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File Date: \_\_\_\_\_

# Notice of Rulemaking Hearing

*Hearings will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, T.C.A. § 4-5-204. For questions and copies of the notice, contact the person listed below.*

<b>Agency/Board/Commission:</b>	Underground Storage Tanks and Solid Waste Disposal Control Board
<b>Division:</b>	Solid Waste Management
<b>Contact Person:</b>	Jackie Okoreeh-Baah
<b>Address:</b>	William R. Snodgrass TN Tower 312 Rosa L. Parks Avenue, 14th Floor Nashville, Tennessee 37243
<b>Phone:</b>	(615) 532-0825
<b>Email:</b>	<a href="mailto:Jackie.Okoreeh-Baah@tn.gov">Jackie.Okoreeh-Baah@tn.gov</a>

*Any Individuals with disabilities who wish to participate in these proceedings (to review these filings) and may require aid to facilitate such participation should contact the following at least 10 days prior to the hearing:*

<b>ADA Contact:</b>	ADA Coordinator
<b>Address:</b>	William R. Snodgrass TN Tower 312 Rosa L. Parks Avenue, 22nd Floor Nashville, Tennessee 37243
<b>Phone:</b>	1-866-253-5827 (toll free) or (615) 532-0200 Hearing impaired callers may use the TN Relay Service at 1-800-848-0298.
<b>Email:</b>	<a href="mailto:Jennifer.Katzenmiller@tn.gov">Jennifer.Katzenmiller@tn.gov</a>

**Hearing Location(s)** (for additional locations, copy and paste table)

Address 1:	Second Floor Conference Rooms A, B, and C		
Address 2:	William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue		
City:	Nashville, Tennessee		
Zip:	37243		
Hearing Date :	11/10/2020		
Hearing Time:	9:00 a.m.	<input checked="" type="checkbox"/> X CST/CDT	<input type="checkbox"/> EST/EDT

*The Department of Environment and Conservation is committed to the Tennessee Pledge and reopening responsibly. All individuals planning to attend this hearing are asked to follow the current recommended guidelines for social distancing, hygiene, and wearing protective equipment when appropriate.*

**Alternate Hearing Option (An electronic participation option is also available. If the In-Person Hearing is Prohibited or Otherwise Inappropriate the Hearing will be Electronic-Only)**

<b>Method 1:</b>	You may also join electronically.  Join by going to this link: <a href="https://tngov.webex.com/tngov/j.php?MTID=m1b99e86617dd6a24e76ab34fdb217e8d">https://tngov.webex.com/tngov/j.php?MTID=m1b99e86617dd6a24e76ab34fdb217e8d</a>
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	<b>Meeting number (access code): 171 869 6113</b> <b>Meeting password: NRmum22KSh5</b>
<b>Method 2:</b>	<b>Join by phone</b> <b>1-415-655-0003</b> <b>Access code: 171 869 6113</b>  <b>Global call-in numbers are available online at:</b> <a href="#">Link for Global Call-in Numbers</a>  <b>Join from a video system or application</b> <b>Dial <a href="tel:1718696113">1718696113</a> @<a href="https://tngov.webex.com">tngov.webex.com</a></b> <b>You can also dial 173.243.2.68 and enter the meeting number</b>

#### **Additional Hearing Information:**

*If it is hard for you to read, speak, or understand English, TDEC may be able to provide translation or interpretation services free of charge. Please contact Mary F. Evans at (615-532-0798) for more information.*

This rulemaking has four purposes:

- (a) To make the changes requested by EPA. Under section 3006 of the Resource Conservation and Recovery Act (RCRA), EPA may authorize qualified states to administer and enforce the RCRA hazardous waste program within the state. Tennessee is an authorized state. EPA Region 4 has evaluated the current and previous rulemakings to determine if these rulemakings will, when effective, be approved for continuing program authorization. As a result of this review, EPA Region 4 identified opportunities to clarify, update and correct rule language;
- (b) To allow aerosol cans that contain hazardous waste to be managed as universal waste. Currently, universal hazardous wastes include batteries, pesticides, mercury-containing equipment, and lamps containing mercury (florescent lamps). Universal waste management standards are less stringent than the hazardous waste management requirements. To be considered for management as a universal waste, the waste or category of waste shall not be exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments, is generated by a large number of generators, and is frequently generated in relatively small quantities by each generator;
- (c) To update the regulations for the identification of ignitable hazardous waste and to modernize the hazardous waste testing methods that currently require test methods that refer to outdated standards developed by ASTM and that require instrumentation that is no longer readily commercially available. For example, the standards require the use of mercury thermometers, which are becoming more difficult to acquire and calibrate due to their use and availability being phased out for environmental, health, and safety concerns. These revisions, also, codify existing EPA guidance to define “aqueous” as “50% water by weight;” update cross references to U.S. DOT regulations; and remove obsolete information in the ignitability regulation; and
- (d) To correct typographical errors.

