASTM Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method)," ASTM Standard D 2382-83, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;

5. "ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," ASTM Standard E 169-87, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;

6. "ASTM Standard Practices for General Techniques of Infrared Quantitative Analysis," ASTM Standard E 168-88, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;

7. "ASTM Standard Practice for Packed Column Gas Chromatography," ASTM Standard E 260-85, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;

8. "ASTM Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography," ASTM Standard D 2267-88, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;

9. "APTI Course 415: Control of Gaseous Emissions," EPA Publication EPA-450/2-81-005, December 1981, available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161;

10. "Flammable and Combustible Liquids Code" (1977 or 1981), available from the National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210;

11. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 [Third Edition (November, 1986), as amended by Updates I (July, 1992), II (September, 1994), IIA (August, 1993), and IIB (January, 1995)]. The Third Edition of SW-846 and Updates I, II, IIA, and IIB (document number 955-001-00000-1) are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800. Copies may be inspected at the Library, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460;

12. "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, EPA Publication Number EPA-450/R-92-019, Environmental Protection Agency, Research Triangle, Park, NC;

13. "ASTM Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," ASTM Standard E 926-88, Test Method C—Bomb, Acid Digestion Method, available from American Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19103;

14. API Publication 2517, Third Edition, February

1989, "Evaporative Loss from External Floating-Roof Tanks," available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, DC 20005; and

15. "ASTM Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope," ASTM Standard D 2879-92, available from American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, Pennsylvania 19103.

0010	Modified Method 5 Sampling Train
0020	Source Assessment Sampling System (SASS)
0030	Volatile Organic Sampling Train
1320	Multiple Extraction Procedure
1330	Extraction Procedure for Oily Wastes
3611	Alumina Column Cleanup and Separation of Petroleum Wastes
5040	Protocol for Analysis of Sorbent Cartridges from Volatile Organic Sampling Train
6010	Inductively Coupled Plasma Atomic Emission Spectroscopy
7090	Beryllium (AA, Direct Aspiration)
7091	Beryllium (AA, Furnace Technique)
7198	Chromium, Hexavalent (Differential Pulse Polarography)
7210	Copper (AA, Direct Aspiration)
7211	Copper (AA, Furnace Technique)
7380	Iron (AA, Direct Aspiration)
7381	Iron (AA, Furnace Technique)
7460	Manganese (AA, Direct Aspiration)
7461	Manganese (AA, Furnace Technique)
7550	Osmium (AA, Direct Aspiration)
7770	Sodium (AA, Furnace Technique)
7840	Thallium (AA, Direct Aspiration)
7841	Thallium (AA, Furnace Technique)
7910	Vanadium (AA, Direct Aspiration)
7911	Vanadium (AA, Furnace Technique)
7950	Zinc (AA, Direct Aspiration)
7951	Zinc (AA, Furnace Technique)
9022	Total Organic Halides (TOX) by Neutron Activation Analysis
9035	Sulfate (Colorimetric, Automated, Chloranilate)
9036	Sulfate (Colorimetric, Automated, Methylthymol Blue, AA II)
9038	Sulfate (Turbidimetric)
9060	Total Organic Carbon
9065	Phenolics (Spectrophotometric, Manual 4-AAP with Distillation)

9066*	Phenolics (Colorimetric, Automated, 4-AAP with Distillation)
9067	Phenolics (Spectrophotometric, MBTH with Distillation)
9070	Total Recoverable Oil and Grease (Gravimetric, Separatory Funnel Extraction)
9071	Oil and Grease Extraction Method for Sludge Samples
9080	Cation-Exchange Capacity of Soils (Ammonium Acetate)
9081	Cation-Exchange Capacity of Soils (Sodium Acetate)
9100	Saturated Hydraulic Conductivity, Saturated Leachate Conductivity, and Intrinsic Permeability
9131	Total Coliform: Multiple Tube Fermentation Technique
9132	Total Coliform: Membrane Filter Technique
9200	Nitrate
9250	Chloride (Colorimetric, Automated Ferricyanide AAI)
9251	Chloride (Colorimetric, Automated Ferricyanide AAI)
9252	Chloride (Titrimetric, Mercuric Nitrate)
9310	Gross Alpha and Gross Beta
9315	Alpha-Emitting Radium Isotopes
9320	Radium-228

\* When Method 9066 is used it must be preceded by the manual distillation specified in procedure 7.1 of Method 9065. Just prior to distillation in Method 9065, adjust the sulfuric acid-preserved sample to pH 4 with 1 + 9 NaOH. After the manual distillation is completed, the autoanalyzer manifold is simplified by connecting the resample line directly to the sampler.

B. The references listed in Subsection A of this Section are also available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. These materials are incorporated as they exist on the date that this rule is promulgated and a notice of any change in these materials will be published in the *Louisiana Register*.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 22:814 (September 1996).

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

**§322. Classification of Permit Modifications**

The following is a listing of classifications of permit modifications made at the request of the permittee.

Modifications	Class
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\* \* \*

[See Prior Text in A-K.18]

L. Incinerators, Boilers, and Industrial Furnaces

1. Changes to increase by more than 25 percent any of the following limits authorized in the permit: a thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

3

2. Changes to increase by up to 25 percent any of the following limits authorized in the permit: a thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

2

3. Modification of an incinerator, boiler, or industrial furnace unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HCl/Cl<sub>2</sub>, metals, or particulate from the combustion gases, or by changing other features of the incinerator, boiler, or industrial furnace that could affect its capability to meet the regulatory performance standards. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

3

4. Modification of an incinerator, boiler, or industrial furnace unit in a manner that would not be likely to affect the capability of the unit to meet the regulatory performance standards but that would change the operating conditions or monitoring requirements specified in the permit. The administrative authority may require a new trial burn to demonstrate compliance with the regulatory performance standards.

2

5. Operating requirements:  
a. modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, or oxygen concentration in the secondary combustion chamber, flue gas carbon monoxide and hydrocarbon concentration, maximum temperature at the inlet to the particulate matter emission control system, or operating parameters for the air pollution control system. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

\* \* \*

[See Prior Text in L.5.b-c]

6. Burning of different wastes:

a. if the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit. The administrative authority will require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

b. if the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit.

