

3745-50-11

**Incorporated by reference.**

When used in the hazardous waste rules, the following text or other materials are incorporated by reference. All references cited in this rule are those that existed and were available on July 1, ~~2014~~2019 unless a different edition or version date is specified in this rule.

(A) Code of Federal Regulations (~~CFR~~C.F.R.) references. These regulations can generally be found in public libraries, electronically at <http://www.gpo.gov/fdsys/browse/collectionCfraction?collectionCode=CFR> <http://www.ecfr.gov>, or can be purchased from "U.S. Government Printing, Superintendent of Documents, Mail Stop SSOP, Washington DC" 20402-9328. The regulations listed in this rule are those published in the July 1, ~~2014~~2019 C.F.R.

(1) ~~10~~10 ~~CFR~~C.F.R. Part 1.

(2) ~~10~~10 ~~CFR~~C.F.R. Part 20.

(3) ~~10~~10 ~~CFR~~C.F.R. Part 61.

(4) ~~10~~10 ~~CFR~~C.F.R. Part 71.

(5) 16 C.F.R. Part 1115.

(6) 21 C.F.R. Parts 7, 203, 312, and 1308.

~~(5)~~(7) ~~29~~29 ~~CFR~~C.F.R. Part 1910.

~~(6)~~(8) ~~33~~33 ~~CFR~~C.F.R. Part 153.

~~(7)~~(9) ~~33~~33 ~~CFR~~C.F.R. Parts 336 and 337.

(10) 40 C.F.R. Part 3.

~~(8)~~(11) ~~40~~40 ~~CFR~~C.F.R. Parts 51 and 52.

~~(9)~~(12) ~~40~~40 ~~CFR~~C.F.R. Parts 60, 61, 62, and 63, except as otherwise specifically described in the hazardous waste rules.

~~(10)~~(13) ~~40~~40 ~~CFR~~C.F.R. Part 112.

~~(11)~~(14) ~~40~~40 ~~CFR~~C.F.R. ~~Part~~ C.F.R. Parts 122 and 124.

~~(12)~~(15) ~~40~~40 ~~CFR~~C.F.R. Parts 144, 146, and 148.

~~(13)~~(16) ~~40~~40 ~~CFR~~C.F.R. Part 232.

~~(14)~~(17) 40 ~~CFRC.F.R.~~ Parts 257 and 258.

~~(15)~~(18) 40 ~~CFRC.F.R.~~ Parts 260 to 279.

~~(16)~~(19) 40 ~~CFRC.F.R.~~ Part 302.

(20) 40 C.F.R. Part 403.

~~(17)~~(21) 40 ~~CFRC.F.R.~~ Part 761.

~~(18)~~(22) 49 ~~CFRC.F.R.~~ Parts 100 to 185.

(B) Federal statute references. These laws can generally be found in public libraries, or electronically at <http://www.gpo.gov/fdsys> the "Library of Congress" at <https://www.loc.gov/> using the "Library Catalog" search selection. The federal laws listed in this rule are those versions of the laws amended through July 1, ~~2014~~2019.

(1) The Act of August 18, 1970, 84 Stat. 825, 16 U.S.C.A. 1a-5, ~~as amended through the date specified in paragraph (B) of this rule.~~

(2) Atomic Energy Act of 1954, 42 U.S.C. 2011.

(3) "Chemical and Biological Warfare Program, Destruction of Existing Stockpile of Lethal Chemical Agents and Munitions, 50 U.S.C. 1521."

(4) Clean Air Act, 42 U.S.C. 7401.

(5) Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601.

(6) Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 301.

(7) Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136.

~~(8)~~ Federal Tax Code, 26 U.S.C. 501(c)(3).

~~(8)~~(9) Federal Water Pollution Control Act, Clean Water Act of 1977, or Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1251.

~~(9)~~(10) Investment Company Act of 1940, 15 U.S.C. 80a-1.

~~(10)~~(11) Marine Protection, Research, and Sanctuaries Act of 1972, 33 U.S.C. 1401.

~~(12)~~ Occupational Safety and Health Act of 1970, 29 U.S.C. 661.

~~(11)~~(13) Resource Conservation and Recovery Act of 1976 (RCRA) or Solid Waste Disposal Act, 42 U.S.C. 6901.