An initial set of draft rules has been prepared for public review and comment and may also be accessed for review using at <http://tn.gov/environment/topic/ppo-waste>.

Oral or written comments are invited at the hearing. In addition, written comments may be submitted prior to or after the public hearing to: Tennessee Department of Environment and Conservation, Division of Solid Waste Management; Attention: Jackie Okoreeh-Baah, William R. Snodgrass TN Tower, 312 Rosa L. Parks Avenue, 14<sup>th</sup> Floor, Nashville, Tennessee 37243; telephone 615-532-0825, fax 615-532-0886 or email: [Jackie.Okoreeh-Baah@tn.gov](mailto:Jackie.Okoreeh-Baah@tn.gov). However, such written comments must be received by 4:30 PM CST, November 10, 2020, in order to assure consideration. For further information, please contact Jackie Okoreeh-Baah at the above address or telephone number, or by e-mail.

**Revision Type (check all that apply):**

- Amendment  
 New  
 Repeal

**Rule(s)** (ALL chapters and rules contained in filing must be listed. If needed, copy and paste additional tables to accommodate more than one chapter. Please enter only **ONE** Rule Number/Rule Title per row.)

<b>Chapter Number</b>	<b>Chapter Title</b>
0400-12-01	Hazardous Waste Management
<b>Rule Number</b>	<b>Rule Title</b>
0400-12-01-.01	Hazardous Waste Management System: General
0400-12-01-.02	Identification and Listing of Hazardous Waste
0400-12-01-.04	Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste
0400-12-01-.05	Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-01-.06	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-01-.07	Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-01-.10	Land Disposal Restrictions
0400-12-01-.12	Standards for Universal Waste Management

(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to <http://state.tn.us/sos/rules/1360/1360.htm>)

Chapter 0400-12-01  
Hazardous Waste Management

Amendments

Subparagraph (a) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by modifying the definitions of “Universal waste” and “Universal waste handler” to read as follows while remaining in alphabetical order.

“Universal waste” means any of the following hazardous wastes ~~listed in subparagraph (1)(a) of Rule 0400-12-01-.12~~ that are managed under the universal waste requirements of Rule 0400-12-01-.12:

1. Batteries as described in subparagraph (1)(b) of Rule 0400-12-01-.12;
2. Pesticides as described in subparagraph (1)(c) of Rule 0400-12-01-.12;
3. Mercury-containing equipment as described in subparagraph (1)(d) of Rule 0400-12-01-.12;
4. Lamps as described in subparagraph (1)(e) of Rule 0400-12-01-.12; and
5. Aerosol cans as described in subparagraph (1)(f) of Rule 0400-12-01-.12.

“Universal waste handler”:

1. Means:
  - (i) A generator (as defined in this subparagraph) of universal waste; or
  - (ii) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.
2. Does not mean:
  - (i) A person who treats (except under the provisions of part (2)(d)1 or 3 of Rule 0400-12-01-.12, or part (3)(d)1 or 3 of Rule 0400-12-01-.12), disposes of, or recycles (except under the provisions of part (2)(d)5 of Rule 0400-12-01-.12 or part (3)(d)5 of Rule 0400-12-01-.12) universal waste; or
  - (ii) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (a) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by adding following definitions in alphabetical order to read as follows:

“Aerosol can” means a non-refillable receptacle containing a gas compressed, liquefied, or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

“RCRA permit,” “Part B permit” or “RCRA Part B permit” means a hazardous waste permit, as defined in this subparagraph, and includes an authorization, license, or equivalent control document issued by EPA or an authorized state pursuant to 40 CFR Parts 270 and 124 or comparable rules of an EPA authorized state.