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 L.7-7.a]

b. authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction, with the prior approval of the administrative authority.

\* \* \*

[See Prior Text in L.7.c-d]

8. Substitution of an alternate type of nonhazardous waste fuel that is not specified in the permit.

\* \* \*

[See Prior Text in M-N.2]

<sup>1</sup> Class 1 modifications requiring prior administrative authority approval.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:433 (August 1987), LR 16:614 (July 1990), LR 17:658 (July 1991), LR 21:266 (March 1995), LR 21:944 (September 1995), LR 22:815 (September 1996).

**Chapter 5. Permit Application Contents**  
**Subchapter E. Specific Information Requirements**  
**§529. Specific Part II Information Requirements for Incinerators**

Except as LAC 33:V.Chapter 31 provides otherwise, owners and operators of facilities that incinerate hazardous waste must fulfill the requirements of Subsection A, B, or C of this Section.

\* \* \*

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

c. an identification of any hazardous organic constituents listed in Table 1, LAC 33:V.Chapter 31, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Table 1, LAC 33:V.Chapter 31, which would reasonably not be expected to be found in the waste; the constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, or their equivalent.

d. an approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110;

\* \* \*

[See Prior Text in C.1.e-D.2]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:280 (April 1984), LR 22:817 (September 1996).

**§530. Specific Part II Information Requirements for Process Vents**

Except as otherwise provided in LAC 33:V.1501, owners and operators of facilities that have process vents to which LAC 33:V.Chapter 17, Subchapter A applies must provide the following additional information:

\* \* \*

[See Prior Text in A-D.2]

3. a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," as incorporated by reference at LAC 33:V.110, or other engineering texts acceptable to the administrative authority that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in LAC 33:V.1713.B.4.a;

\* \* \*

[See Prior Text in D.4-5]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 18:1256 (November 1992), LR 22:817 (September 1996).

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

\* \* \*

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

v. documentation that the maximum annual average ground level concentration of each constituent identified in Subsection A.2.b.ii of this Section quantified in conformance with Subsection A.2.b.iv of this Section does not exceed the allowable ambient level established in 40 CFR 266, appendices IV or V, as adopted and amended at LAC 33:V.Chapter 30, Appendices D and E. The acceptable ambient concentration for emitted constituents for which a specific Reference Air Concentration has not been established in 40 CFR 266, Appendix IV, as adopted and amended at LAC 33:V.Chapter 30, Appendix D or Risk-Specific Dose has not been established in 40 CFR 266, Appendix V, as adopted at LAC 33:V.Chapter 30, Appendix E, is 0.1 micrograms per cubic meter, as noted in the footnote to 40 CFR 266, Appendix IV, as adopted and amended at LAC 33:V.Chapter 30, Appendix D.

\* \* \*

[See Prior Text in A.3-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), LR 22:817 (September 1996).

**§536. Specific Part II Information Requirements for Equipment**

Except as otherwise provided in LAC 33:V.1501, owners and operators of facilities that have equipment to which LAC 33:V.Chapter 17, Subchapter B applies must provide the following additional information.

\* \* \*

[See Prior Text in A-E.2]

3. a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," as incorporated by reference at LAC 33:V.110, or other engineering texts acceptable to the administrative authority that present basic control device design information. The design analysis shall address the vent stream characteristics and control device operation parameters as specified in LAC 33:V.1713.B.4.c;

\* \* \*

[See Prior Text in E.4-5]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 18:1256 (November 1992), LR 22:817 (September 1996).

**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, that are present in the feed stream, except that the applicant need not analyze for constituents listed in Table 1 that would reasonably not be expected to be found in the hazardous waste. The constituents excluded from analysis must be identified and the basis for this exclusion explained. The waste analysis must be conducted in accordance with analytical techniques specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, or an equivalent method;

(b). an approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by the analytical methods specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, or an equivalent method;

\* \* \*

[See Prior Text in B.2.b.ii.(c)-3.b]

4. Final Permit. For the final period of operation, the administrative authority will develop operating requirements in conformance with LAC 33:V.3005.E that reflect conditions in the trial burn plan and are likely to ensure compliance with the performance standards of LAC 33:V.3009-3015. Based on the trial burn results, the administrative authority will modify the permit as necessary to ensure compliance with the performance standards of LAC 33:V.3009-3015. The permit modification shall proceed according to LAC 33:V.321.

\* \* \*

[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 15:737 (September 1989), amended LR 18:1375 (December 1992), LR 21:266 (March 1995), LR 22:818 (September 1996).

**Chapter 11. Generators**

**§1103. Hazardous Waste Determination**

A person who generates a solid waste, as defined in LAC 33:V.109, must determine if that waste is a hazard.

\* \* \*

[See Prior Text in A-B]

1. testing the waste according to the methods set forth in the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, or according to an equivalent method approved by the administrative authority; or

\* \* \*

[See Prior Text in B.2-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 15:378 (May 1989), LR 17:658 (July 1991), LR 22:818 (September 1996).

## **Chapter 15. Treatment, Storage, and Disposal Facilities**

### **§1519. General Waste Analysis**

\* \* \*

[See Prior Text in A-B.1]

2. the test methods as specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, or an equivalent method approved by the administrative authority, which will be used to test for these parameters; and

\* \* \*

[See Prior Text in B.3-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 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:266 (March 1995), LR 21:1334 (December 1995), LR 22:818 (September 1996).

## **Chapter 17. Air Emission Standards**

### **Subchapter A. Process Vents**

#### **§1711. Test Methods and Procedures**

\* \* \*

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

c. Each sample shall be analyzed, and the total organic concentration of the sample shall be computed using Method 9060 or 8240 of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

\* \* \*

[See Prior Text in D.1.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 17:658 (July 1991), amended LR 20:1000 (September 1994), LR 22:818 (September 1996).