~~(12)~~(14) Safe Drinking Water Act, 42 U.S.C. 300f.

~~(13)~~(15) Toxic Substances Control Act, 15 U.S.C. 2601.

~~(14)~~(16) U.S.C. Title 11 (bankruptcy).

~~(15)~~(17) U.S. Constitution.

(C) Government literature. The availability of these documents is provided with each paragraph.

~~(1)~~ U.S. department of commerce documents: "Survey of Current Business," available at [www.commerce.gov](http://www.commerce.gov).

~~(2)~~(1) U.S. department of defense documents, available at [www.dtic.mil](http://www.dtic.mil).

(a) DD form 1348- requisition tracking form.

(b) DD form 1907- signature and tally record.

(c) DD form 626- motor vehicle inspection report.

(d) DD form 836- special instructions for motor vehicle drivers.

(e) DOD 6055.9-STD- ammunition and explosive safety standards.

~~(3)~~(2) U.S. department of transportation (DOT) shipping requirements are available at <http://hazmat.dot.gov/rules.htm> [www.phmsa.dot.gov/phmsa-regulations](http://www.phmsa.dot.gov/phmsa-regulations).

~~(4)~~(3) U.S. department of the treasury document: "Circular 570" is published in the Federal Register annually on July first; interim changes in the circular are also published in the Federal Register. "Circular 570" is available on the treasury department's website at [www.fms.treas.gov](http://www.fms.treas.gov) [www.fiscal.treasury.gov/surety-bonds/circular-570.html](http://www.fiscal.treasury.gov/surety-bonds/circular-570.html).

~~(5)~~(4) U.S. EPA technical documents. These documents are generally available in libraries. Documents listed in this paragraph without an address can be ordered by calling 800/490-9198. These documents may also be obtained by writing to "U.S. EPA/NSCEP, P.O. Box 42419, Cincinnati, OH" 45242-0419. Documents listed in this paragraph with an address may also be obtained at that address. Many of these documents can also be obtained via online ordering at

www.epa.gov/nscep. Some documents listed in this paragraph may be available for purchase, not free of charge.

- (a) "APTI Course 415: Control of Gaseous Emissions," ~~EPA publication~~ EPA-450/2-81-005, December 1981.
- (b) "Field Evaluation of Carbon Monoxide and Hydrogen Sulfide Continuous Emission Monitors at an Oil Refinery," Ferguson, B.B., R.E. Lester, and W.J. Mitchell, August 1982, EPA-600/4-82-054, available at [www.epa.gov/nscip](http://www.epa.gov/nscip).
- (c) U.S. EPA form 8700-22, part of the "Uniform Hazardous Waste Manifest" and ~~its~~ instructions, ~~is~~ are available in the appendix to 40 ~~CFR~~ CFR.F.R. Part 262 at [www.epa.gov](http://www.epa.gov) at the approved registered printers selection.
- (d) U.S. EPA form 8700-22A, part of the "Uniform Hazardous Waste Manifest" and ~~its~~ instructions, ~~is~~ are available in the appendix to 40 ~~CFR~~ CFR.F.R. Part 262 at [www.epa.gov](http://www.epa.gov) at the approved registered printers selection.
- (e) U.S. EPA form 8700-23, the "Part A" permit application form, is available at [www.epa.gov/osw/inforesources/data/form8700/forms.htm](http://www.epa.gov/osw/inforesources/data/form8700/forms.htm).
- (f) "Gaseous Continuous Emissions Monitoring Systems-Performance Specification Guidelines for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, O<sub>2</sub>, and TRS," October 1982, EPA-450/3-82-026, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).
- (g) "Gasoline Vapor Emission Laboratory Evaluation-Part 2," August 1975, EMB report No. 76-GAS-6, available from "U.S. EPA OAQPS, Research Triangle Park, NC" 27711.
- (h) "Guidance ~~for~~ on Metals and Hydrogen Chloride Controls for Hazardous Waste Incinerators, Volume IV of the Hazardous Waste Incineration Guidance Series," August 1989, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).
- (i) "Guideline on Air Quality Models (revised)," July 1986, EPA-450/2-78-027R, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).
- (j) "Handbook: Continuous Air Pollution Source Monitoring Systems," Jahnke, James A. and G.J. Aldina, June 1979, EPA-625/6-79-005, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).
- (k) "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and Dibenzofurans (CDDs

and CDFs)," March, 1989 update, EPA-625/3-89/016, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).