“Thermostat” means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of subpart (2)(d)3(ii) of Rule 0400-12-01-.12 or subpart (3)(d)3(ii) of Rule 0400-12-01-.12.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (viii) of part 3 of subparagraph (a) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety, including the note immediately following, and substituting instead the following:

- (viii) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that -- during the calendar year (commencing on January 1) -- the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. Materials must be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under subpart (d)3(i) of this paragraph are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

~~(Note: The speculative accumulation requirements contained in this subpart are only applicable when specifically referenced by the exclusion or exemption conditions contained in this rule and Rule 0400-12-01-.09. For example, subparts (d)1(viii), (xiii), and (xxvi) of this paragraph do not require compliance with this subpart as a condition of the exclusions; subparts (d)1(vi) and (vii) of this paragraph and part (6)(a)3 of Rule 0400-12-01-.09 do require compliance with the subpart as a condition of the exclusion or exemption.)~~

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (b) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by deleting it in its entirety and substituting instead the following:

- (b) References [40 CFR 260.11 and 40 CFR 270.6]
1. When used in this chapter, the publications or materials identified in 40 CFR 260.11 and 40 CFR 270.6 are incorporated by reference.
  2. The publications or materials identified in 40 CFR 260.11 and 40 CFR 270.6 are incorporated as they exist on the effective date of these rules.

(Note: 40 CFR 260.11 is reprinted here as amended in the Federal Register (~~81 FR 85713 and 85806~~) on November 28, 2016 85 FR 40594) on July 7, 2020:

§ 260.11 Incorporation by reference

When used in parts 260 through 268 of this chapter, the following materials are incorporated by reference with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved materials are available for inspection at

the OLEM Docket in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW, Washington, DC. The EPA/DC Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number of the EPA/DC Public Reading room is (202) 566-1744, and the telephone number for the OLEM Docket is (202) 566-0270. These approved materials are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov) or go to [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html). In addition, these materials are available from the following sources:

- ~~(a) When used in parts 260 through 268 and 278 of this chapter, the following publications are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register pursuant to 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the Federal Register. Copies may be inspected at the Library, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW. (3403T), Washington, DC 20460, [libraryhq@epa.gov](mailto:libraryhq@epa.gov); or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/code-of-federal-regulations/ibr-locations.html>.~~
- ~~(b) The following materials are available for purchase from the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.~~
- ~~(1) ASTM D 93-79 or D 93-80, "Standard Test Methods for Flash Point by Pensky-Martens Closed-Cup Tester," IBR approved for §261.21.~~
  - ~~(2) ASTM D 1946-82, "Standard Method for Analysis of Reformed Gas by Gas Chromatography," IBR approved for §§264.1033, 265.1033.~~
  - ~~(3) ASTM D 2267-88, "Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography," IBR approved for §264.1063.~~
  - ~~(4) ASTM D 2382-83, "Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method)," IBR approved for §§264.1033, 265.1033.~~
  - ~~(5) ASTM D 2879-92, "Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope," IBR approved for §265.1084.~~
  - ~~(6) ASTM D 3278-78, "Standard Test Methods for Flash Point for Liquids by Setaflash Closed Tester," IBR approved for §261.21(a).~~
  - ~~(7) ASTM E 168-88, "Standard Practices for General Techniques of Infrared Quantitative Analysis," IBR approved for §264.1063.~~
  - ~~(8) ASTM E 169-87, "Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," IBR approved for §264.1063.~~
  - ~~(9) ASTM E 260-85, "Standard Practice for Packed Column Gas Chromatography," IBR approved for §264.1063.~~
  - ~~(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 for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800.~~

~~(1) "APTI Course 415: Control of Gaseous Emissions," EPA Publication EPA-450/2-81-005, December 1981, IBR approved for §§264.1035 and 265.1035.~~

~~(2) 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:~~

~~(i) Revision A, EPA-821-R-98-002, February 1999, IBR approved for Part 261, appendix IX.~~

~~(ii) Revision B, EPA-821-R-10-001, February 2010, IBR approved for Part 261, appendix IX.~~

~~(3) 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. 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, IBR approved for part 261, appendix IX.~~

~~(ii) Method 0020, dated September 1986 and in the Basic Manual, IBR approved for part 261, appendix IX.~~

~~(iii) Method 0030, dated September 1986 and in the Basic Manual, IBR approved for part 261, appendix IX.~~

~~(iv) Method 1320, dated September 1986 and in the Basic Manual, IBR approved for part 261, appendix IX.~~