#### **§1713. Recordkeeping Requirements**

\* \* \*

[See Prior Text in A-B.4.b]

c. if engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," as incorporated by reference at LAC 33:V.110, or other engineering texts acceptable to the administrative authority that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with LAC 33:V.1713.B.4.c.i-vii may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below;

\* \* \*

[See Prior Text in B.4.c.i-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 17:658 (July 1991), amended LR 18:723 (July 1992), LR 20:1000 (September 1994), LR 22:818 (September 1996).

### **Subchapter B. Equipment Leaks**

#### **§1741. Test Methods and Procedures**

\* \* \*

[See Prior Text in A-D]

1. methods described in ASTM Methods D 2267-88, E 169-87, E 168-88, E 260-85, as incorporated by reference at LAC 33:V.110;

2. method 9060 or 8240 of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110; or

\* \* \*

[See Prior Text in D.3-G]

H. To determine whether pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D-2879-86, as incorporated by reference at LAC 33:V.110.

\* \* \*

[See Prior Text in 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 17:658 (July 1991), amended LR 20:1000 (September 1994), LR 22:819 (September 1996).

## **Chapter 19. Tanks**

### **§1901. Applicability**

The requirements of this Chapter apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste except as otherwise provided in Subsections A and B of this Section or LAC 33:V.105.D.

A. Tank systems that are used to store or treat hazardous waste that contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements of LAC 33:V.1907. To demonstrate the absence or presence of free liquids in the stored/treated waste, the following test method must be used: EPA Method 9095 (Paint Filter Liquids) as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

\* \* \*

[See Prior Text in B-D]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 16:614 (July 1990), LR 18:1375 (December 1992), LR 22:819 (September 1996).

**§1917. Special Requirements for Ignitable or Reactive Wastes**

\* \* \*

[See Prior Text in A-A.3]

B. The owner or operator of a facility where ignitable or reactive waste is stored or treated in a tank must comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981), as incorporated by reference at LAC 33:V.110.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 13:651 (November 1987), LR 22:819 (September 1996).

**Chapter 22. Prohibitions on Land Disposal**

**Subchapter A. Land Disposal Restrictions**

**§2213. Waste-specific Prohibitions - California List Wastes**

\* \* \*

[See Prior Text in A-E]

F. To determine whether or not a waste is a liquid under Subsections A and C of this Section, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication Number SW-846, as incorporated by reference at LAC 33:V.110.

\* \* \*

[See Prior Text in G-G.3]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 22:22 (January 1996), LR 22:819 (September 1996).

**§2223. Applicability of Treatment Standards**

\* \* \*

[See Prior Text in A-A.3]

B. For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004-D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the Test Method 1311, the Toxicity Characteristic Leaching Procedure as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, must be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311 or Method 1310, the Extraction Procedure Toxicity Test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the administrative authority under the procedures set forth in LAC 33:V.2227.

\* \* \*

[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 15:378 (May 1989), amended LR

16:1057 (December 1990), LR 17:658 (July 1991), LR 21:266 (March 1995), LR 22:22 (January 1996), LR 22:819 (September 1996).

**§2225. Treatment Standards Expressed as Concentrations in Waste Extract**

A. LAC 33:V.Chapter 22.Table 2 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 Toxicity Characteristic Leaching Procedure as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, for the allowable land disposal of such wastes.

\* \* \*

[See Prior Text in B]

C. The treatment standards for F001-F005 nonwastewater constituents carbon disulfide, cyclohexanone, and/or methanol apply to wastes that contain only one, two, or three of these constituents. Compliance is measured for these constituents in the waste extract from test Method 1311, the Toxicity Characteristic Leaching Procedure as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110. If the waste contains any of these three constituents along with any of the other 25 constituents found in F001-F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, and/or methanol are not required.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:1057 (December 1990), LR 21:266 (March 1995), LR 22:22 (January 1996), LR 22:820 (September 1996).

**§2245. Generators' Waste Analysis, 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 using Method 1311, the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, 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 Method 1311, the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, 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 exhibits the characteristic of ignitability (D001) (and is not in the High TOC Ignitable Liquids Subcategory or is not treated by CMBST or RORGS of Table 3 of this Chapter), or the

characteristic of corrosivity (D002), and the waste is prohibited under LAC 33:V.2221, and/or the characteristic of organic toxicity (D012-D043), and is prohibited under LAC 33:V.2221.E, the generator must determine the underlying hazardous constituents, as defined in LAC 33:V.2203, in the D001, D002, or D012-D043 waste.

\* \* \*

[See Prior Text in B-E.3]

F. If a generator determines whether the waste is prohibited solely on the basis of his or her knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines whether the waste is prohibited on the basis of tests of this waste or an extract developed using the Toxicity Characteristic Leaching Procedure and test methods in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, all waste analysis data must be retained on-site in the generator's files.

\* \* \*

[See Prior Text in G-K]

AUTHORITY NOTE: Promulgated in accordance with R.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), LR 21:1334 (December 1995), LR 22:22 (January 1996), LR 22:820 (September 1996).

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

\* \* \*

[See Prior Text in A]

1. For wastes with treatment standards expressed as concentrations in the waste extract (LAC 33:V.2225), the owner or operator of the treatment facility must test the treatment residues, or an extract of such residues developed using the Toxicity Characteristic Leaching Procedure and the test methods in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, to assure that the treatment residues or extract meet the applicable treatment standards.

\* \* \*

[See Prior Text in A.2-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 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), LR 21:1334 (December 1995), LR 22:22 (January 1996), LR 22:820 (September 1996).

**Subchapter B. Hazardous Waste Injection Restrictions**

**§2271. Exemptions to Allow Land Disposal of a Prohibited Waste by Deep Well Injections**

\* \* \*

[See Prior Text in A-Table 7, footnote 3]

<sup>4</sup> Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010 or

9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, with a sample size of 10 grams and a distillation time of one hour and 25 minutes.

\* \* \*

[See Prior Text in footnote 5-Table 11,  
Certification Statement: 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 22:22 (January 1996), amended LR 22:820 (September 1996).

