

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 the 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. Wastes that are excluded from regulation are found in this Section.

A. – D.1.i.iii.(d). ...

(e). prior to operating pursuant to this exclusion, the plant owner or operator submits to the Office of Environmental Services a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language:

"I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation."

The plant must maintain a copy of that document in its on-site records until closure of the facility~~for a period of no less than three years from the date specified in the notice.~~ The exclusion applies ~~only~~ so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the administrative authority for reinstatement. The administrative authority may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur;

1.j. – 6.h. ...

i. the facility prepares and submits a report to the Office of Environmental Services, by March 15 of each year, that ~~estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and~~ includes the following information for the previous calendar year:

D.6.i.i. – H. ...

I. Petitions for Equivalent Testing or Analytical Methods

1. Any person seeking approval of an equivalent testing or analytical method may petition for a regulatory amendment under ~~LAC 33:V.105. This Subsection~~ and LAC 33:I.Chapter 9. To be successful, the petitioner must demonstrate to the satisfaction of the administrative authority that the proposed method is equal to or superior to the corresponding method prescribed in these regulations~~Method 1311, in 40 CFR Part 268, Appendix 1,~~ in terms of its sensitivity, accuracy, and precision (i.e., reproducibility).

2. – 2.b. ...

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

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~~

M.3.a.ii. – O.2.b.i. ...

~~ii. the prevalence of the practice on an industry-wide basis;~~
~~iii. the extent to which the material is handled before reclamation to minimize loss;~~

~~iiii. the time periods between generating the material and its reclamation and between reclamation and return to the original primary production process;~~

~~v. the location of the reclamation operation in relation to the production process;~~

~~vi. whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;~~

~~vii. whether the person who generates the material also reclaims it; and~~

~~viii. other relevant factors.~~

c. The administrative authority may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:

O.2.c.i. – P.2. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq., and in particular, 2186(A)(2).

HISTORICAL 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, LR 16:220 (March 1990), LR 16:398 (May 1990), LR 16:614 (July 1990), LR 17:362, 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, 831 (September 1996), amended by the Office of the Secretary, LR 23:298 (March 1997), amended by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:564, 567 (May 1997), LR 23:721 (June 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 23:952 (August 1997), LR 23:1511 (November 1997), LR 24:298 (February 1998), LR 24:655 (April 1998), LR 24:1093 (June 1998), LR 24:1687, 1759 (September 1998), LR 25:431 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:268 (February 2000), LR 26:2464 (November 2000), LR 27:291 (March 2001), LR 27:706 (May 2001), LR 29:317 (March 2003), LR 30:1680 (August 2004), amended by the Office of Environmental Assessment, LR 30:2463

(November 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2451 (October 2005), LR 32:605 (April 2006), LR 32:821 (May 2006), LR 33:450 (March 2007), LR 33:2097 (October 2007), LR 34:614 (April 2008), LR 34:**.

§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.

* * *

Hazardous Waste—a *solid waste*, as defined in this Section, is a hazardous waste if:

1. – 2.c.vii. ...

d. **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 (e.g., ~~by using an analytical method from LAC 33:V.4999 Appendix A to~~ by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in LAC 33:V.3105, Table 1):

2.d.i. – 6.b. ...

* * *

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790, 791 (November 1988), LR 15:378 (May 1989), LR 15:737 (September 1989), LR 16:218, 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 by the Office of Solid and Hazardous Waste, Hazardous Waste Division, 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), LR 23:564 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:655 (April 1998), LR 24:1101 (June 1998), LR 24:1688 (September 1998), LR 25:433 (March 1999), repromulgated LR 25:853 (May 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:269 (February 2000), LR 26:2465 (November 2000), LR 27:291 (March 2001), LR 27:708 (May 2001), LR 28:999 (May 2002), LR 28:1191 (June 2002), LR 29:318 (March 2003); amended by the Office of the Secretary, Legal Affairs Division, LR 31:2452 (October 2005), LR 31:3116 (December 2005), LR 32:606 (April 2006), LR 32:822 (May 2006), LR 33:1625 (August 2007), LR 33:2098 (October 2007), LR 34:71 (January 2008), LR 34:615 (April 2008), LR 34:**.

§110. References

A. When used in LAC 33:V, Subpart 1 the following publications and methods listed in this Section shall be used to comply with these regulations ~~are incorporated by reference.~~

B. The following materials are available for purchase from the American Society for Testing and Materials, 100 Barr Harbor Drive, Box C700, West Conshohocken, PA 19428-2959, or go to: <http://www.astm.org>:

1. ~~"ASTM D-3278-78, "Standard Test Methods for Flash Point for Liquids by Setaflash Closed Tester," approved for LAC 33:V.4903.BASTM Standard D-3278-78, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;~~
 2. ~~"ASTM D-93-79 or D-93-80, "Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester," approved for LAC 33:V.4903.BASTM 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 D-1946-82, "Standard Method for Analysis of Reformed Gas by Gas Chromatography," approved for LAC 33:V.1709 and 4555ASTM Standard D-1946-82, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;~~
 4. ~~"ASTM D 2382-83, "Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method)," approved for LAC 33:V.1709 and 4555ASTM Standard D 2382-83, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;~~
 5. ~~"ASTM E 169-87, "Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," approved for LAC 33:V.1741ASTM Standard E 169-87, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;~~
 6. ~~"ASTM E 168-88, "Standard Practices for General Techniques of Infrared Quantitative Analysis," approved for LAC 33:V.1741ASTM Standard E 168-88, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;~~
 7. ~~"ASTM E 260-85, "Standard Practice for Packed Column Gas Chromatography," approved for LAC 33:V.1741ASTM Standard E 260-85, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;~~
 8. ~~"ASTM D 2267-88, "Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography," approved for LAC 33:V.1741ASTM Standard D 2267-88, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;~~
 9. ~~ASTM D 2879-92, "Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope," approved for LAC 33:V.4727;~~
 10. ~~ASTM E 926-88, "Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," Test Method C—Bomb, Acid Digestion Method.~~
- C. The following materials are available for purchase from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; or from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800:
19. "APTI Course 415: Control of Gaseous Emissions," EPA Publication EPA-450/2-81-005, December 1981, approved for LAC 33:V.1713 and 4559available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161;
 2. "Method 1664, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, PB99-121949," approved for LAC 33:V.4999.Appendix E;
 10. "Flammable and Combustible Liquids Code" (1977 or 1981), available from the National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210;

344. the following methods as published in the test methods compendium known as *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), IIB (January 1995), III (December 1996), and IIIA (April 1998)]. The Third Edition of SW 846 and Updates I, II, IIA, IIB, and III (Document Number 955-001-00000-1) are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800. Update IIIA is available through EPA's Methods Information Communication Exchange (MICE) Service. MICE can be contacted by phone at (703) 821-4690. Update IIIA can also be obtained by contacting the U.S. Environmental Protection Agency, Office of Solid Waste (5307W), OSW Methods Team, 1200 Pennsylvania Ave, NW, Washington, DC, 20460. Copies of the Third Edition and its updates are also available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4650. Copies may be inspected at the Library, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave, NW, Washington, DC 20460, or at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, DC; A suffix "A" in the method number indicates revision one (the method has been revised once). A suffix "B" in the method number indicates revision two (the method has been revised twice). A suffix "C" in the method number indicates revision three (the method has been revised three times). A suffix "D" in the method number indicates revision four (the method has been revised four times):

- a. Method 0010, dated September 1986 and in the Basic Manual, approved for LAC 33:V.4999.Appendix E;
- b. Method 0020, dated September 1986 and in the Basic Manual, approved for LAC 33:V.4999.Appendix E;
- c. Method 0030, dated September 1986 and in the Basic Manual, approved for LAC 33:V.4999.Appendix E;
- d. Method 1320, dated September 1986 and in the Basic Manual, approved for LAC 33:V.4999.Appendix E;
- e. Method 1311, dated September 1992 and in Update I, approved for LAC 33:V.2223, 2245, 2247, 4903.E, and 4999.Appendix E;
- f. Method 1330A, dated September 1992 and in Update I, approved for LAC 33:V.4999.Appendix E;
- g. Method 1312 dated September 1994 and in Update II, approved for LAC 33:V.4999.Appendix E;
- h. Method 0011, dated December 1996 and in Update III, approved for LAC 33:V.3099.Appendix I and 4999.Appendix E;
- i. Method 0023A, dated December 1996 and in Update III, approved for LAC 33:V.3009, 3099.Appendix I, and 4999.Appendix E;
- j. Method 0031, dated December 1996 and in Update III, approved for LAC 33:V.4999.Appendix E;
- k. Method 0040, dated December 1996 and in Update III, approved for LAC 33:V.4999.Appendix E;
- l. Method 0050, dated December 1996 and in Update III, approved for LAC 33:V.3015, 3099.Appendix I, and 4999.Appendix E;
- m. Method 0051, dated December 1996 and in Update III, approved for LAC 33:V.3015, 3099.Appendix I, and 4999.Appendix E;
- n. Method 0060, dated December 1996 and in Update III, approved

for LAC 33:V.3013, 3099.Appendix I, and 4999.Appendix E;

o. Method 0061, dated December 1996 and in Update III, approved for LAC 33:V.3013, 3099.Appendix I, and 4999.Appendix E;

p. Method 9071B, dated April 1998 and in Update IIIA, approved for LAC 33:V.4999.Appendix E;

q. Method 1010A, dated November 2004 and in Update IIIB, approved for LAC 33:V.4999.Appendix E;

r. Method 1020B, dated November 2004 and in Update IIIB, approved for LAC 33:V.4999.Appendix E;

s. Method 1110A, dated November 2004 and in Update IIIB, approved for LAC 33:V.4903.C and 4999.Appendix E;

t. Method 1310B, dated November 2004 and in Update IIIB, approved for LAC 33:V.4999.Appendix E;

u. Method 9010C, dated November 2004 and in Update IIIB, approved for LAC 33:V.2299, Tables 2, 7, and 10, and 4999.Appendix E;

v. Method 9012B, dated November 2004 and in Update IIIB, approved for LAC 33:V.2299, Tables 2, 7, and 10, and 4999.Appendix E;

w. Method 9040C, dated November 2004 and in Update IIIB, approved for LAC 33:V.4903.C and 4999.Appendix E;

x. Method 9045D, dated November 2004 and in Update IIIB, approved for LAC 33:V.4999.Appendix E;

y. Method 9060A, dated November 2004 and in Update IIIB, approved for LAC 33:V.1711, 1741, 4557, 4587, and 4999.Appendix E;

z. Method 9070A, dated November 2004 and in Update IIIB, approved for LAC 33:V.4999.Appendix E;

aa. Method 9095B, dated November 2004 and in Update IIIB, approved, LAC 33:V.1901, 2515, 4431, 4507, 4721, and 4999.Appendix E.

