

US EPA ARCHIVE DOCUMENT

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 260, 264, 265, and 266

[EPA F-97-WT3F-FFFFF; FRL-5839-6]

Hazardous Waste Management System; Testing and Monitoring Activities

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

---

**SUMMARY:** The Environmental Protection Agency (EPA or Agency) is amending its hazardous waste regulations for testing and monitoring activities. This amendment adds new and revised methods as Update III to the Third Edition of the EPA-approved test methods manual "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 and deletes several obsolete methods from SW-846 and the RCRA regulations. It also incorporates SW-846, Third Edition, as amended by Updates I (July 1992), II (September 1994) and IIA (August 1993 as part of the wood surface protection rule), IIB (January 1995, clarifying the temperature requirement for pH measurements of highly alkaline wastes), and III (December 1996). The intent of this action is to provide state-of-the-art analytical technologies for RCRA-related testing, thus promoting cost effectiveness and flexibility in choosing analytical test methods, as well as clarifying the RCRA Program's approach to working towards the Performance Based Measurement System (PBMS). Incorporation by reference was approved for the updates on the following dates: Update I, August 31, 1993, Update II, January 13, 1995, Update IIA, January 4, 1994 as part of the wood surface protection rule, and Update IIB, April 4, 1995, clarifying the temperature requirement for pH measurements of highly alkaline wastes.

**DATES:** This action is effective as of June 13, 1997. The incorporation by reference of the publication listed in the regulations is approved by the Director of the Federal Register as of June 13, 1997.

**ADDRESSES:** Supporting materials are available for viewing in the RCRA Information Center (RIC), located at Crystal Gateway I, First Floor, 1235 Jefferson Davis Highway, Arlington, VA. The Docket Identification Number is F-97-WT3F-FFFFF. The RIC is open from 9 a.m. to 4 p.m., Monday through Friday, excluding federal holidays. All comments received are in the docket for the proposed rule (Docket No. F-95-WT3P-FFFFF). Summaries of the comments together with the Agency's responses are in "Response to Public Comments Background Document, Promulgation of the Third Update to SW-846, Third Edition" which is in the docket for this final rule (Docket No. F-97-WT3F-FFFFF). To review docket materials, it is recommended that the

public make an appointment by calling (703) 603-9230. The public may copy a maximum of 100 pages of material from any regulatory docket at no charge. Additional copies cost \$0.15 per page. The docket index and rule are available electronically. See the SUPPLEMENTARY INFORMATION section for information on accessing it.

Copies of the Third Edition of SW-846, as amended by Updates I, II, IIA, IIB, and III, are part of the official docket for this rulemaking, and also are available from the Superintendent of Documents, Government Printing Office (GPO), Washington, DC 20402, (202) 512-1800. The GPO document number is 955-001-00000-1. Copies of the Third Edition integrated manual and its updates are also available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4650. The Third Edition integrated manual order number is PB95264073, and the Final Update III order number is PB97156137.

In addition, a CD-ROM version of SW-846, Third Edition, as amended by Updates I through IIB, is available from NTIS. In the future, the CD-ROM will be updated by NTIS to also include Update III to SW-846.

FOR FURTHER INFORMATION CONTACT: For general information, contact the RCRA Hotline at (800) 424-9346 or TDD (800) 553-7672 (hearing impaired). In the Washington, DC, metropolitan area, call (703) 412-9810 or TDD (703) 412-3323. For more detailed information on specific aspects of this rulemaking, contact Kim Kirkland, Office of Solid Waste(5307W), U. S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (703) 308-8855.

>>>> The preamble has not been included in this file. <<<<

For the reasons set out in the preamble, title 40, ch. I, of the Code of Federal Regulations is amended as set forth below:

#### PART 260--HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

1. The authority citation for part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921-6927, 6930, 6934, 6935, 6937, 6938, 6939, and 6974.

#### Subpart B--Definitions

2. Section 260.11(a) is revised to read as follows:

#### § 260.11 References.

(a) When used in parts 260 through 270 of this chapter, the following publications are incorporated by reference:

(1) "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester," ASTM Standard D-3278-78, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

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

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

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

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

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

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

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

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

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

(11) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 [Third Edition (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), and III (December 1996)]. 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. 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, 401 M Street, SW, Washington, DC 20460.

(12) "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised", October 1992, EPA Publication No. EPA-450/R-92-019, Environmental Protection Agency, Research Triangle Park, NC.

(13) "ASTM Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," ASTM Standard E926-88, 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.

(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, PA 19103.

\* \* \* \* \*

## PART 264--STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

3. The authority citation for part 264 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6925.

### Subpart AA--Air Emission Standards for Process Vents

4. Paragraphs (d)(1)(iii) and (f) of § 264.1034 are revised to read as follows:

§ 264.1034 Test methods and procedures.

\* \* \* \* \*

(d) \* \* \*

(1) \* \* \*

(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060 or 8260 of SW-846 (incorporated by reference under §260.11).