## **Chapter 25. Landfills**

### **§2515. Special Requirements for Bulk and Containerized Liquids**

\* \* \*

[See Prior Text in A-C.4]

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 Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

\* \* \*

[See Prior Text in E-F.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, in LR 10:200 (March 1984), amended LR 16:220 (March 1990), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 22:821 (September 1996).

## **Chapter 30. Hazardous Waste Burned in Boilers and Industrial Furnaces**

### **§3001. Applicability**

\* \* \*

[See Prior Text in A-C]

1. To be exempt from LAC 33:V.3005-3023, an owner or operator of a metal recovery furnace or mercury 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 Subsection C.3 of this Section):

\* \* \*

[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," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, 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-2.b]

3. To be exempt from LAC 33:V.3005-3023, an

owner or operator of a lead or nickel-chromium or mercury 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 Subsection C.1 or C.3 of this Section. The owner or operator must comply with the requirements of Subsection C.1 of this Section 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 40 CFR 266, appendices XI, XII, and XIII, as adopted and amended at Appendices K, L, and M of this Chapter, and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of Subsection C.1 of this Section, provided that:

i. a waste listed in 40 CFR 266, Appendix IX, as adopted at Appendix I of this Chapter, must contain recoverable levels of lead, a waste listed in 40 CFR 266, Appendix XII, as adopted and amended at Appendix L of this Chapter, must contain recoverable levels of nickel or chromium, a waste listed in 40 CFR 266, Appendix XIII, as adopted and amended at Appendix M of this Chapter, must contain recoverable levels of mercury and contain less than 500 ppm of LAC 33:V.3105.Table 1 organic constituents, and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal;

\* \* \*

[See Prior Text in C.3.a.ii-iv]

b. the administrative authority may decide on a case-by-case basis that the toxic organic constituents in a material listed in 40 CFR 266, Appendix XI, XII, or XIII, as adopted and amended at Appendices K, L, and M of this Chapter, 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:

\* \* \*

[See Prior Text in C.3.b.i-ii]

iii. whether the acceptable ambient levels established in 40 CFR 266, Appendix IV or V, as adopted and amended at Appendices D and E of this Chapter, 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-F.1.a.iii]

b. sample and analyze the hazardous waste as necessary to document that the waste is burned for recovery of economically significant amounts of precious metal using procedures as described in "Test Methods for

Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, 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 F.1.c]

[Note: Parts of this Section were previously promulgated in LAC 33:V.4142, which has been repealed]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), LR 21:944 (September 1995), LR 22:821 (September 1996).

### **§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," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110. 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-I]

[Note: Parts of this Section were previously promulgated in LAC 33:V.4142, which has been repealed.]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), LR 21:944 (September 1995), LR 22:822 (September 1996).

### **§3007. Interim Status Standards for Burners**

\* \* \*

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

ii. the estimated partitioning factor to the combustion gas for the materials identified in Subsection B.2.a of this Section and the basis for the estimate and an estimate of the partitioning to HCl and Cl<sub>2</sub> of total chloride and chlorine in feed materials. To estimate the partitioning factor, the owner or operator must use either best engineering judgment or the procedures specified in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter;

iii. for industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under Subsection C.3.b.i of this Section, the estimated enrichment factor for each metal. To estimate the enrichment factor, the owner or operator must use either best engineering judgment or the procedures specified in "Alternative Methodology for Implementing Metals Controls" in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter;

\* \* \*

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

ii. to estimate APCS removal efficiency, the owner or operator must use either best engineering judgment or the procedures prescribed in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter;

\* \* \*

[See Prior Text in B.2.d.iii-3.e]

4. Operating Requirements for Furnaces that Recycle PM. Owners and operators of furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions controls under Subsection C.3.b.i of this Section must comply with the special operating requirements provided in "Alternative Methodology for Implementing Metals Controls" in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter.

\* \* \*

[See Prior Text in B.5-6.j]

7. Monitoring Other Operating Parameters. When the monitoring systems for the operating parameters listed in Subsection C.1.e-m of this Section are installed and operating in conformance with vendor specifications or (for CO, HC, and oxygen) specifications provided by 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter, as appropriate, the parameters shall be continuously monitored and records shall be maintained in the operating record.

\* \* \*

[See Prior Text in B.8-C.3.b]

i. the special testing requirements prescribed in "Alternative Method for Implementing Metals Controls" in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter; or

\* \* \*

[See Prior Text in C.3.b.ii-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 Subsection A.5.a.iv

of this Section or LAC 33:V.3009.C, a conditioned gas monitoring system may be used in conformance with specifications provided in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter, provided that the owner or operator submits a certification of compliance without using extensions of time provided by Subsection C.7 of this Section.

\* \* \*

[See Prior Text in C.6]

a. (when complying with the requirements of Subsection C.7 of this Section), comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter; and

\* \* \*

[See Prior Text in C.6.b-J.1.a]

b. carbon monoxide (CO), oxygen, and if applicable, hydrocarbons (HC) must be monitored on a continuous basis at a common point in the boiler or industrial furnace downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with the operating limits specified in the certification of compliance. CO, HC and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter;

\* \* \*

[See Prior Text in J.1.c-Note]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), LR 22:822 (September 1996).

### **§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.2]

3. Dioxin-listed Waste. A boiler or industrial furnace burning hazardous waste containing (or derived from) EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, or F027 must achieve a DRE of 99.9999 percent for each POHC designated (under Subsection A.1.b of this Section) in its permit. This performance must be demonstrated on POHCs that are more difficult to burn than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. The DRE is determined for each POHC from the equation in Subsection A.1 of this Section. In addition, the owner or operator of the boiler or industrial furnace must notify the administrative authority of his intent to burn EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, or F027.

\* \* \*

[See Prior Text in A.4-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 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter.

\* \* \*

[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 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter. CO and oxygen shall be continuously monitored in conformance with Subsection B.2 of this Section.