D. The following materials are available for purchase from the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA 02269-9101:

1. "Flammable and Combustible Liquids Code" (1977 or 1981), approved for LAC 33:V.1917, and 4443;

2. Reserved.

E. The following materials are available for purchase from the American Petroleum Institute, 1220 L Street, Northwest, Washington, DC 20005:

1. API Publication 2517, Third Edition, February 1989, "Evaporative Loss from External Floating-Roof Tanks," approved for LAC 33:V.4727;

2. Reserved.

F. The following materials are available for purchase from the Environmental Protection Agency, Research Triangle Park, NC:

1. ~~2.~~ "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, EPA Publication Number EPA-450/R-92-019, approved for LAC 33:V.3099.Appendix I ~~Environmental Protection Agency, Research Triangle, Park, NC;~~

2. Reserved.

G. The following materials are available for purchase from the Organisation for Economic Co-operation and Development, Environment Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France:

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;~~

~~1.16. The OECD Green List of Wastes (revised May 1994), the Amber List of Wastes and Red List of Wastes (both revised May 1993) as set forth in Appendix 3, Appendix 4, and Appendix 5, respectively, to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations), approved for LAC 33:V.1127.I. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51 on July 11, 1996. These materials are incorporated as they exist on the date of the approval and a notice of any change in these materials will be published in the Federal Register. The materials are available for inspection at: the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, DC; the U.S. Environmental Protection Agency, RCRA Information Center (RIC), 1235 Jefferson Davis Highway, First Floor, Arlington, VA 22203 (Docket Number F-94-IEHF-FFFFF); and may be obtained from the Organization for Economic Cooperation and Development, Environment Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France; and~~

2. Reserved.

17. ~~Method 1664, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Non-Polar Material) by Extraction and Gravimetry. Available at NTIS, PB99-121949, U.S. Department of Commerce, 5285 Port Royal, Springfield, Virginia 22161.~~

~~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), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:656 (April 1998), LR 24:1690 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:270 (February 2000), LR 27:291 (March 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

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 and Subsection F of this Section provide otherwise,

owners and operators of facilities that incinerate hazardous waste must fulfill the requirements of Subsection A, B, or C of this Section:

A. – C.1.b. ...

c. an identification of any hazardous organic constituents listed in LAC 33:V.3105, Table 1, ~~which~~that are present in the waste to be burned, except that the applicant need not analyze for constituents listed in LAC 33:V.3105, Table 1, 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 appropriate 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~~appropriate 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;~~

C.1.e. – F. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2011(D)(24)(a) and 2180 et seq.

HISTORICAL 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), amended by the Office of Waste Services, Hazardous Waste Division, LR 25:2199 (November 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:292 (March 2001), LR 29:319 (March 2003), amended by the Office of Environmental Assessment, LR 31:1571 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 34:620 (April 2008), LR 34:**.

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

A. – A.2.b.i. ...

ii. results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in LAC 33:V.4901.G, Table 6, except for those constituents that would reasonably not be expected to be in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained. The analysis must rely on appropriate analytical techniques ~~specified in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*;~~

A.2.b.iii. – 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 15:737 (September 1989), amended LR 18:1375 (December 1992), LR 21:266 (March 1995), LR 22:817 (September 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:292 (March 2001), LR 29:319 (March 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 34:621 (April 2008), LR 34:**.

Subchapter F. Special Forms of Permits

§537. Permits for Boiler and Industrial Furnaces Burning Hazardous Waste for Recycling Purposes Only (Boilers and industrial furnaces burning hazardous waste for destruction are subject to permit requirements for incinerators.)

A. – B.2.b.ii. ...

(a). an identification of any hazardous organic constituents listed in LAC 33:V.3105, Table 1, that are present in the feed stream, except that the applicant need not analyze for constituents listed in LAC 33:V.3105, 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 appropriate 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 appropriate~~ 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;~~

B.2.b.ii.(c). – D.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 15:737 (September 1989), amended LR 18:1375 (December 1992), LR 21:266 (March 1995), LR 22:818, 832 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:657 (April 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2468 (November 2000), LR 27:292 (March 2001), LR 29:320 (March 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2455 (October 2005), LR 33:2101 (October 2007), LR 34:622 (April 2008), LR 34:**.

Chapter 11. Generators

Subchapter B. Transfrontier Shipments of Hazardous Waste

§1127. Transfrontier Shipments of Hazardous Waste for Recovery within the OECD

A. – A.2. ...

B. General Conditions

1. Scope. The level of control for exports and imports of waste is indicated by assignment of the waste to a green, amber, or red list and by United States national procedures as defined in Paragraph A.1 of this Section. The green, amber, and red lists are incorporated by reference in LAC 33:V.110:~~A.16.~~

B.1.a. – I.4. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Waste Services, Hazardous Waste Division, LR 24:661 (April 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2471 (November 2000), LR 27:293 (March 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2103 (October 2007), LR 34:72 (January 2008), LR 34:**.

Chapter 15. Treatment, Storage, and Disposal Facilities

§1516. Manifest System for Treatment, Storage, and Disposal (TSD) Facilities

A. – C.6.a.iii. ...

iv. Copy the manifest tracking number in Item 4 of the new manifest to the manifest reference number line in the Discrepancy block of the old manifest (Item 18a).

C.6.a.v. – D.7.Comment. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs Division, LR 32:825 (May 2006), amended LR 33:2104 (October 2007), LR 34:623 (April 2008), LR 34:**.

Chapter 17. Air Emission Standards**§1703. Definitions**

A. As used in this Chapter, all terms not defined herein shall have the meanings given them in LAC 33:V.109.

* * *

Waste Stabilization Process—any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Test Method 9095B (Paint Filter Liquids Test) in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication Number SW-846, ~~Third Edition, September 1986,~~ as amended by Update I, November 15, 1992 (incorporated by reference; refer to LAC 33:V.110). A waste stabilization process includes mixing the hazardous waste with binders or other materials and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are *waste fixation* ~~or~~ and *waste solidification*. This does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid.

AUTHORITY NOTE: Promulgated in accordance with R.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 by the Office of Waste Services, Hazardous Waste Division, LR 24:1696 (September 1998), LR 25:437 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:278 (February 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Subchapter A. Process Vents**§1711. Test Methods and Procedures**

A. – C.1.a. ...

b. Method 18 or Method 25A in LAC 33:III.6071 for organic content. If Method 25A is used, the organic hazardous air pollutants (HAP) used as the calibration gas must be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

c. ...

d. Total organic mass flow rates shall be determined by one of the

following equations:

i. for sources utilizing Method 18:

$$E_h = Q_{2sd} \left[\sum_{i=1}^n C_i MW_i \right] (0.0416) (10^{-6})$$

where:

E_h = total organic mass flow rate, kg/h;

Q_{2sd} = volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

n = number of organic compounds in the vent gas;

C_i = organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

MW_i = molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416 = conversion factor for molar volume, kg-mol/m³ (@ 293 K and 760 mm Hg);

and

10^{-6} = conversion from ppm, ppm⁻¹.

ii. for sources utilizing Method 25A:

$$E_h = (Q)(C)(MW)(0.0416)(10^{-6})$$

where:

E_h = total organic mass flow rate, kg/h

Q = volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h

C = organic concentration in ppm, dry basis, as determined by Method 25A

MW = molecular weight of propane, 44

0.0416 = conversion factor for molar volume, kg-mol/m³ (@ 293 K and 760 mm Hg)

10^{-6} = conversion from ppm

e. The annual total organic emission rate shall be determined by the following equation.

$$E_A = E_h H$$

where:

E_A = total organic mass emission rate, kg/y;

E_h = total organic mass flow rate for the process vent, kg/h; and

H = total annual hours of operations for the affected unit, h;

C.1.f. – D.1.b. ...

c. Each sample shall be analyzed, and the total organic concentration of the sample shall be computed using Method 9060A (incorporated by reference in LAC 33:V.110) or 8260 of *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference at LAC 33:V.110 or each sample shall be analyzed for its individual organic constituents.

D.1.d. – E.3. ...