~~(v) Method 1311, dated September 1992 and in Update I, IBR approved for part 261, appendix IX, and §§261.24, 268.7, 268.40.~~

~~(vi) Method 1330A, dated September 1992 and in Update I, IBR approved for part 261, appendix IX.~~

~~(vii) Method 1312 dated September 1994 and in Update III, IBR approved for part 261, appendix IX and § 278.3(b)(1).~~

~~(viii) Method 0011, dated December 1996 and in Update III, IBR approved for part 261, appendix IX, and part 266, appendix IX.~~

~~(ix) Method 0023A, dated December 1996 and in Update III, IBR approved for part 261, appendix IX, part 266, appendix IX, and §266.104.~~

~~(x) Method 0031, dated December 1996 and in Update III, IBR approved for part 261, appendix IX.~~

- ~~(xi) Method 0040, dated December 1996 and in Update III, IBR approved for part 261, appendix IX.~~
- ~~(xii) Method 0050, dated December 1996 and in Update III, IBR approved for part 261, appendix IX, part 266, appendix IX, and §266.107.~~
- ~~(xiii) Method 0051, dated December 1996 and in Update III, IBR approved for part 261, appendix IX, part 266, appendix IX, and §266.107.~~
- ~~(xiv) Method 0060, dated December 1996 and in Update III, IBR approved for part 261, appendix IX, §266.106, and part 266, appendix IX.~~
- ~~(xv) Method 0061, dated December 1996 and in Update III, IBR approved for part 261, appendix IX, §266.106, and part 266, appendix IX.~~
- ~~(xvi) Method 9071B, dated April 1998 and in Update IIIA, IBR approved for part 261, appendix IX.~~
- ~~(xvii) Method 1010A, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX.~~
- ~~(xviii) Method 1020B, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX.~~
- ~~(xix) Method 1110A, dated November 2004 and in Update IIIB, IBR approved for §261.22 and part 261, appendix IX.~~
- ~~(xx) Method 1310B, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX.~~
- ~~(xxi) Method 9010C, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX and §§268.40, 268.44, 268.48.~~
- ~~(xxii) Method 9012B, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX and §§268.40, 268.44, 268.48.~~
- ~~(xxiii) Method 9040C, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX and §261.22.~~
- ~~(xxiv) Method 9045D, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX.~~
- ~~(xxv) Method 9060A, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX, and §§264.1034, 264.1063, 265.1034, 265.1063.~~
- ~~(xxvi) Method 9070A, dated November 2004 and in Update IIIB, IBR approved for part 261, appendix IX.~~
- ~~(xxvii) Method 9095B, dated November 2004 and in Update IIIB, IBR approved, part 261, appendix IX, and §§264.190, 264.314, 265.190, 265.314, 265.1081, 267.190(a), 268.32.~~

- ~~(d) The following materials are available for purchase from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.~~
- ~~(1) "Flammable and Combustible Liquids Code" (NFPA 30), 1977 or 1981, IBR approved for §§ 262.16(b), 264.198(b), 265.198(b), 267.202(b).~~
- ~~(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," IBR approved for §265.1084.~~
- ~~(2) [Reserved]~~
- ~~(f) The following materials are available for purchase from the Environmental Protection Agency, Research Triangle Park, NC.~~
- ~~(1) "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised", October 1992, EPA Publication No. EPA 450/R-92-019, IBR approved for part 266, appendix IX.~~
- ~~(2) [Reserved]~~
- ~~(g) The following materials are available for purchase from the Organization for Economic Cooperation and Development (OECD), Environment Directorate, 2 rue André Pascal, 75775 Paris Cedex 16, France.~~
- ~~(1) Guidance Manual for the Control of Transboundary Movements of Recoverable Wastes, copyright 2009, Annex B: OECD Consolidated List of Wastes Subject to the Green Control Procedure and Annex C: OECD Consolidated List of Wastes Subject to the Amber Control Procedure, IBR approved for §§ 262.82(a), 262.83(b),(d), and (g), and 262.84(b) and (d) of this chapter.~~
- ~~(2) [Reserved]~~
- ~~(a) American Petroleum Institute (API). 1220 L Street Northwest, Washington, DC 20005, (855) 999-9870, [www.api.org](http://www.api.org).~~
- ~~(1) API Publication 2517, Third Edition, February 1989, "Evaporative Loss from External Floating-Roof Tanks," IBR approved for Sec. 265.1084.~~
- ~~(2) [Reserved]~~
- ~~(b) ASTM International (ASTM). 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, (877) 909-ASTM, [www.astm.org](http://www.astm.org).~~
- ~~(1) ASTM D93-79, "Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester," IBR approved for Sec. 261.21(a).~~
- ~~(2) ASTM D93-80, "Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester," IBR approved for Sec. 261.21(a).~~
- ~~(3) ASTM D1946-82, "Standard Method for Analysis of Reformed Gas by Gas Chromatography," IBR approved for Sec. Sec. 264.1033 and 265.1033.~~