\* \* \*

[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 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter;

2. estimate the 2,3,7,8-TCDD toxicity equivalence of the tetra-octa CDD/CDF congeners using "Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners" in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter. Multiply the emission rates of CDD/CDF congeners with a toxicity equivalence greater than zero (see the procedure) by the calculated toxicity equivalence factor to estimate the equivalent emission rate of 2,3,7,8-TCDD;

3. conduct dispersion modeling using methods recommended in 40 CFR 51, Appendix W ("Guideline on Air Quality Models (Revised)" and its supplements), the "Hazardous Waste Combustion Air Quality Screening Procedure" provided in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter, or in "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," as incorporated by reference at LAC 33:V.110, to predict the maximum annual average off-site ground level concentration of 2,3,7,8-TCDD equivalents determined under Subsection E.2 of this Section. The maximum annual average concentration must be used when a person resides on-site; and

4. the ratio of the predicted maximum annual average ground level concentration of 2,3,7,8-TCDD equivalents to the risk-specific dose for 2,3,7,8-TCDD provided in 40 CFR 266, Appendix V, as adopted at Appendix E of this Chapter,  $(2.2 \times 10^{-7})$  shall not exceed 1.0.

F. Reserved

\* \* \*

[See Prior Text in G-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), LR 22:823 (September 1996).

**§3011. Standards to Control Particulate Matter**

A. A boiler or industrial furnace burning hazardous waste may not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) after correction to a stack gas concentration of seven percent oxygen, using procedures prescribed in 40 CFR 60, Appendix A, Methods 1-5, and 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter.

\* \* \*

[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 18:1375 (December 1992), LR 22:823 (September 1996).

**§3013. Standards to Control Metals Emissions**

A. General. The owner or operator must comply with the metals standards provided by Subsections B-F of this Section for each metal listed in Subsection B of this Section that is present in hazardous waste at detectable levels using analytical procedures specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

B. Tier I Feed Rate Screening Limits. Feed rate screening limits for metals are specified in 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter, 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 Subsection B.7 of this Section.

1. Noncarcinogenic Metals. The feed rates of antimony, barium, lead, mercury, thallium, and silver in all feedstreams, including hazardous waste, fuels, and industrial furnace feedstocks shall not exceed the screening limits specified in 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter.

\* \* \*

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

a. The feed rates of arsenic, cadmium, beryllium, and chromium in all feedstreams, including hazardous waste, fuels, and industrial furnace feedstocks shall not exceed values derived from the screening limits specified in 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter. 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 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter, 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 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter, for metal "i"

\* \* \*

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

a. the terrain-adjusted effective stack height (TESH) is determined according to the following equation:

$$TESH = Ha + H1 - Tr$$

where:

Ha = actual physical stack height

H1 = plume rise as determined from 40 CFR 266, Appendix VI, as adopted at Appendix F of this Chapter, as a function of stack flow rate and stack gas exhaust temperature

Tr = terrain rise within five kilometers of the stack

\* \* \*

[See Prior Text in B.3.b-4]

5. Land Use. The screening limits are a function of whether the facility is located in an area where the land use is urban or rural. To determine whether land use in the vicinity of the facility is urban or rural, use procedures provided in 40 CFR 266, appendices IX or X, as adopted and amended at Appendices I or J of this Chapter.

\* \* \*

[See Prior Text in B.6-8]

C. Tier II Emission Rate Screening Limits. Emission rate screening limits are specified in 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter, 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 Subsection B.7 of this Section.

1. Noncarcinogenic Metals. The emission rates of antimony, barium, lead, mercury, thallium, and silver shall not exceed the screening limits specified in 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter.

2. Carcinogenic Metals. The emission rates of arsenic, cadmium, beryllium, and chromium shall not exceed values derived from the screening limits specified in 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter. 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

$$\sum_{i=1}^n \frac{AER_{(i)}}{ERSL_{(i)}} \leq 1.0$$

specified in 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter, shall not exceed 1.0, as

provided by the following equation:  
where:

n = number of carcinogenic metals

AER = actual emission rate for metal "i"

ERSL = emission rate screening limit provided by 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter, for metal "i"

\* \* \*

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

2. Acceptable Ambient Levels. 40 CFR 266, appendices IV and V, as adopted and amended at Appendices D and E of this Chapter, list the acceptable ambient levels for purposes of this rule. Reference air concentrations (RACs) are listed for the noncarcinogenic metals and 10<sup>-5</sup> risk-specific doses (RSDs) are listed for the carcinogenic metals. The RSD for a metal is the acceptable ambient level for that metal provided that only one of the four carcinogenic metals is emitted. If more than one carcinogenic metal is emitted, the acceptable ambient level for the carcinogenic metals is a fraction of the RSD as described in Subsection D.3 of this Section.

\* \* \*

[See Prior Text in D.3-6]

E. Adjusted Tier I Feed Rate Screening Limits. The owner or operator may adjust the feed rate screening limits provided by 40 CFR 266, Appendix I, as adopted at Appendix A of this Chapter, 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 40 CFR 266, appendices IV and V, as adopted and amended at Appendices D and E of this Chapter, 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 Subsection B.2 of this Section.

\* \* \*

[See Prior Text in F-F.2]

a. for each noncarcinogenic metal, by back-calculating from the RAC provided in 40 CFR 266, Appendix IV, as adopted and amended at Appendix D of this Chapter, to determine the allowable emission rate for each metal using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with Subsection H of this Section; and

b. for each carcinogenic metal, by:

i. back-calculating from the RSD provided in 40 CFR 266, Appendix V, as adopted at Appendix E of this Chapter, to determine the allowable emission rate for each metal if that metal were the only carcinogenic metal emitted using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with Subsection H of this Section; and

\* \* \*

[See Prior Text in F.2.b.ii-G]

1. General. Emission testing for metals shall be conducted using the Multiple Metals Train as described in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter.

2. Hexavalent Chromium. Emissions of chromium are assumed to be hexavalent chromium unless the owner or operator conducts emissions testing to determine hexavalent chromium emissions using procedures prescribed in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter.