F. When an owner or operator and the administrative authority do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the ~~procedures in Method 8260 *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference at LAC 33:V.110~~ may be resolved by using direct measurement as specified in Paragraph D.1 of this Section.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 17:658 (July 1991), amended LR 20:1000 (September 1994), LR 22:818 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1699 (September 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Subchapter B. Equipment Leaks

§1741. Test Methods and Procedures

A. – D.1. ...

2. Method 9060A (incorporated by reference in LAC 33:V.110) ~~or 8260 of *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference at LAC 33:V.110~~ for computing total organic concentration of the sample or analyzing for its individual organic constituents; or

D.3. – 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), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1701 (September 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

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.1501.

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 9095B (Paint Filter Liquids Test) as described in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference ~~in~~ at LAC 33:V.110.

B. – C. ...

D. Tanks meeting the requirements for the accumulation time exclusion of LAC 33:V.305.C and 1109.E.1 are subject to the requirements of LAC 33:V.1903.A, 1905.B-H, 1907.A.6, 1907.B-I, 1909, 1911, 1913, 1915.D, 1917, and 1919.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 13:651 (November 1987), LR 16:614 (July 1990), LR 18:1375 (December 1992), LR 22:819 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1107 (June 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Chapter 22. Prohibitions on Land Disposal

Subchapter A. Land Disposal Restrictions

§2223. Applicability of Treatment Standards

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~~in 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 1310B, 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.

C. – 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 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), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:668 (April 1998), LR 24:1726 (September 1998), LR 25:444 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:280 (February 2000), LR 30:1682 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

§2299. Appendix—Tables 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Table 2. – Table 2.Footnote 6. ...

⁷ Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference in LAC 33:V.110, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

Table 2.Footnote 8. – Table 7.Footnote 3. ...

⁴ Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference in LAC 33:V.110, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

Table 7.Footnote 5. – Table 10. ...

⁽¹⁾—A facility may certify compliance with these treatment standards according to provisions in LAC 33:V.2245 and 2247.

⁽²⁾—Cyanide Wastewater Standards for F006 are based on analysis of composite samples.

⁽³⁾—These facilities must comply with 0.86 mg/L for amenable cyanides in the wastewater exiting the alkaline chlorination system. These facilities must also comply with LAC 33:V.2245.D for appropriate monitoring frequency consistent with the facilities' waste analysis plan.

⁽⁴⁾—Cyanide nonwastewaters are analyzed using SW-846 Method 9010C or 9012B, sample size 10 grams, distillation time, 1 hour and 15 minutes.

[NOTE: NA means Not Applicable.]

Table 11. – Table 12. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:1057 (December 1990), amended LR 17:658 (July 1991), LR 21:266 (March 1995), LR 22:22 (January 1996), LR 22:834 (September 1996), LR 23:566 (May 1997), LR 24:301 (February 1998), LR 24:670 (April 1998), LR 24:1732 (September 1998), LR 25:451 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:282 (February 2000), LR 27:295 (March 2001), LR 29:322 (March 2003), LR 30:1682 (August 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 32:828 (May 2006), LR 32:1843 (October 2006), LR 34:625 (April 2008), LR 34:**.

Chapter 26. Corrective Action Management Units and Special Provisions for Cleanup §2603. Corrective Action Management Units (CAMUs)

A. – A.3.b. ...

c. The placement of any liquid that is not a hazardous waste in a CAMU is prohibited unless such placement facilitates the remedy selected for the waste or a demonstration is made in accordance with LAC 33:V.2515.DF.

d. The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with LAC 33:V.2515.BD. Sorbents used to treat free liquids in CAMUs must meet the requirements of LAC 33:V.2515.DF.

A.4. – E.4.d.v. ...

vi. Alternatives to TCLP. For metal-bearing wastes for which metals removal treatment is not used, the administrative authority may specify a leaching test other than the TCLP (Method 1311, EPA Publication SW-846, as incorporated by reference in LAC 33:V.110-A.44) to measure treatment effectiveness, provided the administrative authority determines that an alternative leach testing protocol is appropriate for use and that the alternative more accurately reflects conditions at the site that affect leaching.

E.4.e. - K. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:1192 (June 2002), amended LR 29:323 (March 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 34:627 (April 2008), LR 34:**.

Chapter 30. Hazardous Waste Burned in Boilers and Industrial Furnaces §3001. Applicability

A. – D.1.a.iv. ...

b. sample and analyze the hazardous waste and other feedstocks as

necessary to comply with the requirements of this Section by using appropriate methods 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

D.1.c. – G.1.a.iii. ...

b. sample and analyze the hazardous waste as necessary to document that the waste ~~containsis burned for recovery of~~ economically significant amounts of ~~precious~~ the metals ~~and that the treatment recovers 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

G.1.c. – 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 21:944 (September 1995), LR 22:821, 835 (September 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1466 (August 1999), LR 27:297 (March 2001), LR 27:712 (May 2001), LR 29:323 (March 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 32:607 (April 2006), LR 34:628 (April 2008), LR 34:**.

§3005. Permit Standards for Burners

A. – A.2.i. ...

B. Hazardous Waste Analysis

1. The owner or operator must provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in LAC 33:V.3105, Table 1, that may reasonably be expected to be in the waste. Such constituents must be identified and quantified, if present, at levels detectable by using appropriate 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.3105, Table 1 constituents excluded from this analysis must be identified and the basis for ~~this~~ their 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 ~~and~~ 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.

B.2. – G. ...

H. Recordkeeping. The owner or operator must ~~maintain~~keep in the operating record of the facility all information and data required by ~~this Section LAC 33:V.3005~~ until the facility closes or for not less than ~~five~~three years, ~~whichever comes later~~.

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 21:944 (September 1995), LR 22:822 (September 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2483 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2463 (October 2005), LR 33:2113 (October 2007), LR 34:628 (April 2008), LR 34:**.

§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 by using appropriate 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. – 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), repromulgated LR 22:980 (October 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1741 (September 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 33:1626 (August 2007), LR 34:**.

§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.2.d, h, and i unless the device and the owner or operator meet the following requirements.

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~~incorporated by reference in LAC 33:V.3099.Appendix H, that may be generated as products of incomplete combustion. ~~Sampling and analyses shall be in conformance with procedures prescribed in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, as incorporated by reference at LAC 33:V.110.~~ For polychlorinated dibenzo-p-dioxins and

polychlorinated dibenzo-furans, analyses must be performed to determine specific congeners and homologues, and the results converted to 2,3,7,8-TCDD equivalent values using the procedure specified in LAC 33:V.3099.Appendix I;

a. – b. ...

2. Comparison of Waste-Derived Residue Concentrations with Health-Based Limits

a. Nonmetal Constituents. The concentration of each nonmetal toxic constituent of concern (specified in Paragraph B.1 of this Section) in the waste-derived residue must not exceed the health-based level specified in 40 CFR 266, Appendix VII, as ~~adopted~~incorporated by reference and amended ~~at~~in LAC 33:V.3099.Appendix G, 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~~incorporated by reference and amended ~~at~~in LAC 33:V.3099.Appendix G, then a limit of 0.002 micrograms per kilogram or the level of detection (~~which must be determined by using appropriate analytical procedures contained in SW-846 or other appropriate methods~~), 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~~incorporated by reference and amended ~~at~~in LAC 33:V.3099.Appendix G) are administratively stayed under the condition, for those constituents specified in Paragraph 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.2299.Appendix, 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.2299.Appendix, Table 2 for F039 nonwastewaters. In complying with the LAC 33:V.2299.Appendix, Table 2 for F039 nonwastewater levels for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans, analyses must be performed for total hexachlorodibenzo-p-dioxins, total hexachlorodibenzofurans, total pentachlorodibenzo-p-dioxins, total pentachlorodibenzofurans, total tetrachlorodibenzo-p-dioxins, and total tetrachlorodibenzofurans;

[NOTE to Subparagraph B.2.a: The stay, under the condition that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in LAC 33:V.2299.Appendix, Table 2 for F039 nonwastewaters, remains in effect until further administrative action is taken and notice is published in the *Federal Register* or the *Louisiana Register*.; ~~and~~]

B.2.b. – 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), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1107 (June 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:300 (March 2001), repromulgated LR 27:513 (April 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Chapter 31. Incinerators**§3115. Incinerator Permits for New or Modified Facilities**

A. – B.1.b. ...

c. an identification of any hazardous, organic constituents listed in LAC 33:V.3105, Table 1, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in LAC 33:V.3105, Table 1 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 appropriate 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 appropriate 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;

B.2. – E. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 16:614 (July 1990), LR 18:1256 (November 1992), LR 22:828, 835 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:683 (April 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2484 (November 2000), LR 27:302 (March 2001), LR 29:324 (March 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2464 (October 2005), LR 33:2115 (October 2007), LR 34:630 (April 2008), LR 34:**.

Chapter 33. Groundwater Protection**§3325. Groundwater Monitoring List**

Table 4 lists groundwater monitoring constituents.

Table 4. Groundwater Monitoring List ¹		
Common Name ¹²	CAS RN ²³	Chemical Abstracts Service Index Name ³⁴
* * *		
[See prior text in Acenaphthene - Aniline]		
Anathracene	120-12-7	Anthracene
* * *		
[See prior text in Antimony - Endosulfan I]		
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro- 1,5,5a,6,9, 9a-hexahydro-, 3-oxide, (3 α ,5 α ,6 β ,9 α ,9 $\alpha\alpha$)-
* * *		
[See prior text in Endosulfan sulfate - Parathion]		

Table 4. Groundwater Monitoring List [†]		
Common Name ¹²	CAS RN ²³	Chemical Abstracts Service Index Name ³⁴
Polychlorinated biphenyls; PCBs	See Note <u>45</u>	1,1'-Biphenyl, chloro derivatives
Polychlorinated dibenzo-p- dioxins; PCDDs	See Note <u>56</u>	Dibenzo[b,e][1,4]dioxin, chloro derivatives
Polychlorinated dibenzofurans; PCDFs	See Note <u>67</u>	Dibenzofuran, chloro derivatives
* * *		
[See prior text in Pentachlorobenzene - Zinc]		

[†]The regulatory requirements pertain only to the list of substances.