- (4) ASTM D2267-88, "Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography," IBR approved for Sec. 264.1063.
  - (5) ASTM D2382-83, "Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method)," IBR approved for Sec. Sec. 264.1033 and 265.1033.
  - (6) ASTM D2879-92, "Standard Test Method for Vapor Pressure--Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope." IBR approved for Sec. 265.1084.
  - (7) ASTM D3278-78, "Standard Test Methods for Flash Point for Liquids by Setaflash Closed Tester," IBR approved for Sec. 261.21(a).
  - (8) ASTM D8174-18 "Standard Test Method for Finite Flash Point Determination of Liquid Wastes by Small Scale Closed Cup Tester." Approved March 15, 2018, IBR approved for Sec. 261.21(a).
  - (9) ASTM D8175-18 "Standard Test Method for Finite Flash Point Determination of Liquid Wastes by Pensky-Martens Closed Cup Tester." Approved March 15, 2018, IBR approved for Sec. 261.21(a).
  - (10) ASTM E168-88, "Standard Practices for General Techniques of Infrared Quantitative Analysis," IBR approved for Sec. 264.1063.
  - (11) ASTM E169-87, "Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," IBR approved for Sec. 264.1063.
  - (12) ASTM E260-85, "Standard Practice for Packed Column Gas Chromatography," IBR approved for Sec. 264.1063.
  - (13) ASTM E681-85 "Standard Test Method for Concentration Limits of Flammability of Chemicals (Vapors and gases)," Approved November 14, 1985, IBR approved for Sec. 261.21(a).
- (c) Environmental Protection Agency (EPA). Material cited in paragraphs (d)(1) through (3) is available from: National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800; EPA's National Service Center for Environmental Publications at <https://www.epa.gov/nscep>. Material cited in paragraph (d)(4) of this section is available at <https://www.epa.gov/hw-sw846>.
- (1) "APTI Course 415: Control of Gaseous Emissions," EPA Publication EPA-450/2-81-005, December 1981, IBR approved for Sec. Sec. 264.1035 and 265.1035.
  - (2) 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:
    - (i) Revision A, EPA-821-R-98-002, February 1999, IBR approved for appendix IX to part 261.
    - (ii) Revision B, EPA-821-R-10-001, February 2010, IBR approved for appendix IX to part 261.

- (3) “Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised”, October 1992, EPA Publication No. EPA-450/R-92-019, IBR approved for appendix IX to part 266.
- (4) 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.
- (i) Method 0010, Modified Method 5 Sampling Train, Revision 1, dated August 2018, IBR approved for appendix IX to part 261.
  - (ii) Method 0011, Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources, Revision 1, dated August 2018, IBR approved for appendix IX to part 261 and appendix IX to part 266
  - (iii) Method 0020, Source Assessment Sampling System (SASS), Revision 1, dated August 2018, IBR approved for appendix IX to part 261.
  - (iv) Method 0023A, Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources, Revision 2, dated August 2018, IBR approved for appendix IX to part 261, Sec. 266.104(e), and appendix IX to part 266.
  - (v) Method 0030, Volatile Organic Sampling Train, dated September 1986 and in the Basic Manual, IBR approved for appendix IX to part 261.
  - (vi) Method 0031, Sampling Method for Volatile Organic Compounds (SMVOC), dated December 1996 and in Update III, IBR approved for appendix IX to part 261.
  - (vii) Method 0040, Sampling of Principal Organic Hazardous Constituents from Combustion Sources Using Tedlar® Bags, dated December 1996 and in Update III, IBR approved for appendix IX to part 261.
  - (viii) Method 0050, Isokinetic HCl/Cl<sub>2</sub> Emission Sampling Train, dated December 1996 and in Update III, IBR approved for appendix IX to part 261, Sec. 266.107, and appendix IX to part 266.
  - (ix) Method 0051, Midget Impinger HCl/Cl<sub>2</sub> Emission Sampling Train, Revision 1, dated August 2018, IBR approved for appendix IX to part 261, Sec. 266.107, and appendix IX to part 266.
  - (x) Method 0060, Determination of Metals in Stack Emissions, dated December 1996 and in Update III, IBR approved for appendix IX to part 261, Sec. 266.106, and appendix IX to part 266.
  - (xi) Method 0061, Determination of Hexavalent Chromium Emissions from Stationary Sources, dated December 1996 and in Update III, IBR approved for appendix IX to part 261 Sec. 266.106, and appendix IX to part 266.
  - (xii) Method 1010B, Test Methods for Flash Point by Pensky-Martens Closed-Cup Tester, dated December 2018, IBR approved for Sec. 261.21 and appendix IX to part 261.