- (l) "U.S. EPA Manual for SEA (Special Environmental Area) Requirements."
- (m) "Measurement of Volatile Organic Compounds-Guideline Series," June 1978, EPA-450/2-78-041, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).
- (n) "Method 1664, 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 from [www.epa.gov](http://www.epa.gov).
  - (i) Revision A, EPA-821-R-98-002, February 1999.
  - (ii) Revision B, EPA-821-R-10-001, February 2010.
- (o) "Performance Test Results and Comparative Data for Designated Reference Methods for Carbon Monoxide," Michie, Raymond, M. Jr., et. al., September 1982, EPA-600/S4-83-013, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).
- (p) "Quality Assurance Handbook for Air Pollution Measurement Systems: Volume I. Principles," December 1984, EPA-600/9-76-006, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).
- (q) "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, EPA-450/R-92-019, available from [www.epa.gov](http://www.epa.gov).
- (r) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, U.S. EPA publication SW-846 [third edition (November 1986), as amended by "Update I" through "Update IV" is available from the "National Technical Information Service, U.S. Department of Commerce, 5301 Shawnee Road, Alexandria, VA," 22312 or at <http://www.epa.gov/waste/hazard/testmethods/sw846/index.htm> <https://www.epa.gov/hw-sw846/sw-846-compendium>.

The following methods as published in the test methods compendium known as "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA publication SW-846, and are available for purchase from the "National Technical Information Service, 5285 Port Royal Road, Springfield, VA" 22161. A suffix of "A" in the method number indicates revision one (the method has been revised once). A suffix of "B" in

the method number indicates revision two (the method has been revised twice). A suffix of "C" in the method number indicates revision three (the method has been revised three times). A suffix of "D" in the method number indicates revision four (the method has been revised four times):

- (i) Method 0010, dated September 1986 and in the basic manual.
- (ii) Method 0020, dated September 1986 and in the basic manual.
- (iii) Method 0030, dated September 1986 and in the basic manual.
- (iv) Method 1320, dated September 1986 and in the basic manual.
- (v) Method 1311, dated September 1992 and in "Update I."
- (vi) Method 1330A, dated July 1992 and in "Update I."
- (vii) Method 1312 dated September 1994 and in "Update II."
- (viii) Method 0011, dated December 1996 and in "Update III."
- (ix) Method 0023A, dated December 1996 and in "Update III."
- (x) Method 0031, dated December 1996 and in "Update III."
- (xi) Method 0040, dated December 1996 and in "Update III."
- (xii) Method 0050, dated December 1996 and in "Update III."
- (xiii) Method 0051, dated December 1996 and in "Update III."
- (xiv) Method 0060, dated December 1996 and in "Update III."
- (xv) Method 0061, dated December 1996 and in "Update III."
- (xvi) Method 9071B, dated April 1998 and in "Update IIIA."
- (xvii) Method 1010A, dated November 2004 and in "Update IIIB."
- (xviii) Method 1020B, dated November 2004 and in "Update IIIB."
- (xix) Method 1110A, dated November 2004 and in "Update IIIB."
- (xx) Method 1310B, dated November 2004 and in "Update IIIB."
- (xxi) Method 9010C, dated November 2004 and in "Update IIIB."

- (xxii) Method 9012B, dated November 2004 and in "Update IIIB."
- (xxiii) Method 9040C, dated November 2004 and in "Update IIIB."
- (xxiv) Method 9045D, dated November 2004 and in "Update IIIB."
- (xxv) Method 9060A, dated November 2004 and in "Update IIIB."
- (xxvi) Method 9070A, dated November 2004 and in "Update IIIB."
- (xxvii) Method 9095B, dated November 2004 and in "Update IIIB."

(s) "Traceability Protocol for Establishing True Concentrations of Gases Used for Calibration and Audits of Continuous Source Emission Monitors (Protocol No. 1)," June 1978, available from [www.epa.gov/nscep](http://www.epa.gov/nscep).