¹² Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

²³ Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

³⁴ CAS index names are those used in the ninth Cumulative Index.

⁴⁵ Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5).

²⁶ This category contains congener chemicals, including tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-dioxins, and hexachlorodibenzo-p-dioxins.

⁶⁷ This category contains congener chemicals, including tetrachlorodibenzofurans, pentachlorodibenzofurans, and hexachlorodibenzofurans.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 16:399 (May 1990), amended LR 18:1256 (November 1992), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1742 (September 1998), amended by the Office of the Secretary, Legal Affairs Division, LR 32:1848 (October 2006), LR 34:**.

Chapter 38. Universal Wastes

Subchapter A. General

§3807. Applicability—Mercury-Containing Equipment

A. – B. . . .

1. mercury-containing equipment that is not yet waste under LAC 33:V.Chapter 49 (Subsection C of this Section describes when mercury-containing equipment becomes waste.); ~~and~~

2. mercury-containing equipment that is not hazardous waste. Mercury-containing equipment is a hazardous waste if it exhibits one or more of the characteristics identified in LAC 33:V.4903; ~~and-~~

3. equipment and devices from which the mercury-containing components have been removed.

C. - C.2. . . .

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:569 (May 1997),

amended by the Office of the Secretary, Legal Affairs Division, LR 31:3117 (December 2005), LR 34:**.

Subchapter B. Standards for Small Quantity Handlers of Universal Waste

§3823. Labeling/Marking

A. – A.3.b. ...

4. Universal waste mercury-containing equipment (~~e.g.i.e.~~, each device), or a container in which the mercury-containing equipment is contained, shall be labeled or marked clearly with any of the following phrases: "Universal Waste—Mercury-Containing Equipment," or "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

5. – 8. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:572 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1761 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:303 (March 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 31:3119 (December 2005), LR 34:**.

Subchapter C. Standards for Large Quantity Handlers of Universal Waste

§3845. Labeling/Marking

A. – A.3.b. ...

4. Universal waste mercury-containing equipment (~~e.g.i.e.~~, each device), or a container ~~or tank~~ in which the mercury-containing equipment is contained, shall be labeled or marked clearly with one of the following phrases: "Universal Waste—Mercury-Containing Equipment," or "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

5. – 8. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:575 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1761 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:303 (March 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 31:3121 (December 2005), LR 34:**.

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.

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, e.g., by using an analytical method from EPA Publication SW-846, Third Edition, to showing~~ 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).~~

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), amended LR 22:828, 836 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1108 (June 1998), LR 25:481 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:713 (May 2001), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2540 (October 2005), LR 34:631 (April 2008), LR 34:**.

Subchapter D. Standards for Used Oil Transporter and Transfer Facilities
§4033. Rebuttable Presumption for Used Oil

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 (~~e.g. for example, by using an analytical method from SW-846, Third Edition, to showing~~ 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).~~

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), amended LR 22:828 (September 1996), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Subchapter E. Standards for Used Oil Processors and Re-Refiners
§4047. Rebuttable Presumption for Used Oil

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 (~~e.g., for example, by using an analytical method from SW-846, Third Edition, to showing~~ 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).~~

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), amended LR 22:828 (September 1996), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Subchapter F. Standards for Used Oil Burners That Burn Off-Specification Used Oil for Energy Recovery

§4067. Rebuttable Presumption for Used Oil

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 ~~(e.g. for example, by using an analytical method from SW-846, Third Edition, to showing 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).~~

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), amended LR 22:828 (September 1996), amended by the Office of the Secretary, Legal Affairs Division, LR 34:632 (April 2008), LR 34:**.

Chapter 43. Interim Status

Subchapter D. Manifest System, Recordkeeping, and Reporting

§4357. Operating Record

A. ...

B. Records of each hazardous waste received, treated, stored, or disposed of at the facility must be recorded, as they become available, and maintained in the operating record for three years, unless otherwise specified in Paragraphs B.1-17 of this Section ~~until closure of the facility~~. These records shall include the following information:

1. a description by its common name and the EPA hazardous waste number(s) (LAC 33:V.Chapter 49) that apply to the waste and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal at the facility as required by LAC 33:V.4999.Appendix F. The waste description also must include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in LAC 33:V.Chapter 49, the description also must include the process that produced it; This information must be maintained in the operating record until closure of the facility;

2. the location of each hazardous waste within the facility and the quantity at

each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest; This information must be maintained in the operating record until closure of the facility;

3. – 5. ...

6. summary reports and details of all incidents that require implementing the contingency plan as specified in LAC 33:V.1513.F.940;

7. ...

8. monitoring, testing, or analytical data, and corrective action where required by LAC 33:V.4367, 4373.F, and 4373.I, and the certification as required by LAC 33:V.4441.F. Chapter 43, Subchapter E, 4320, 4367, 4375, 4433, 4437, 4440, 4449, 4451, 4455, 4470, 4472, 4474, 4483, 4485, 4489.D.1, 4497-4502, 4498, 4499, 4501, 4502, 4519, 4529, 4557, 4559, 4587, 4589, and 4725-4739, 4727, 4729, 4731, 4733, 4735, 4737, and 4739;. Maintain this information in the operating record for three years, except for records and results pertaining to groundwater monitoring and cleanup, and response action plans for surface impoundments, waste piles, and landfills, which must be maintained in the operating record until closure of the facility;

[Comment: As required by LAC 33:V.4375, monitoring data at disposal facilities must be kept throughout the post-closure period.]

9. all closure cost estimates under LAC 33:V.4401 and, for disposal facilities, all post-closure cost estimates under LAC 33:V.4405; This information must be maintained in the operating record until closure of the facility;

10. records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal prohibition granted in accordance with LAC 33:V.2239, monitoring data required in accordance with an exemption under LAC 33:V.2241 or 2271 or a certification under LAC 33:V.2235, and the applicable notice required of a generator under LAC 33:V.2245; All of this information must be maintained in the operating record until closure of the facility;

11. – 15. ...

16. for an on-site storage facility, the information contained in the notice (except the manifest number) and the certification and demonstration, if applicable, required by the generator or the owner or operator of a treatment facility under LAC 33:V.2245 or 2247;:

17. monitoring, testing, or analytical data and corrective action data where required by LAC 33:V.4367, 4373.F, and 4373.I, and the certification as required by LAC 33:V.4441.F. This information must be maintained in the operating record until closure of the facility.

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 15:378 (May 1989), LR 16:220 (March 1990), LR 17:658 (July 1991), LR 18:723 (July 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995), LR 22:837 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1744 (September 1998), LR 25:484 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1803 (October 1999), amended by the Office of the Secretary, Legal Affairs Division, LR 33:1626 (August 2007), LR 34:633 (April 2008), LR 34:**.

Subchapter I. Tanks**§4431. Applicability**

A. ...

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 9095B (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~~in LAC 33:V.110.

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), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Subchapter V. Air Emission Standards for Tanks, Surface Impoundments, and Containers**§4727. Waste Determination Procedures**

A. – A.3.b.ii. ...

iii. All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of ~~an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW 846, incorporated by~~ for a total volatile organic constituent concentration may be found in LAC 33:V.110.A, or in Method 25D in 40 CFR Part 60, Appendix A.

iv. ...

c. Analysis. Each collected sample shall be prepared and analyzed in accordance with ~~one or more of the methods listed in Clauses A.3.c.i ix of this Section, including appropriate quality assurance and quality control (QA/QC) checks and use of target compounds for calibration. If Method 25D in 40 CFR Part 60, Appendix A~~ for the total concentration of volatile organic constituents, is not used, then one or by using one or more appropriate methods should be chosen that are appropriate to ensure that the waste determination when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³) at 25°C. Each of the analytical methods listed in Clauses A.3.c.ii vii of this Section has an associated list of approved chemical compounds for which the department considers the method appropriate for measurement. If an owner or operator uses Method 624, 625, 1624, or 1625 in 40 CFR Part 136,

~~Appendix A to analyze one or more compounds that are not on that method's published list, the Alternative Test Procedure contained in 40 CFR 136.4 and 136.5 must be followed. If an owner or operator uses EPA Method 8260 or 8270 in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.A, to analyze one or more compounds that are not on that method's published list, the procedures in Clause A.3.e.viii of this Section must be followed. At the owner's or operator's discretion, the owner or operator may adjust test data ~~measured~~obtained by any appropriate method other than Method 25D to the corresponding average VO concentration value which would have been obtained had the waste samples been analyzed using Method 25D in 40 CFR Part 60, Appendix A to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25°C. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}). If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25°Celsius that are contained in the waste. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711; Other test methods may be used if they meet one of the following requirements in Clause A.3.c.i or ii of this Section and provided that the requirement to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³) at 25°C is met:~~

- ~~i. Method 25D in 40 CFR Part 60, Appendix A;~~
- ~~ii. Method 624 in 40 CFR Part 136, Appendix A;~~
- ~~iii. Method 625 in 40 CFR Part 136, Appendix A. Perform corrections to the compounds for which the analysis is being conducted based on the *accuracy as recovery* using the factors in Table 7 of the method;~~
- ~~iv. Method 1624 in 40 CFR Part 136, Appendix A;~~
- ~~v. Method 1625 in 40 CFR Part 136, Appendix A;~~
- ~~vi. Method 8260 in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.A. Maintain a formal quality assurance program consistent with the requirements of Method 8260. The quality assurance program shall include the following elements:

 - ~~(a). documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, preparation, introduction, and analysis steps; and~~
 - ~~(b). measurement of the overall accuracy and precision of the specific procedures;~~~~
- ~~vii. Method 8270 in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.A. Maintain a formal quality assurance program consistent with the requirements of Method 8270. The quality assurance program shall include the following elements:

 - ~~(a). documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, preparation, introduction, and analysis steps; and~~
 - ~~(b). measurement of the overall accuracy and precision~~~~

of the specific procedures;

~~i.viii.~~ any other EPA standard method that has been validated in accordance with *Alternative Validation Procedure for EPA Waste and Wastewater Methods*, 40 CFR Part 63, Appendix D. ~~As an alternative, other EPA standard methods may be validated by the procedure specified in Clause A.3.c.ix of this Section; and/or~~

~~ii.ix.~~ any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR Part 63, Appendix A. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

A.3.d. – B.3.b.ii. ...

iii. All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of ~~an acceptable sampling plan includes a plan incorporating sample collection and handling procedures for a total volatile organic constituent concentration may be found in accordance with the requirements specified in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.A, or in Method 25D in 40 CFR Part 60, Appendix A.~~

iv. ...

c. Analysis. Each collected sample shall be prepared and analyzed in accordance with Method 25D in 40 CFR Part 60, Appendix A for the total concentration of volatile organic constituents, or by using one or more appropriate methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³) at 25°C ~~one or more of the methods listed in Clauses B.3.c.i-ix of this Section, including appropriate quality assurance and quality control (QA/QC) checks and use of target compounds for calibration. When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system, to determine if the conditions of LAC 33:V.4723 or 4725 are met, then the waste samples shall be prepared and analyzed using the same method or methods as were used in making the initial waste determinations at the point of waste origination or at the point of entry to the treatment system. If Method 25D in 40 CFR Part 60, Appendix A is not used, then one or more methods should be chosen that are appropriate to ensure that the waste determination accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³] at 25°C. Each of the analytical methods listed in Clauses B.3.c.ii-vii of this Section has an associated list of approved chemical compounds for which the department considers the method appropriate for measurement. If an owner or operator uses Method 624, 625, 1624, or 1625 in 40 CFR Part 136,~~

~~Appendix A to analyze one or more compounds that are not on that method's published list, the Alternative Test Procedure contained in 40 CFR 136.4 and 136.5 must be followed. If an owner or operator uses Method 8260 or 8270 in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.A, to analyze one or more compounds that are not on that method's published list, the procedures in Clause B.3.e.viii of this Section must be followed. At the owner's or operator's discretion, the owner or operator may adjust test data ~~measured~~obtained by any appropriate method other than Method 25D to ~~discount any contribution to the corresponding average~~total VO concentration value which that is a result of including a compound with a Henry's law constant value less than 0.1 Y/X at 25°C would have been obtained had the waste samples been analyzed using Method 25D in 40 CFR Part 60, Appendix A. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}). If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25°Celsius that are contained in the waste. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711.;~~ Other test methods may be used if they meet one of the following requirements in Clause B.3.c.i or ii of this Section and provided that the requirement to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m³) at 25°C is met:

- ~~i. Method 25D in 40 CFR Part 60, Appendix A;~~
- ~~ii. Method 624 in 40 CFR Part 136, Appendix A;~~
- ~~iii. Method 625 in 40 CFR Part 136, Appendix A. Perform corrections to the compounds for which the analysis is being conducted based on the accuracy as recovery using the factors in Table 7 of the method;~~
- ~~iv. Method 1624 in 40 CFR Part 136, Appendix A;~~
- ~~v. Method 1625 in 40 CFR Part 136, Appendix A;~~
- ~~vi. Method 8260 in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.A. Maintain a formal quality assurance program consistent with the requirements of Method 8260. The quality assurance program shall include the following elements:

 - ~~(a): documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, preparation, introduction, and analysis steps; and~~
 - ~~(b): measurement of the overall accuracy and precision of the specific procedures;~~~~
- ~~vii. Method 8270 in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.A. Maintain a formal quality assurance program consistent with the requirements of Method 8270. The quality assurance program shall include the following elements:

 - ~~(a): documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, preparation, introduction, and analysis steps; and~~
 - ~~(b): measurement of the overall accuracy and precision of the specific procedures;~~~~

~~i.viii.~~ any other EPA standard method that has been validated in accordance with *Alternative Validation Procedure for EPA Waste and Wastewater Methods*, 40 CFR Part 63, Appendix D. ~~As an alternative, other EPA standard methods may be validated by the procedure specified in Clause A.3.c.ix of this Section; and/or~~

~~ii.ix.~~ any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR Part 63, Appendix A. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

B.3.d. – C.2. ...

3. Direct Measurement to Determine the Maximum Organic Vapor Pressure of a Hazardous Waste

a. Sampling. A sufficient number of samples shall be collected to be representative of the waste contained in the tank. All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of ~~an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified~~ may be found in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.A, or in Method 25D in 40 CFR Part 60, Appendix A.

C.3.b. – D.9. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Waste Services, Hazardous Waste Division, LR 24:1747 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:288 (February 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Chapter 49. Lists of Hazardous Wastes

[Comment: Chapter 49 is divided into two sections: Category I Hazardous Wastes, which consist of Hazardous Wastes from nonspecific and specific sources (F and K wastes), Acute Hazardous Wastes (P wastes), and Toxic Wastes (U wastes) (LAC 33:V.4901); and Category II Hazardous Wastes, which consist of wastes that are ignitable, corrosive, reactive, or toxic (LAC 33:V.4903).]

§4901. Category I Hazardous Wastes

A. – B.3.b.ii.(b).(ii). ...

(c). Analytical Requirements

(i). Rinses must be tested by using an appropriate method 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). The 2,3,7,8-TCDD-based MCL is 0.01 parts per trillion (ppt), sample weight of 1000g, IS spiking level of 1 ppt, final extraction volume of 10-50 µL. For other

congeners, multiply the values by 1 for TCDF/PeCDD/PeCDF, by 2.5 for HxCDD/HxCDF/HpCDD/HpCDF, and by 5 for OCDD/OCDF 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.

B.3.b.ii.(d). – G.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 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 14:426 (July 1988), LR 14:791 (November 1988), LR 15:182 (March 1989), 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, 840 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 23:1522 (November 1997), LR 24:321 (February 1998), LR 24:686 (April 1998), LR 24:1754 (September 1998), LR 25:487 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:304 (March 2001), LR 27:715 (May 2001), LR 28:1009 (May 2002), LR 29:324 (March 2003), amended by the Office of Environmental Assessment, LR 31:1573 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 32:831 (May 2006), LR 33:1627 (August 2007), LR 34:635 (April 2008), LR 34:**.

§4903. Category II Hazardous Wastes

A. – B. ...

1. It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a 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 in LAC 33:V.110, or by a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D 3278-78, as incorporated by reference at in 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.~~

B.2. – C. ...

1. It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040C ~~described in~~ *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference at in 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~~ Method 1110A in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, and as incorporated by reference in at LAC 33:V.110.

D. – F. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 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), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 29:325 (March 2003), amended by the Office of the Secretary, Legal Affairs Division, LR 34:644 (April 2008), LR 34:**.

§4909. Comparable/Syngas Fuel Exclusion

A. – D.6. ...

7. Waste Analysis Plans. The generator of a comparable/syngas fuel shall develop and follow a written waste analysis plan ~~which~~that describes the procedures for sampling and analysis of the hazardous waste to be excluded. ~~The waste analysis plan shall be developed in accordance with the applicable sections of the *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, incorporated by reference in LAC 33:V.110.~~ The plan shall be followed and retained at the facility excluding the waste.

7.a – 13. ...

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Waste Services, Hazardous Waste Division, LR 25:489 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:305 (March 2001), LR 28:1010 (May 2002), amended by the Office of the Secretary, Legal Affairs Division, LR 34:644 (April 2008), LR 34:**.

§4999. Appendices—Appendix A, B, C, D, ~~and E,~~ and F

Appendix A. ReservedChemical 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. ReservedToxicity Characteristic Leaching Procedure (TCLP) (Method 1311)

[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 1310B)

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

Appendix D. Representative Sampling Methods

The methods and equipment used for sampling waste materials will vary with the form

and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed below, for sampling waste with properties similar to the indicated materials, will be considered by the department to be representative of the waste.

Containerized Liquid Wastes—"COLIWASA," ~~described in *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods*,¹ U.S. Environmental Protection Agency, Office of Solid Waste, Washington, D.C. 20460. (Copies may be obtained from Solid Waste Information, U.S. Environmental Protection Agency, 26 W. St. Clair St., Cincinnati, Ohio 45268.)~~

* * *

Liquid Waste in Pits, Ponds, Lagoons, and Similar Reservoirs—"Pond Sampler," ~~described in *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods*.¹ This manual also contains additional information on application of these protocols.~~

ENDNOTE: ¹These ~~methods~~ protocols are also described in *Samplers and Sampling Procedures for Hazardous Waste Streams*, EPA 600/2-80-018, January 1980.

Appendix E. – Appendix E. Table 1. ...