- (xiii) Method 1020C, Standard Test Methods for Flash Point by Setafash (Small Scale) Closed-Cup Apparatus, dated December 2018, IBR approved for Sec. 261.21 and appendix IX to part 261.
- (xiv) Method 1110A, Corrosivity Toward Steel, dated November 2004 and in Update IIIB, IBR approved for Sec. 261.22 and appendix IX to part 261.
- (xv) Method 1310B, Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test, dated November 2004 and in Update IIIB, IBR approved for appendix IX to part 261.
- (xvi) Method 1311, Toxicity Characteristic Leaching Procedure, dated July 1992 and in Update I, IBR approved for appendix IX to part 261, and Sec. Sec. 261.24, 268.7, 268.40.
- (xvii) Method 1312, Synthetic Precipitation Leaching Procedure, dated September 1994 and in Update III, IBR approved for appendix IX to part 261.
- (xviii) Method 1320, Multiple Extraction Procedure, dated September 1986 and in the Basic Manual, IBR approved for appendix IX to part 261.
- (xix) Method 1330A, Extraction Procedure for Oily Wastes, dated July 1992 and in Update I, IBR approved for appendix IX to part 261.
- (xx) Method 9010C, Total and Amenable Cyanide: Distillation, dated November 2004 and in Update IIIB, IBR approved for appendix IX to part 261 and Sec. Sec. 268.40, 268.44, 268.48.
- (xxi) Method 9012B, Total and Amenable Cyanide (Automated Colorimetric, with Off-Line Distillation), dated November 2004 and in Update IIIB, IBR approved for appendix IX to part 261 and Sec. Sec. 268.40, 268.44, 268.48.
- (xxii) Method 9040C, pH Electrometric Measurement, dated November 2004 and in Update IIIB, IBR approved for appendix IX to part 261 and Sec. 261.22.
- (xxiii) Method 9045D, Soil and Waste pH, dated November 2004 and in Update IIIB, IBR approved for appendix IX to part 261.
- (xxiv) Method 9060A, Total Organic Carbon, dated November 2004 and in Update IIIB, IBR approved for appendix IX to part 261, and Sec. Sec. 264.1034, 264.1063, 265.1034, 265.1063.
- (xxv) Method 9070A, n-Hexane Extractable material (HEM) for Aqueous Samples, dated November 2004 and in Update IIIB, IBR approved for appendix IX to part 261.
- (xxvi) Method 9071B, n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples, dated April 1998 and in Update IIIA, IBR approved for appendix IX to part 261.
- (xxvii) Method 9095B, Paint Filter Liquids Test, dated November 2004 and in Update IIIB, IBR approved, appendix IX to part 261, and Sec. Sec. 264.190, 264.314, 265.190, 265.314, 265.1081, 267.190(a), 268.32.

(d) National Fire Protection Association (NFPA). 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101, (800) 344-3555, [www.nfpa.org/](http://www.nfpa.org/).

(1) NFPA 30, "Flammable and Combustible Liquids Code," 1977 Edition, IBR approved for Sec. Sec. 262.16(b), 264.198(b), 265.198(b), and 267.202(b).

(2) NFPA 30, "Flammable and Combustible Liquids Code," 1981 Edition, IBR approved for Sec. Sec. 262.16(b), 264.198(b), 265.198(b), and 267.202(b).