H. Dispersion Modeling. Dispersion modeling required under this Section shall be conducted according to methods recommended in 40 CFR 51, Appendix W ("Guidelines on Air Quality Models (revised)" (1986) and its supplements), the "Hazardous Waste Combustion Air Quality Screening Procedure" described in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter, or in "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," as incorporated by reference at LAC 33:V.110, to predict the maximum annual average off-site ground level concentration. However, on-site concentrations must be considered when a person resides on-site.

\* \* \*

[See Prior Text in 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), LR 22:824 (September 1996).

### **§3015. Standards to Control Hydrogen Chloride (HCl) and Chlorine Gas (Cl<sub>2</sub>) Emissions**

\* \* \*

[See Prior Text in A-B]

1. Tier I Feed Rate Screening Limits. Feed rate screening limits are specified for total chlorine in 40 CFR 266, Appendix II, as adopted at Appendix B of this Chapter, as a function of terrain-adjusted effective stack height and terrain and land use in the vicinity of the facility. The feed rate of total chlorine and chloride, both organic and inorganic, in all feedstreams, including hazardous waste, fuels, and industrial furnace feedstocks shall not exceed the levels specified.

2. Tier II Emission Rate Screening Limits. Emission rate screening limits for HCl and Cl<sub>2</sub> are specified in 40 CFR 266, Appendix III, as adopted at Appendix C of this Chapter, 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<sub>2</sub> shall not exceed the levels specified.

\* \* \*

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

2. Acceptable Ambient Levels. 40 CFR 266, Appendix IV, as adopted and amended at Appendix D of this Chapter, lists the reference air concentrations (RACs)

for HCl (seven micrograms per cubic meter) and Cl<sub>2</sub> (0.4 micrograms per cubic meter).

\* \* \*

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

E. Adjusted Tier I Feed Rate Screening Limits. The owner or operator may adjust the feed rate screening limit provided by 40 CFR 266, Appendix II, as adopted at Appendix B of this Chapter, 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<sub>2</sub> provided by 40 CFR 266, Appendix IV, as adopted and amended at Appendix D of this Chapter, using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit.

F. Emissions Testing. Emissions testing for HCl and Cl<sub>2</sub> shall be conducted using the procedures described in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter.

\* \* \*

[See Prior Text in G-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), LR 22:825 (September 1996).

### **§3019. Low Risk Waste Exemption**

\* \* \*

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

i. for the noncarcinogenic compounds listed in 40 CFR 266, Appendix IV, as adopted and amended at Appendix D of this Chapter, the levels established in 40 CFR 266, Appendix IV, as adopted and amended at Appendix D of this Chapter;

ii. for the carcinogenic compounds listed in 40 CFR 266, Appendix V, as adopted at Appendix E of this Chapter, the sum for all constituents of the ratios of the actual ground level concentration to the level established in 40 CFR 266, Appendix V, as adopted at Appendix E of this Chapter, cannot exceed 1.0; and

iii. for constituents not listed in 40 CFR 266, appendices IV or V, as adopted and amended at Appendices D and E of this Chapter, 0.1 micrograms per cubic meter.

\* \* \*

[See Prior Text in B-B.2]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 18:1375 (December 1992), amended LR 21:266 (March 1995), LR 22:826 (September 1996).

### **§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), as incorporated by reference at LAC 33:V.110. 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), LR 22:826 (September 1996).

### **§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-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 40 CFR 266, Appendix VIII, as adopted at Appendix H of this Chapter, 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," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

a. Normal Residue. Concentrations of toxic constituents of concern in normal residue shall be determined based on analyses of a minimum of 10 samples representing a minimum of 10 days of operation. Composite samples may be used to develop a sample for analysis provided that the compositing period does not exceed 24 hours. The upper tolerance limit (at 95-percent confidence with a 95-percent proportion of the sample distribution) of the concentration in the normal residue shall be considered the statistically-derived concentration in the normal residue. If changes in raw materials or fuels reduce the statistically-derived concentrations of the toxic constituents of concern in the normal residue, the statistically-derived concentrations must be revised or statistically-derived concentrations of toxic constituents in normal residue must be established for a new mode of operation with the new raw material or fuel. To determine the upper tolerance limit in the normal residue, the owner

or operator shall use statistical procedures prescribed in "Statistical Methodology for Beville Residue Determinations" in 40 CFR 266, Appendix IX, as adopted and amended at Appendix I of this Chapter;

\* \* \*

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

a. **Nonmetal Constituents.** The concentration of each nonmetal toxic constituent of concern (specified in Subsection B of this Section) in the waste-derived residue must not exceed the health-based level specified in 40 CFR 266, Appendix VII, as adopted and amended at Appendix G of this Chapter, or the level of detection (using analytical procedures prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110), whichever is higher. If a health-based limit for a constituent of concern is not listed in 40 CFR 266, Appendix VII, as adopted and amended at Appendix G of this Chapter, 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. The levels specified in 40 CFR 266, Appendix VII (and the default level of 0.002 micrograms per kilogram or the level of detection for constituents as identified in 40 CFR 266, Appendix VII.Note 1, as adopted and amended at Appendix G of this Chapter) are administratively stayed under the condition, for those constituents specified in Subsection B.1 of this Section, that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in LAC 33:V.Chapter 22.Table 2 for F039 nonwastewaters. In complying with those alternative levels, if an owner or operator is unable to detect a constituent despite documenting use of best good-faith efforts, as defined by applicable agency guidance or standards, the owner or operator is deemed to be in compliance for that constituent. Until new guidance or standards are developed, the owner or operator may demonstrate such good-faith efforts by achieving a detection limit for the constituent that does not exceed an order of magnitude above the level provided by LAC 33:V.Chapter 22.Table 2 for F039 nonwastewaters. The stay will remain in effect until further administrative action is taken and notice is published in the *Louisiana Register*; and

b. **Metal Constituents.** The concentration of metals in an extract obtained using the Toxicity Characteristic Leaching Procedure of LAC 33:V.4903 must not exceed the levels specified in 40 CFR 266, Appendix VII, as adopted and amended at Appendix G of this Chapter.

\* \* \*

[See Prior Text in B.2.c-C.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), LR 22:826 (September 1996).