Appendix F—Recordkeeping Instructions

A. The recordkeeping provisions of LAC 33:V.4357 specify that an owner or operator must keep a written operating record at his facility. This appendix provides additional instructions for keeping portions of the operating record. See LAC 33:V.4357.B for additional recordkeeping requirements.

B. The following information concerning each hazardous waste received, treated, stored, or disposed of at the facility must be recorded, as it becomes available, and maintained in the operating record until closure of the facility, in the following manner:

1. a description of the waste, identified by its common name and the EPA hazardous waste number(s) from LAC 33:V.Chapter 49 that apply to the waste. The waste description must include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in LAC 33:V.Chapter 49, the description also must include the process that produced it (for example, "solid filter cake from production of [_____], EPA Hazardous Waste Number W051"). Each hazardous waste listed in LAC 33:V.4901, and each hazardous waste characteristic defined in LAC 33:V.4903, has a four-digit EPA hazardous waste number assigned to it. This number must be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description must include all applicable EPA hazardous waste numbers;

2. the estimated or manifest-reported weight, or volume and density, where applicable, in one of the units of measure specified in Table 1:

Table 1—Units of Measure	
<u>Unit of Measure</u>	<u>Code</u>¹
<u>Gallons</u>	<u>G</u>
<u>Gallons per Hour</u>	<u>E</u>
<u>Gallons per Day</u>	<u>U</u>

Table 1—Units of Measure	
<u>Unit of Measure</u>	<u>Code</u>¹
<u>Liters</u>	<u>L</u>
<u>Liters Per Hour</u>	<u>H</u>
<u>Liters Per Day</u>	<u>V</u>
<u>Short Tons Per Hour</u>	<u>D</u>
<u>Metric Tons Per Hour</u>	<u>W</u>
<u>Short Tons Per Day</u>	<u>N</u>
<u>Metric Tons Per Day</u>	<u>S</u>
<u>Pounds Per Hour</u>	<u>J</u>
<u>Kilograms Per Hour</u>	<u>R</u>
<u>Cubic Yards</u>	<u>Y</u>
<u>Cubic Meters</u>	<u>C</u>
<u>Acres</u>	<u>B</u>
<u>Acre-feet</u>	<u>A</u>
<u>Hectares</u>	<u>Q</u>
<u>Hectare-meter</u>	<u>F</u>
<u>Btu's per Hour</u>	<u>I</u>
<u>Pounds</u>	<u>P</u>
<u>Short tons</u>	<u>T</u>
<u>Kilograms</u>	<u>K</u>
<u>Tons</u>	<u>M</u>

¹ Single digit symbols are used here for data processing purposes.

3. the method(s) (by handling code(s) as specified in Table 2) and date(s) of treatment, storage, or disposal. Use the handling code(s) listed in Table 2 that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of hazardous waste received.

Table 2—Handling Codes for Treatment, Storage, and Disposal	
<u>Methods</u>	
<u>Handling Code</u>	<u>Technique</u>
<u>A. Storage</u>	
<u>S01</u>	<u>Container (barrel, drum, etc.)</u>
<u>S02</u>	<u>Tank</u>
<u>S03</u>	<u>Waste Pile</u>
<u>S04</u>	<u>Surface Impoundment</u>
<u>S05</u>	<u>Drip Pad</u>

Table 2—Handling Codes for Treatment, Storage, and Disposal Methods	
Handling Code	Technique
S06	Containment Building (Storage)
S99	Other Storage (specify)
B. Treatment	
1. Thermal Treatment	
T06	Liquid injection incinerator
T07	Rotary kiln incinerator
T08	Fluidized bed incinerator
T09	Multiple hearth incinerator
T10	Infrared furnace incinerator
T11	Molten salt destructor
T12	Pyrolysis
T13	Wet air oxidation
T14	Calcination
T15	Microwave discharge
T18	Other (specify)
2. Chemical Treatment	
T19	Absorption mound
T20	Absorption field
T21	Chemical fixation
T22	Chemical oxidation
T23	Chemical precipitation
T24	Chemical reduction
T25	Chlorination
T26	Chlorinolysis
T27	Cyanide destruction
T28	Degradation
T29	Detoxification
T30	Ion exchange
T31	Neutralization
T32	Ozonation
T33	Photolysis
T34	Other (specify)
3. Physical Treatment	
a. Separation of Components	
T35	Centrifugation
T36	Clarification
T37	Coagulation
T38	Decanting
T39	Encapsulation
T40	Filtration
T41	Flocculation
T42	Flotation
T43	Foaming

Table 2—Handling Codes for Treatment, Storage, and Disposal Methods	
Handling Code	Technique
<u>T44</u>	<u>Sedimentation</u>
<u>T45</u>	<u>Thickening</u>
<u>T46</u>	<u>Ultrafiltration</u>
<u>T47</u>	<u>Other (specify)</u>
b. Removal of Specific Components	
<u>T48</u>	<u>Absorption-molecular sieve</u>
<u>T49</u>	<u>Activated carbon</u>
<u>T50</u>	<u>Blending</u>
<u>T51</u>	<u>Catalysis</u>
<u>T52</u>	<u>Crystallization</u>
<u>T53</u>	<u>Dialysis</u>
<u>T54</u>	<u>Distillation</u>
<u>T55</u>	<u>Electrodialysis</u>
<u>T56</u>	<u>Electrolysis</u>
<u>T57</u>	<u>Evaporation</u>
<u>T58</u>	<u>High gradient magnetic separation</u>
<u>T59</u>	<u>Leaching</u>
<u>T60</u>	<u>Liquid ion exchange</u>
<u>T61</u>	<u>Liquid-liquid extraction</u>
<u>T62</u>	<u>Reverse osmosis</u>
<u>T63</u>	<u>Solvent recovery</u>
<u>T64</u>	<u>Stripping</u>
<u>T65</u>	<u>Sand filter</u>
<u>T66</u>	<u>Other (specify)</u>
4. Biological Treatment	
<u>T67</u>	<u>Activated sludge</u>
<u>T68</u>	<u>Aerobic lagoon</u>
<u>T69</u>	<u>Aerobic tank</u>
<u>T70</u>	<u>Anaerobic tank</u>
<u>T71</u>	<u>Composting</u>
<u>T72</u>	<u>Septic tank</u>
<u>T73</u>	<u>Spray irrigation</u>
<u>T74</u>	<u>Thickening filter</u>
<u>T75</u>	<u>Trickling filter</u>
<u>T76</u>	<u>Waste stabilization pond</u>
<u>T77</u>	<u>Other (specify)</u>
<u>T78-T79</u>	[Reserved]
5. Boilers and Industrial Furnaces	
<u>T80</u>	<u>Boiler</u>
<u>T81</u>	<u>Cement Kiln</u>
<u>T82</u>	<u>Lime Kiln</u>
<u>T83</u>	<u>Aggregate Kiln</u>
<u>T84</u>	<u>Phosphate Kiln</u>
<u>T85</u>	<u>Coke Oven</u>

Table 2—Handling Codes for Treatment, Storage, and Disposal Methods	
Handling Code	Technique
<u>T86</u>	<u>Blast Furnace</u>
<u>T87</u>	<u>Smelting, Melting, or Refining Furnace</u>
<u>T88</u>	<u>Titanium Dioxide Chloride Process Oxidation Reactor</u>
<u>T89</u>	<u>Methane Reforming Furnace</u>
<u>T90</u>	<u>Pulping Liquor Recovery Furnace</u>
<u>T91</u>	<u>Combustion Device Used in the Recovery of Sulfur Values From Spent Sulfuric Acid</u>
<u>T92</u>	<u>Halogen Acid Furnace</u>
<u>T93</u>	<u>Other Industrial Furnaces Listed in 40 CFR 260.10 (specify)</u>
6. Other Treatment	
<u>T94</u>	<u>Containment Building (Treatment)</u>
C. Disposal	
<u>D79</u>	<u>Underground Injection</u>
<u>D80</u>	<u>Landfill</u>
<u>D81</u>	<u>Land Treatment</u>
<u>D82</u>	<u>Ocean Disposal</u>
<u>D83</u>	<u>Surface Impoundment (to be closed as a landfill)</u>
<u>D99</u>	<u>Other Disposal (specify)</u>
D. Miscellaneous	
<u>X01</u>	<u>Open Burning/Open Detonation</u>
<u>X02</u>	<u>Mechanical Processing</u>
<u>X03</u>	<u>Thermal Unit</u>
<u>X04</u>	<u>Geologic Repository</u>
<u>X99</u>	<u>Other (specify)</u>

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, LR 20:1000 (September 1994), amended by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:944 (September 1995), LR 22:830 (September 1996), amended by the Office of Waste Services, Hazardous Waste Division, LR 23:952 (August 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:2397 (December 1999), LR 26:2509 (November 2000), LR 29:1084 (July 2003), repromulgated LR 29:1475 (August 2003), amended by the Office of Environmental Assessment, LR 30:2464 (November 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 33:445 (March 2007), LR 33:825 (May 2007), LR 33:1016 (June 2007), LR 34:73 (January 2008), LR 34:**.

Part VII. Solid Waste

Subpart 1. Solid Waste Regulations

Chapter 1. General Provisions and Definitions

§115. Definitions

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

* * *

Liquid Waste—any waste material that is determined to contain free liquids as defined by Method 9095B (Paint Filter Liquids Test), as described in *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods* (EPA Pub. SW-846), which is incorporated by reference. A suffix of “B” in the method number indicates revision two (the method has been revised twice). Method 9095B is dated November 2004.