~~(6)~~(5) U.S. natural resources conservation service information regarding soils and soil particle size is available at ~~<http://soils.usda.gov/procedures/ssm/main.htm>~~ <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/class/>.

~~(7)~~(6) Occupational safety and health (OSHA) exposure levels to mercury are available at [www.osha.gov/SLTC/mercury/standards.html](http://www.osha.gov/SLTC/mercury/standards.html).

~~(8)~~(7) Ohio EPA documents.

(a) These forms are portions of the hazardous waste biennial report, and are in the "Hazardous Waste Biennial Report Instructions" available at [http://www.epa.ohio.gov/Portals/32/annualreport/HWAR\\_Instructions.pdf](http://www.epa.ohio.gov/Portals/32/annualreport/HWAR_Instructions.pdf):

- (i) Ohio EPA form EPA 9027.
- (ii) Ohio EPA form EPA 9028.
- (iii) Ohio EPA form EPA 9029.

(b) This document is available at <http://www.epa.ohio.gov/ddagw>: "Technical Manual for Hydrogeologic Investigations and Ground Water Monitoring."

~~(9)~~(8) U.S. postal service (USPS) shipping requirements are available at <http://www.usps.com>.

~~(10)~~(9) GSA standard form 1103- government bill of lading. Federal employees can order this form at ~~[www.gsa.gov/portal/found](http://www.gsa.gov/portal/found)~~ [www.gsa.gov/forms-library/u-s-government-bill-lading](http://www.gsa.gov/forms-library/u-s-government-bill-lading).

(D) Private publications. These publications are generally available at libraries.

- (1) "An Analysis of Variance Test for Normality (complete samples)," Shapiro, S.S. and Wilk, M.B. (1965), "Biometrika," 52, 591-611.
- (2) "Correlation of Land Use and Cover with Meteorological Anomalies," "Journal of Applied Meteorology," pp. 636-643, 1978.
- (3) "Fate of Metals in Waste Combustion Systems," Barton, R.G., W.D. Clark, and W.R. Seeker. (1990). "Combustion Science and Technology," 74, 1-6, p. 327.
- (4) "Statistical Concepts and Methods," Bhattacharyya, G.K. and R.A. Johnson (1977), John Wiley and sons, New York.
- (5) "The Partitioning of Metals in Rotary Kiln Incineration," Carroll, G.J., R.C. Thurnau, R.E. Maurnighan, L.R. Waterland, J.W. Lee, and D.J. Fournier. "Proceedings of the Third International Conference on New Frontiers for Hazardous Waste Management." NTIS document number EPA-600/9-89/072, p. 555 (1989).
- (6) Available from the "American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY" 10036 or 212/642-4900, or [www.ansi.org](http://www.ansi.org):
  - (a) "Petroleum Refining ~~Piping~~Piping System," ANSI standard B31.3.
  - (b) "Liquid Petroleum Transportation Piping System," ANSI standard B31.4.
- (7) Available for purchase from the "American Petroleum Institute (API), 1220 L Street, Northwest, Washington, DC" 20005 or <http://api-cp.api.org>/[https://global.ihs.com/individual\\_standards.cfm?&rid=Z56&mid=5280](https://global.ihs.com/individual_standards.cfm?&rid=Z56&mid=5280):
  - (a) "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API publication 1632.
  - (b) "Evaporative Loss from External Floating-Roof Tanks," API publication 2517, third edition, February 1989.
  - (c) "Guide for Inspection of Refinery Equipment," 4th edition, 1981.
  - (d) "Installation of Underground Petroleum Storage Systems," API publication 1615, November 1979.
- (8) "American Society for Testing and Materials" (ASTM) methods referenced in the hazardous waste rules are generally available in public libraries or are

available from "ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA" 19428-2959, at 610/832-9555, or at ASTM.org.

(a) The following methods may be available for purchase at the ASTM web site. Some of the methods may be no longer available on the web site and may be found in libraries:

(i) "ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography," ASTM standard D1946-90(2011), approved in 1990 and reapproved in 2011.

(ii) "ASTM Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi," ASTM method G21-70(1984a)

~~(ii)~~(iii) "ASTM Standard Practice for Determining Resistance of Plastics to Bacteria," ASTM method G22-76(1996).