### **Appendices to Chapter 30**

#### **Appendix A. Tier I and Tier II Feed Rate and Emissions Screening Limits For Metals**

40 CFR 266, Appendix I, as amended by 56 FR 7228

(February 21, 1991) and 56 FR 32690 (July 17, 1991), is hereby incorporated by reference.

#### **Appendix B. Tier I Feed Rate Screening Limits for Total Chlorine**

40 CFR 266, Appendix II, as amended by 56 FR 32690 (July 17, 1991), is hereby incorporated by reference.

#### **Appendix C. Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride**

40 CFR 266, Appendix III, as amended by 56 FR 32691 (July 17, 1991), is hereby incorporated by reference.

#### **Appendix D. Reference Air Concentrations**

40 CFR 266, Appendix IV, as amended by 56 FR 7232 (February 21, 1991) and 56 FR 32691 (July 17, 1991), is hereby incorporated by reference, except that in regulations incorporated thereby, references to 40 CFR 261, Appendix VIII and 266, Appendix V shall mean LAC 33:V.3105.Table 1 and Appendix E of this Chapter, respectively.

#### **Appendix E. Risk Specific Doses (10<sup>-5</sup>)**

40 CFR 266, Appendix V, as amended by 56 FR 7232 (February 21, 1991), is hereby incorporated by reference.

#### **Appendix F. Stack Plume Rise [Estimated Plume Rise (in Meters) Based on Stack Exit Flow and Gas Temperature]**

40 CFR 266, Appendix VI, as amended by 56 FR 7233 (February 21, 1991), is hereby incorporated by reference.

#### **Appendix G. Health-based Limits for Exclusion of Waste-derived Residues**

40 CFR 266, Appendix VII, as amended by 56 FR 7234 (February 21, 1991), 56 FR 32691 (July 17, 1991), and 58 FR 59603 (November 9, 1993), is hereby incorporated by reference, except that in regulations incorporated thereby, 40 CFR 261, Appendix VIII, 266.112(b)(1) and (b)(2)(i), and 268.43 shall mean LAC 33:V.3105.Table 1, 3025.B.1 and B.2.a, and Chapter 22.Table 2, respectively.

#### **Appendix H. Potential PICs for Determination of Exclusion of Waste-derived Residues**

40 CFR 266, Appendix VIII, as amended by 56 FR 7235 (February 21, 1991) and 56 FR 32691 (July 17, 1991), is hereby incorporated by reference.

#### **Appendix I. Methods Manual for Compliance with the BIF Regulations**

40 CFR 266, Appendix IX, as amended by 56 FR 32692 (July 17, 1991), 56 FR 42512,42516 (August 27, 1991), 57 FR 38566 (August 25, 1992) and 57 FR 44999 (September 30, 1992), is hereby incorporated by reference, except that the citations 40 CFR 261, Appendix VIII, 266.103, 266.103(b), 266.103(b)(3), 266.103(c), 266.103(c)(1), 266.103(c)(3)(ii), 266.103(c)(7), 266.103(d), 266.106, 266.112, 266.112(b)(1) and (b)(2)(i), 268.43, and 266.Subpart H shall mean LAC 33:V.3105.Table 1, 3007, 3007.B, 3007.B.3, 3007.C, 3007.C.1, 3007.C.3.b, 3007.C.7, 3007.D, 3013, 3025, 3013, 3025, 3025.B.1 and B.2.a, Chapter 22.Table 2, and Chapter 30, respectively. Terms within the incorporated Appendix shall be the terms adopted by reference except that "director," "administrator," "EPA regional office," and "EPA regional office or the appropriate enforcement agency" shall mean

"administrative authority." "Environmental Protection Agency" and "EPA" shall mean "administrative authority," except when referring to an EPA method, protocol, file, performance audit sample, handbook, manual, document, program, default value, or default assumption.

Federal statutes and regulations that are cited in 40 CFR 266, Appendix IX that are not specifically adopted by reference shall be used as guidance in interpreting the federal regulations in 40 CFR 266, Appendix IX.

**Appendix J. Reserved**

**Appendix K. Lead-bearing Materials That May Be Processed in Exempt Lead Smelters**

40 CFR 266, Appendix XI, as amended by 56 FR 42517 (August 27, 1991), is hereby incorporated by reference.

**Appendix L. Nickel or Chromium-bearing Materials That May Be Processed in Exempt Nickel-Chromium Recovery Furnaces**

40 CFR 266, Appendix XII, as amended by 56 FR 42517 (August 27, 1991), is hereby incorporated by reference, except that the footnote should be deleted.

**Appendix M. Mercury-bearing Wastes That May Be Processed in Exempt Mercury Units**

40 CFR 266, Appendix XIII, as amended by 59 FR 48041 (September 19, 1994), is hereby incorporated by reference, except that in regulations incorporated thereby, 40 CFR 261, Appendix VIII shall mean LAC 33:V.3105.Table 1.

**Chapter 31. Incinerators**

**§3115. Incinerator Permits for New or Modified Facilities**

\* \* \*

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

c. an identification of any hazardous, organic constituents listed in Table 1 of this Chapter, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Table 1 of this Chapter that would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified, and the basis for their exclusion stated. The waste analysis must rely on analytical techniques as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, or other equivalent methods approved by the administrative authority;

d. an approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, or other equivalent methods approved by the administrative authority;

\* \* \*

[See Prior Text in B.2-D]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:614 (July 1990), LR 18:1256

(November 1992), LR 22:828 (September 1996).

**Chapter 40. Used Oil**

**Subchapter A. Materials Regulated as Used Oil**

**§4003. Applicability**

This Section identifies those materials that are subject to regulation as used oil under this Chapter. This Section 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 this Subpart.

\* \* \*

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

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 EPA Publication SW-846, Third Edition, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in LAC 33:V.3105.Table 1). EPA Publication SW-846, Third Edition, is available from the Government Printing Office, Superintendent of Documents, Box 371954, Pittsburgh, PA 15250-7954, (202) 512-1800 (document number 955-001-00000-1).