* * *

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

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended LR 22:279 (April 1996), amended by the Office of Waste Services, Solid Waste Division, LR 23:1145 (September 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2514, 2609 (November 2000), amended by the Office of Environmental Assessment, LR 31:1576 (July 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 33:1019 (June 2007), LR 34:**.

Chapter 30. Appendices

§3005. Groundwater Sampling and Analysis Plan—Appendix C

Groundwater Sampling and Analysis Plan

A. – G....

Table 1	
Detection Monitoring Parameters¹	
Common Name¹²	CAS RN²³
Inorganic Constituents	
* * *	
[See prior text in (1) - (15)]	
Organic Constituents:	
* * *	
[See prior text in (16) - (62)]	

NOTES:

¹ This list contains 47 volatile organics for which possible analytical procedures provided in EPA Publication SW-846, *Test Methods for Evaluating Solid Wastes*, include Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods.

¹² Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

²³ Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

Table 2
Assessment Monitoring Parameters¹

Common Name ¹²	CAS RN ²³	Chemical Abstracts Service Index Name ³⁴	Suggested Methods ⁵	PQL ⁶ (µg/L)
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-	8100 8270	200 10
Acenaphthylene	208-96-8	Acenaphthylene	8100 8270	200 10
Acetone	67-64-1	2-Propanone	8260	100
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	10
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-	8270	20
Acrolein	107-02-8	2-Propenal	8030 8260	5 100
Acrylonitrile	107-13-1	2-Propenenitrile	8030 8260	5 200
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene; 1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a,- hexa-hydro-(1α,4α,4β, 5α,8α,8β)	8080 8270	0.05 10
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010 8260	5 10
4-Amino-biphenyl	92-67-1	[1,1'-Biphenyl]-4-amine	8270	20
Anthracene	120-12-7	Anthracene	8100 8270	200 10
Antimony	(Total)	Antimony	6010 7040 7041	300 2,000 30
Arsenic	(Total)	Arsenic	6010 7060 7061	500 10 20
Barium	(Total)	Barium	6010 7080	20 1,000
Benzene	71-43-2	Benzene	8020 8021 8260	2 0.1 5
Benzo[a]anthracene; 1,2-Benzanthracene	56-55-3	Benz[a]anthracene	8100 8270	200 10
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100 8270	200 10
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100 8270	200 10
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100 8270	200 10
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100 8270	200 10
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20
Beryllium	(Total)	Beryllium	6010 7090 7091	3 50 2
alpha-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro- (1α,2α,3β,4α,5β,6β)-	8080 8270	0.05 10
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro- (1α,2β,3α,4β,5α,6β)-	8080 8270	0.05 20
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro- (1α,2α,3α,4β, 5α,6β)-	8080 8270	0.1 20

Table 2				
Assessment Monitoring Parameters ⁴				
Common Name ^{1,2}	CAS RN ^{2,3}	Chemical Abstracts Service Index Name ^{3,4}	Suggested Methods ⁵	PQL ⁶ (µg/L)
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-(1 α ,2 α ,3 β ,4 α ,5 α ,6 β)-	8080 8270	0.05 20
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	8410 8270	5 10
Bis(2-chloroethyl)ether	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	8410 8270	3 10
Bis(2-chloro-1-methylethyl) ether; 2,2'-Dichlorodiisopropyl ether	108-60-1 See Note 47	Propane, 2,2'-oxybis[1-chloro-	8410 8270	10 10
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzene-dicarboxylic acid; bis(2-ethylhexyl) ester	8060	20
Bromochloromethane; Chlorobromomethane	74-97-5	Methane, bromochloro-	8021 8260	0.1 5
Bromodichloromethane	75-27-4	Methane, bromodichloro-	8010 8021 8260	1 0.2 5
Bromoform; Tribromomethane	75-25-2	Methane, tribromo-	8010 8021 8260	2 15 5
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-	8110 8270	25 10
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid; butyl phenylmethyl ester	8060 8270	5 10
Cadmium	(Total)	Cadmium	6010 7130 7131	40 50 1
Carbon disulfide	75-15-0	Carbon disulfide	8260	100
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010 8021 8260	1 0.1 10
Chlordane	57-74-9 See Note 58	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a- hexahydro-	8080 8270	0.1 50
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-	8270	20
Chlorobenzene	108-90-7	Benzene, chloro-	8010 8020 8021 8260	2 2 0.1 5
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro- α -(4- chlorophenyl)- α -hydroxy-, ethyl ester	8270	10
p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro-3-methyl-	8040 8270	5 20
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010 8021 8260	5 1 10
Chloroform	67-66-3	Methane, trichloro-	8010 8021 8260	0.5 0.2 5
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-	8120 8270	10 10

Table 2				
Assessment Monitoring Parameters⁴				
Common Name^{1,2}	CAS RN^{2,3}	Chemical Abstracts Service Index Name^{3,4}	Suggested Methods⁵	PQL⁶ (µg/L)
2-Chlorophenol	95-57-8	Phenol, 2-chloro-	8040 8270	5 10
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-	8110 8270	40 10
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-	8010 8260	50 20
Chromium	(Total)	Chromium	6010 7190 7191	70 500 10
Chrysene	218-01-9	Chrysene	8100 8270	200 10
Cobalt	(Total)	Cobalt	6010 7200 7201	70 500 10
Copper	(Total)	Copper	6010 7210	60 200
m-Cresol	108-39-4	Phenol, 3-methyl-	8270	10
o-Cresol	95-48-7	Phenol, 2-methyl-	8270	10
p-Cresol	106-44-5	Phenol, 4-methyl-	8270	10
Cyanide	57-12-5	Cyanide	9010	200
2,4-D; 2,4-Dichlorophenoxyacetic acid	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-	8150	10
4,4'-DDD	72-54-8	Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro-	8080 8270	0.1 10
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethenylidene) bis[4-chloro-	8080 8270	0.05 10
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-	8080 8270	0.1 10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methyl-ethyl)-, S-(2,3-dichloro-2-propenyl) ester	8270	10
Dibenz[a,h]- anthracene	53-70-3	Dibenz[a,h] anthracene	8100 8270	200 10
Dibenzofuran	132-64-9	Dibenzofuran	8270	10
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-	8010 8021 8260	1 0.3 5
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-	8011 8021 8260	0.1 30 25
1,2-Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-	8011 8021 8260	0.1 10 5
Di-n-butyl phthalate	84-74-2	1,2-Benzene dicarboxylic acid, dibutyl ester	8060 8270	5 10

Table 2				
Assessment Monitoring Parameters ⁴				
Common Name ^{1,2}	CAS RN ^{2,3}	Chemical Abstracts Service Index Name ^{3,4}	Suggested Methods ⁵	PQL ⁶ (µg/L)
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010 8020 8021 8120 8260 8270	2 5 0.5 10 5 10
m-Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-	8010 8020 8021 8120 8260 8270	5 5 0.2 10 5 10
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010 8020 8021 8120 8260 8270	2 5 0.1 15 5 10
3,3'-Dichlorobenzidine	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	8270	20
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-	8260	100
Dichlorodifluoromethane	75-71-8	Methane, dichlorodifluoro-	8021 8260	0.5 5
1,1-Dichloroethane	75-34-3	Ethane, 1,1-dichloro-	8010 8021 8260	1 0.5 5
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-	8010 8021 8260	0.5 0.3 5
1,1-Dichloroethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro	8010 8021 8260	1 0.5 5
cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene	156-59-2	Ethene, 1,2-dichloro-, (Z)-	8021 8260	0.2 5
trans-1,2-Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-(E)-	8010 8021 8260	1 0.5 5
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040 8270	5 10
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10
1,2-Dichloropropane	78-87-5	Propane, 1,2-dichloro-	8010 8021 8260	0.5 0.05 5
1,3-Dichloropropane; Trimethylene dichloride	142-28-9	Propane, 1,3-dichloro-	8021 8260	0.3 5
2,2-Dichloropropane; Isopropylidene chloride	594-20-7	Propane, 2,2-dichloro-	8021 8260	0.5 15
1,1-Dichloropropene	563-58-6	1-Propene, 1,1-dichloro-	8021 8260	0.2 5

Table 2				
Assessment Monitoring Parameters ⁴				
Common Name ^{1,2}	CAS RN ^{2,3}	Chemical Abstracts Service Index Name ^{3,4}	Suggested Methods ⁵	PQL ⁶ (µg/L)
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-	8010 8260	20 10
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-	8010 8240	5 5
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1α,2β,2α,3β,6β,6α,7β,7α)-	8080 8270	0.05 10
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	8060 8270	5 10
O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	8141 8270	5 20
Dimethoate	60-51-5	Phosphorodithioic acid, O,O-dimethyl-S-[2-(methylamino)-2-oxoethyl] ester	8141 8270	3 20
p-(Dimethylamino)azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	8270	10
7,12-Dimethylbenz[a] anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-	8270	10
3,3'-Dimethylbenzidine	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	8270	10
<u>alpha, & alpha-Dimethylphenethylamine</u>	<u>122-09-8</u>	<u>Benzeneethanamine, αα-dimethyl</u>		
2,4-Dimethylphenol	105-67-9	Phenol, 2,4-dimethyl-	8040	5
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	8060 8270	5 10
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-	8270	20
4,6-Dinitro-o-cresol	534-52-1	Phenol, 2-methyl-4,6-dinitro-	8040 8270	150 50
2,4-Dinitrophenol	51-28-5	Phenol, 2,4-dinitro-	8040 8270	150 50
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-	8090 8270	0.2 10
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-	8090 8270	0.1 10
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methyl- propyl)-4,6-dinitro-	8150 8270	1 20
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060 8270	30 10
Diphenylamine	122-39-4	Benzenamine, N-phenyl-	8270	10
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio) ethyl]ester	8140 8141 8270	2 0.5 10
Endosulfan I	959-98-8	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexachloro -1,5,5a,6,9,9a-hexahydro-,3-oxide, (3α,5αβ,6α,9α,9αβ)-	8080 8270	0.1 20
Endosulfan II	33213-65-9	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexachloro -1,5,5a,6,9,9a-hexahydro-,3-oxide, (3α,5αα,6β,9β,9αα)-	8080 8270	0.05 20