~~(iii)~~(iv) "ASTM Standard Practice for Packed Column Gas Chromatography," ASTM standard E260-96(2011, approved in 1996 and reapproved in 2011.)

~~(iv)~~(v) "ASTM Standard Practices for General Techniques of Infrared Quantitative Analysis," ASTM standard E-168-06, amended in 2006.

~~(v)~~(vi) "ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," ASTM standard E169-04(2104), approved in 2004 and reapproved in 2014.

~~(vi)~~(vii) "ASTM Standard Test Method for Vapor Pressure- Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope," ASTM standard D2879-10, amended in 2010.

~~(vii)~~(viii) "ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester," ASTM standard D-93-79 or D-93-80.

~~(viii)~~(ix) "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Cup Tester," ASTM standard D-3278-78.

~~(ix)~~(x) "ASTM Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," ASTM standard D926-08(2013), approved in 2008 and reapproved in 2013, test method C-bomb, acid digestion method.

~~(x)~~(xi) Representative sampling methods for:

- (a) "Standard Guide for Representative Sampling for Management of Waste and Media," ASTM standard D6044-96(2009), approved in 1996 and reapproved in 2009.
- (b) "Practice for Sampling Soils and Contaminated Media with Hand Operated Bucket Auger," D6907-2005(2010), approved in 2005 and reapproved in 2010.
- (c) Extremely viscous liquid- ASTM standard D140/D140M-14, approved in 2014.
- (d) Crushed or powdered material- ASTM standard D346/D346M-11, approved in 2011.

(b) The following older approved equivalent methods are not available from the ASTM web site, but are available in libraries:

- ~~(i) "ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester," ASTM standard D93-79 or D93-80.~~
- ~~(ii) "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Cup Tester," ASTM standard D3278-78.~~
- (i) "ASTM Standard Test Method for Vapor Pressure of Petroleum Products," ASTM standard D-323.

~~(iii)~~(ii) Representative sampling methods for:

- (a) Soil or rock-like material- ASTM standard D420-69.
- (b) Fly ash-like material- ASTM standard D2234-76, approved in 1976.
- (c) Extremely viscous liquid- ASTM standard D140-70, approved in 1970.
- (d) Crushed or powdered material- ASTM Standard D346-75, approved in 1975.
- (e) Soil like material- ASTM Standard D1452-65, approved in 1965.

- (9) Available from the "National Association of Corrosion Engineers" (NACE) at [www.nace.org](http://www.nace.org):
- (a) "Recommended Practice (RP-02-85)- Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems."
  - (b) ~~NACE standard TM-01-69~~; [Reserved.]
- (10) Available for purchase from the "International Chamber of Commerce." "Uniform Customs and Practices for Documentary Credits" (also known as the "Uniform Commercial Code") at <https://2go.iccwbo.org/>.
- ~~(10)~~(11) Available for purchase from the "National Fire Protection Association (NFPA), 1 Batterymarch Park, P.O. Box 9101, Quincy, MA" 02269-9101: ~~"Flammable and Combustible Liquids Code" NFPA 30, (2012.)~~ or [www.nfpa.org](http://www.nfpa.org):
- (a) "Flammable and Combustible Liquids Code" NFPA 30 (2018).
  - (b) "Flammable and Combustible Liquids Code" NFPA 704 (2017).
- ~~(11)~~(12) Available for purchase from the "Organisation for Economic Co-operation and Development, Environment (OECD) Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France," or at <http://www.OECD.org>.
- ~~(a) Reserved.~~
  - ~~(b)~~(a) "OECD Green List of Wastes" (revised May 1994) as found in appendix 3 to the "OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations)."
  - ~~(c)~~(b) "OECD Amber List of Wastes" (revised May 1993) as found in appendix 4 to the "OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations)."
  - ~~(d)~~ "OECD Red List of Wastes" (revised May 1993) as found in appendix 5 to the "OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations)."

~~(12)~~(13) Available from libraries: "STI Standard for Dual-Wall Underground Steel Storage Tanks."

Effective: 10/5/2020  
Five Year Review (FYR) Dates: 7/13/2020 and 10/05/2025

CERTIFIED ELECTRONICALLY

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Certification

09/21/2020

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Date

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