\* \* \*

[See Prior Text in B.1.b.i-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 21:266 (March 1995), LR 22:828 (September 1996).

**§4033. Rebuttable Presumption for Used Oil**

\* \* \*

[See Prior Text in A-B.2]

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 SW-846, Third Edition, 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). EPA Publication SW-846, Third Edition, is available from the Government Printing Office, Superintendent of Documents, Box 371954, Pittsburgh, PA 15250-7954. (202) 512-1800 (document number 955-001-00000-1).

\* \* \*

[See Prior Text in C.1-D]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), LR 22:828 (September 1996).

**§4047. Rebuttable Presumption for Used Oil**

\* \* \*

[See Prior Text in A-B.2]

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 SW-846, Third Edition, 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). EPA Publication SW-846, Third Edition, is available from the Government Printing Office, Superintendent of Documents, Box 371954, Pittsburgh, PA 15250-7954. (202) 512-1800 (document number 955-001-00000-1).

\* \* \*

[See Prior Text in C.1-2]

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

**HISTORICAL NOTE:** Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), LR 22:828 (September 1996).

#### **§4067. Rebuttable Presumption for Used Oil**

\* \* \*

[See Prior Text in A-B.3]

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 SW-846, Third Edition, 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). EPA Publication SW-846, Third Edition, is available from the Government Printing Office, Superintendent of Documents, Box 371954, Pittsburgh, PA 15250-7954. (202) 512-1800 (document number 955-001-00000-1).

\* \* \*

[See Prior Text in C.1-D]

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

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### **Chapter 43. Interim Status**

#### **Subchapter E. Groundwater Monitoring**

##### **§4371. Sampling and Analysis**

\* \* \*

[See Prior Text in A-B.1]

2. The following parameters are to be used as a basis for comparison in the event a groundwater quality assessment is required under LAC 33:V.4373.D:

- a. chloride;
- b. iron;
- c. manganese;
- d. phenols;
- e. sodium;
- f. sulfate;

\* \* \*

[See Prior Text in B.3-F]

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

**HISTORICAL NOTE:** Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 18:1256 (November 1992), LR 22:829 (September 1996).

#### **Subchapter I. Tanks**

##### **§4431. Applicability**

A. The regulations of this Subchapter apply to owners or operators of facilities that use tank systems for storing or treating hazardous waste, except as otherwise provided in this Section and in LAC 33:V.4433 or in 4301 and 105.F.

1. Tank systems that are used to store or treat hazardous waste that contains no free liquids and that are situated inside a building with an impermeable floor are exempted from the requirements of LAC 33:V.4437. To demonstrate the absence or presence of free liquids in the stored/treated waste, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

\* \* \*

[See Prior Text in A.2-3]

**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 13:651 (November 1987), LR 16:614 (July 1990), LR 18:1375 (December 1992), LR 22:829 (September 1996).

#### **Subchapter M. Landfills**

##### **§4507. Special Requirements for Liquid Waste**

\* \* \*

[See Prior Text in A-C.4]

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 Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

\* \* \*

[See Prior Text in E-G.2]

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

**HISTORICAL NOTE:** Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), LR 21:266 (March 1995), LR 22:829 (September 1996).

#### **Chapter 49. Lists of Hazardous Wastes**

##### **§4901. Category I Hazardous Wastes**

\* \* \*

[See Prior Text in A-B.3.b.ii.(c)]

(i). rinses must be tested in accordance with Method 8290, as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110;

(ii). "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, as described in "Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110;

\* \* \*

[See Prior Text in B.3.b.ii.(d)-Table 6]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:320 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 14:426 (July 1988), LR 14:790 (November 1988), LR 15:182 (March 1989), LR 16:47 (January 1990), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 16:1057 (December 1990), LR 17:369 (April 1991), LR 17:478 (May 1991), LR 17:658 (July 1991), LR 18:723 (July 1992), LR 18:1256 (November 1992), LR 18:1375 (December 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 21:944 (September 1995), LR 22:829 (September 1996).

### **§4903. Category II Hazardous Wastes**

A. Category II hazardous wastes are wastes designated as hazardous based on classical analytical procedures (see "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, for guidance on the procedures). There are four hazardous waste categories for wastes not otherwise characterized: ignitability, corrosivity, reactivity, and toxicity. LAC 33:V.Subpart 1 applies to those materials that exhibit the characteristics of ignitability, corrosivity, reactivity, and/or toxicity.

\* \* \*

[See Prior Text in B]

1. It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80, as incorporated by reference at LAC 33:V.110, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78, as incorporated by reference at LAC 33:V.110, or as determined by an equivalent test method approved by the administrative authority under procedures set forth in LAC 33:V.105.H and I.

\* \* \*

[See Prior Text in B.2-C]

1. It is aqueous and has a pH less than or equal to two or greater than or equal to 12.5, as determined by a pH meter using Method 9040 described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

2. It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in National Association of Corrosion Engineers (NACE) Standard TM-01-69 as standardized in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

\* \* \*

[See Prior Text in D-E]

1. A solid waste exhibits the characteristic of toxicity

if, using the Toxicity Characteristic Leaching Procedure, Method 1311 described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110, the extract from a representative sample of the waste contains any of the contaminants listed in Subsection E.2.Table 5 of this Section at the concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purposes of this Section.

\* \* \*

[See Prior Text in E.2-F]

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:1057 (December 1990), LR 17:369 (April 1991), LR 18:723 (July 1992), LR 18:1256 (November 1992), LR 22:829 (September 1996).

### **Appendices to Chapter 49**

#### **Appendix A. Chemical Analysis Test Methods**

*Note:* Appropriate analytical procedures to determine whether a sample contains a given toxic constituent are specified in Chapter Two, "Choosing the Correct Procedure," found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110. Prior to final sampling and analysis method selection, the individual should consult the specific section or method described in SW-846, for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

#### **Appendix B. Method 1311**

##### **Toxicity Characteristic Leaching Procedure (TCLP)**

*Note:* The TCLP (Method 1311) is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

#### **Appendix C. Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test (Method 1310)**

*Note:* The EP (Method 1310) is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.

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