\* \* \* \* \*

(f) When an owner or operator and the Regional Administrator 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 of SW-846 (incorporated by reference under § 260.11) may be used to resolve the dispute.

\* \* \* \* \*

### Subpart BB--Air Emission Standards for Equipment Leaks

5. Paragraph (d)(2) of § 264.1063 is revised to read as follows:

§ 264.1063 Test methods and procedures.

\* \* \* \* \*

(d) \* \* \*

(2) Method 9060 or 8260 of SW-846 (incorporated by reference under § 260.11); or

\* \* \* \* \*

6. Footnote no. 5 to appendix IX to part 264 is revised to read as follows:

#### Appendix IX to Part 264--Ground-Water Monitoring List

\* \* \* \* \*

<sup>5</sup> Suggested methods refer to analytical procedure numbers used in the EPA publication, SW-846, "Test Methods for Evaluating Solid Waste", Third Edition. Analytical details can be found in SW-846 and in documentation on file at the Agency. The packed column gas chromatography methods 8010, 8020, 8030, 8040, 8060, 8080, 8090, 8110, 8120, 8140, 8150, 8240, and 8250 were promulgated methods through Update IIB of SW-846 and, as of Update III, the Agency has replaced these methods with "capillary column GC methods", as the suggested methods.

\* \* \* \* \*

#### PART 265--INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

7. The authority citation for part 265 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, 6925, 6935, and 6936, unless otherwise noted.

#### Subpart AA--Air Emission Standards for Process Vents

8. Paragraphs (d)(1)(iii) and (f) of § 265.1034 are revised to read as follows:

##### § 265.1034 Test methods and procedures

\* \* \* \* \*

(d) \* \* \*

(1) \* \* \*

(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060 or 8260 of SW-846 (incorporated by reference under §260.11).

\* \* \* \* \*

(f) When an owner or operator and the Regional Administrator 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 of SW-846 (incorporated by reference under § 260.11) may be used to resolve the dispute.

\* \* \* \* \*

#### Subpart BB--Air Emission Standards for Equipment Leaks

9. Paragraph (d)(2) of § 265.1063 is revised to read as follows:

§ 265.1063 Test methods and procedures.

\* \* \* \* \*

(d) \* \* \*

(2) Method 9060 or 8260 of SW-846 (incorporated by reference under § 260.11); or

\* \* \* \* \*

#### PART 266--STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

10. The authority citation for part 266 continues to read as follows:

Authority: 42 U.S.C 6905, 6912(a), 6924, and 6934.

#### Subpart H---Hazardous Waste Burned in Boilers and Industrial Furnaces (effective August 21, 1991)

11. Section 266.104 is amended by revising paragraph (e)(1) to read as follows:

§ 266.104 Standards to control organic emissions.

\* \* \* \* \*

(e) \* \* \*

(1) During the trial burn (for new facilities or an interim status facility applying for a permit) or compliance test (for interim status facilities), determine emission rates of the tetra-octa congeners of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs/CDFs) using Method 0023A, Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans Emissions from Stationary Sources, EPA Publication SW-846, as incorporated by reference in § 260.11 of this chapter.

\* \* \* \* \*

12. Section 266.106 is amended by revising paragraph (g)(1) and (2) to read as follows:

§ 266.106 Standards to control metals emissions.

\* \* \* \* \*

(g) \* \* \*



(1) General. Emission testing for metals shall be conducted using Method 0060, Determinations of Metals in Stack Emissions, EPA Publication SW-846, as incorporated by reference in § 260.11 of this chapter.

(2) Hexavalent chromium. Emissions of chromium are assumed to be hexavalent chromium unless the owner or operator conducts emissions testing to determine hexavalent chromium emissions using procedures prescribed in Method 0061, Determination of Hexavalent Chromium Emissions from Stationary Sources, EPA Publication SW-846, as incorporated by reference in § 260.11 of this chapter.

\* \* \* \* \*

13. Section 266.107 is amended by revising paragraph (f) to read as follows:

§ 266.107 Standards to control hydrogen chloride (HCl) and chlorine gas (Cl<sub>2</sub>) emissions.

\* \* \* \* \*

(f) Emissions testing. Emissions testing for HCl and Cl<sub>2</sub> shall be conducted using the procedures described in Methods 0050 or 0051, EPA Publication SW-846, as incorporated by reference in § 260.11 of this chapter.

\* \* \* \* \*

14. In appendix IX to part 266, section 3.0 is revised to read as follows:

Appendix IX to Part 266--Methods Manual for Compliance with the BIF Regulations

\* \* \* \* \*

### 3.0 Sampling and Analytical Methods

Note: The sampling and analytical methods to the BIF manual are published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in § 260.11 of this chapter.

\* \* \* \* \*

[FR Doc. 97-15410 Filed 6-12-97; 8:45 am]

BILLING CODE 6560-50-P