Table 2				
Assessment Monitoring Parameters⁴				
Common Name^{1,2}	CAS RN^{2,3}	Chemical Abstracts Service Index Name^{3,4}	Suggested Methods⁵	PQL⁶ (µg/L)
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3 benzodioxathiepin, 6,7,8,9,10,10-hexachloro -1,5,5a,6,9,9a-hexahydro-,3,3-dioxide	8080 8270	0.5 10
Endrin	72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a, 7,7a-octahydro-, (1α,2β,2aβ,3α,6α,6aβ, 7β,7α)-	8080 8270	0.1 20
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]-pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-(1α,2β,2aβ,4β,4aβ,5β, 6aβ,6bβ,7R*)	8080 8270	0.2 10
Ethylbenzene	100-41-4	Benzene, ethyl-	8020 8221 8260	2 0.05 5
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	8015 8260 8270	5 10 10
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester	8270	20
Famphur	52-85-7	Phosphorothioic acid, O-[4-[(dimethyl-amino)-sulfonyl] phenyl]-O,O-dimethyl ester	8270	20
Fluoranthene	206-44-0	Fluoranthene	8100 8270	200 10
Fluorene	86-73-7	9H-Fluorene	8100 8270	200 10
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a- tetrahydro-	8080 8270	0.05 10
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno [1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro- 1a,1b,5,5a,6,6a-hexahydro-, (1α, 1bβ,2α,5α,5aβ,6β,6α)	8080 8270	1 10
Hexachlorobenzene	118-74-1	Benzene, hexachloro-	8120 8270	0.5 10
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8021 8120 8260 8270	0.5 5 10 10
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene	8120 8270	5 10
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120 8260 8270	0.5 10 10
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	8270	10
2-Hexanone	591-78-6	2-Hexanone	8260	50
Indeno(1,2,3-cd) pyrene	193-39-5	Indeno[1,2,3-cd] pyrene	8100 8270	200 10
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015 8240	50 100

Table 2				
Assessment Monitoring Parameters⁴				
Common Name^{1,2}	CAS RN^{2,3}	Chemical Abstracts Service Index Name^{3,4}	Suggested Methods⁵	PQL⁶ (µg/L)
Isodrin	465-73-6	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro- (1 α ,4 α ,4a β ,5 β ,8 β ,8a β)-	8270 8260	20 10
Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5-tri-methyl-	8090 8270	60 10
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	8270	10
Kepone	143-50-0	1,3,4-Metheno-2H- cyclobuta-[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-	8270	20
Lead	(Total)	Lead	6010 7420 7421	400 1,000 10
Mercury	(Total)	Mercury	7470	2
Methacrylonitrile	126-98-7	2-Propene, nitrile 2-methyl-	8015 8260	5 100
Methapyrilene	91-80-5	1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2- thienylmethyl)-	8270	100
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2, trichloroethylidene) bis[4-methoxy-	8080 8270	2 10
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010 8021	20 10
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010 8021	1 0.3
3-Methylcholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	10
Methyl ethyl ketone; MEK	78-93-3	2-Butanone	8015 8260	10 100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010 8260	40 10
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015 8260	2 30
Methyl methanesulfonate	66-27-3	methanesulfonic acid, methyl ester	8270	10
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	8140 8141 8270	0.5 1 10
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl	8015 8260	5 100
Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-	8010 8021 8260	15 20 10
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-	8010 8021 8060	5 0.2 10
Naphthalene	91-20-3	Naphthalene	8021 8100 8260 8270	0.5 200 5 10
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione	8270	10

Table 2				
Assessment Monitoring Parameters ⁴				
Common Name ^{1,2}	CAS RN ^{2,3}	Chemical Abstracts Service Index Name ^{3,4}	Suggested Methods ⁵	PQL ⁶ (µg/L)
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	10
Nickel	(Total)	Nickel	6010 7520	50 400
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	8270	50
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-	8270	50
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-	8270	50
Nitrobenzene	98-95-3	Benzene, nitro-	8090 8270	40 10
o-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040 8270	5 10
p-Nitrophenol	100-02-7	Phenol, 4-nitro	8040 8270	10 50
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-	8270	10
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-	8270	20
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8070	2
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8070	5
N-Nitrosodipropylamine; Di-n-propylnitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8070	10
N-Nitrosomethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosopiperidine	100-75-4	Piperidine, 1-nitroso-	8270	20
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-	8270	40
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2- methyl-5-nitro-	8270	10
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	8141 8270	0.5 10
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	8270	10
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-	8270	20
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040 8270	5 50
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)	8270	20
Phenanthrene	85-01-8	Phenanthrene	8100 8270	200 10
Phenol	108-95-2	Phenol	8040 8270	1 10
p-Phenylenediamine	106-50-3	1,4-Benzenediamine	8270	10
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S- [(ethylthio)methyl] ester	8140 8141 8270	2 0.5 10
Polychlorinated biphenyls; PCBs	See Note 69	1,1'-Biphenyl, chloro derivatives	8080 8270	50 200
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N- (1,1-dimethyl-2-propynyl)-	8270	10
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015 8260	60 150
Pyrene	129-00-0	Pyrene	8100 8270	200 10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	10

Table 2				
Assessment Monitoring Parameters ⁴				
Common Name ^{1,2}	CAS RN ^{2,3}	Chemical Abstracts Service Index Name ^{3,4}	Suggested Methods ⁵	PQL ⁶ (µg/L)
Selenium	(Total)	Selenium	6010 7740 7741	750 20 20
Silver	(Total)	Silver	6010 7760	70 100
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	8150	2
Styrene	100-42-5	Benzene, ethenyl-	8020 8021 8260	1 0.1 10
Sulfide	18496-25-8	Sulfide	9030	4,000
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2
<u>2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin</u>	<u>1746-01-6</u>	<u>Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-</u>		
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010 8021 8260	5 0.05 5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010 8021 8260	0.5 0.1 5
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-	8010 8021 8260	0.5 0.5 5
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-	8270	10
Thallium	(Total)	Thallium	6010 7840 7841	400 1,000 10
Tin	(Total)	Tin	6010	40
Toluene	108-88-3	Benzene, methyl-	8020 8021 8260	2 0.1 5
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	10
Toxaphene	8001-35-2 See n Note 740	Toxaphene	8080	2
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro	8021 8120 8260 8270	0.3 0.5 10 10
1,1,1-Trichloroethane; Methylchloroform	71-55-6	Ethane, 1,1,1-trichloro-	8010 8021 8260	0.3 0.3 5
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010 8260	0.2 5
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010 8021 8260	1 0.2 5

Table 2				
Assessment Monitoring Parameters ⁴				
Common Name ¹²	CAS RN ²³	Chemical Abstracts Service Index Name ³⁴	Suggested Methods ⁵	PQL ⁶ (µg/L)
Trichlorofluoromethane	75-69-4	Methane, trichlorofluoro-	8010 8021 8260	10 0.3 5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5-trichloro-	8270	10
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040 8270	5 10
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-	8010 8021 8260	10 5 15
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-triethyl ester	8270	10
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro	8270	10
Vanadium	(Total)	Vanadium	6010 7910 7911	80 2,000 40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8260	50
Vinyl chloride	75-01-4	Ethene, chloro-	8010 8021 8260	2 0.4 10
Xylene (total)	1330-20-7 See Note 844	Benzene, dimethyl-	8020 8021 8260	5 0.2 5
Zinc	(Total)	Zinc	6010 7950 7951	20 50 0.5

Notes:

⁴ The regulatory requirements pertain only to the list of substances; the right hand columns (Methods and PQL) are given for informational purposes only. See also Footnotes 5 and 6.

¹² Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

²³ Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

³⁴ CAS index numbers are those used in the 9th Collective Index.

⁵ Suggested Methods refer to analytical procedure numbers used in EPA Publication SW-846. Analytical details can be found in SW-846 and in documentation on file at the agency.

Caution: The methods listed are representative of SW-846 procedures and may not always be the most suitable methods for monitoring an analyte under the regulations.

⁶ Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5-ml samples for volatile organics and 1-L samples for semivolatile organics.

Caution: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

⁴⁷ This substance is often called Bis(2-chloroisopropyl) ether, the name that Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2'-oxybis[2-chloro- (CAS RN 39638-32-9).

⁵⁸ Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 µg/L by method 8270.

⁶⁹ Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals,

including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 11097-69-1), and Aroclor 1260 (CAS RN 11096-82-5). ~~The PQL shown is an average value for PCB congeners.~~

⁷⁴⁰ Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-20), i.e., chlorinated camphene.

⁸⁴⁴ Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7). ~~PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m- or p-xylene. The PQL for m-xylene is 2.0 ug/L by method 8020 or 8260.~~

DECISION TREE DIAGRAM. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.
 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Solid Waste Division, LR 19:187 (February 1993), amended by the Office of the Secretary, Legal Affairs Division, LR 33:1109 (June 2007), LR 34:**.