(e) Organization for Economic Cooperation and Development (OECD). Economic Cooperation and Development, Environment Directorate, 2 rue André Pascal, F-75775 Paris Cedex 16, France, [www.oecd-ilibrary.org/](http://www.oecd-ilibrary.org/).

(1) Guidance Manual for the Control of Transboundary Movements of Recoverable Wastes, copyright 2009, Annex B: OECD Consolidated List of Wastes Subject to the Green Control Procedure and Annex C: OECD Consolidated List of Wastes Subject to the Amber Control Procedure, IBR approved for Sec. Sec. 262.82(a), 262.83(b), (d), and (g), and 262.84(b) and (d).

(2) [Reserved]

(Note: 40 CFR 270.6 is reprinted here as published in the Federal Register (70 FR 59576) on October 12, 2005:

#### § 270.6 References

(a) When used in part 270 of this chapter, the following publications are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register pursuant to 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the Federal Register. Copies may be inspected at the Library, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., (3403T), Washington, DC 20460, [libraryhq@epa.gov](mailto:libraryhq@epa.gov); or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(b) The following materials are available for purchase from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605-6000 or (800) 553-6847; or for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800:

(1) "APTI Course 415: Control of Gaseous Emissions," EPA Publication EPA-450/2-81-005, December 1981, IBR approved for §§270.24 and 270.25.

(2) [Reserved]

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Section B of subitem II of item (V) of subpart (xxiv) of part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- B. (A) Does For a reclamation facility or intermediate facility located in Tennessee, does the publicly available information indicate that the reclamation facility and any intermediate facility that is used by the hazardous secondary material generator notified the ~~appropriate authorities~~ Commissioner of hazardous secondary materials reclamation activities pursuant to subparagraph (5)(c) of Rule 0400-12-01-.01, and have they notified the ~~appropriate authorities~~ Commissioner that the financial assurance condition is satisfied per item (VI)VI of this subpart? In answering these questions, the hazardous secondary material generator can rely on the available information documenting the reclamation facility's and any intermediate facility's compliance with the notification requirements per subparagraph (5)(c) of Rule 0400-12-01-.01, including the requirement in subpart (5)(c)1(v) of Rule 0400-12-01-.01 to notify the ~~appropriate authorities~~ Commissioner whether the reclaimer or intermediate facility has financial assurance.
- (B) For a reclamation facility or intermediate facility located in a state other than Tennessee, does the publicly available information indicate that the reclamation facility and any intermediate facility that is used by the hazardous secondary material generator notified the appropriate authorities of hazardous secondary materials reclamation activities pursuant to 40 CFR 260.42, or an authorized state equivalent, and have they notified the appropriate authorities that the financial assurance condition is satisfied per 40 CFR 261.4(a)(24)(vi)(F), or an authorized state equivalent? In answering these questions, the hazardous secondary material generator can rely on the available information documenting the reclamation facility's and any intermediate facility's compliance with the notification requirements per 40 CFR 260.42, or an authorized state equivalent, including the requirement in 40 CFR 260.42(a)(5), or an authorized state equivalent, to notify the appropriate authorities whether the reclaimer or intermediate facility has financial assurance.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (xxv) of part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (xxv) Hazardous secondary material that is exported from the United States and reclaimed at a reclamation facility located in a foreign country is not a solid waste, provided that the hazardous secondary material generator complies with the applicable requirements of ~~40 CFR § 261.4(a)(24)(i)-(v) items (xxiv)(I) through (V) of this part~~ (excepting ~~40 CFR § 261.4(a)(24)(v)(B)(2) section (xxiv)(V)II.B of this part~~ for foreign reclaimers and foreign intermediate facilities), and that the hazardous secondary material generator also complies with the following requirements:

- (I) Notify EPA of an intended export before the hazardous secondary material is scheduled to leave the United States. A complete notification must be submitted at least 60 days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a 12-month or lesser period. The notification must be in writing, signed by the hazardous secondary material generator, and include the following information:
- I. Name, mailing address, telephone number and EPA ID number (if applicable) of the hazardous secondary material generator;
  - II. A description of the hazardous secondary material and the EPA hazardous waste number that would apply if the hazardous secondary material was managed as hazardous waste and the U.S. DOT proper shipping name, hazard class and ID number (UN/NA) for each hazardous secondary material as identified in 49 CFR ~~parts~~ Parts 171 through 177;
  - III. The estimated frequency or rate at which the hazardous secondary material is to be exported and the period of time over which the hazardous secondary material is to be exported;
  - IV. The estimated total quantity of hazardous secondary material;
  - V. All points of entry to and departure from each foreign country through which the hazardous secondary material will pass;
  - VI. A description of the means by which each shipment of the hazardous secondary material will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.));
  - VII. A description of the manner in which the hazardous secondary material will be reclaimed in the country of import;
  - VIII. The name and address of the reclaimer, any intermediate facility, and any alternate reclaimer and intermediate facilities; and
  - IX. The name of any countries of transit through which the hazardous secondary material will be sent and a description of the approximate length of time it will remain in such countries and the nature of its handling while there (for purposes of this subpart, the terms "EPA Acknowledgement of Consent", "country of import", and "country of transit" are used as defined in ~~40 CFR 262.81~~ subparagraph (9)(b) of Rule 0400-12-01-.03, with the exception that the terms in this subpart refer to hazardous secondary materials, rather than hazardous waste).
- (II) Notifications must be submitted electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system.
- (III) Except for changes to the telephone number in subitem (I)I of this subpart and decreases in the quantity of hazardous secondary material indicated pursuant to subitem (I)IV of this subpart, when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous secondary material specified in the original notification), the hazardous secondary material generator must provide EPA with a written re-notification of the change. The shipment cannot take place until consent of the country of import to the changes (except for changes to subitem (I)IX of this subpart and in the

ports of entry to and departure from countries of transit pursuant to subitem (I)V of this subpart) has been obtained and the hazardous secondary material generator receives from EPA an EPA Acknowledgment of Consent reflecting the country of import's consent to the changes.

- (IV) Upon request by EPA, the hazardous secondary material generator shall furnish to EPA any additional information which a country of import requests in order to respond to a notification.
- (V) EPA will provide a complete notification to the country of import and any countries of transit. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of item (I) of this subpart. Where a claim of confidentiality is asserted with respect to any notification information required by item (I) of this subpart, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.
- (VI) The export of hazardous secondary material under this subpart is prohibited unless the country of import consents to the intended export. When the country of import consents in writing to the receipt of the hazardous secondary material, EPA will send an EPA Acknowledgment of Consent to the hazardous secondary material generator. Where the country of import objects to receipt of the hazardous secondary material or withdraws a prior consent, EPA will notify the hazardous secondary material generator in writing. EPA will also notify the hazardous secondary material generator of any responses from countries of transit.
- (VII) For exports to OECD Member countries, the receiving country may respond to the notification using tacit consent. If no objection has been lodged by any country of import or countries of transit to a notification provided pursuant to item (I) of this subpart within 30 days after the date of issuance of the acknowledgement of receipt of notification by the competent authority of the country of import, the transboundary movement may commence. In such cases, EPA will send an EPA Acknowledgment of Consent to inform the hazardous secondary material generator that the country of import and any relevant countries of transit have not objected to the shipment, and are thus presumed to have consented tacitly. Tacit consent expires one calendar year after the close of the 30-day period; re-notification and renewal of all consents is required for exports after that date.
- (VIII) A copy of the EPA Acknowledgment of Consent must accompany the shipment. The shipment must conform to the terms of the EPA Acknowledgment of Consent.
- (IX) If a shipment cannot be delivered for any reason to the reclaimer, intermediate facility or the alternate reclaimer or alternate intermediate facility, the hazardous secondary material generator must re-notify EPA of a change in the conditions of the original notification to allow shipment to a new reclaimer in accordance with item (III) of this subpart and obtain another EPA Acknowledgment of Consent.
- (X) Hazardous secondary material generators must keep a copy of each notification of intent to export and each EPA Acknowledgment of Consent for a period of three years following receipt of the EPA Acknowledgment of Consent. They may satisfy this recordkeeping requirement by retaining electronically submitted notifications or electronically generated Acknowledgements in their account on EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that such copies are readily available for viewing and

production if requested by any EPA or department inspector. No hazardous secondary material generator may be held liable for the inability to produce a notification or Acknowledgement for inspection under this subpart if they can demonstrate that the inability to produce such copies are due exclusively to technical difficulty with EPA's Waste Import Export Tracking System (WIETS), or its successor system for which the hazardous secondary material generator bears no responsibility.

(XI) Hazardous secondary material generators must file with the Administrator no later than March 1 of each year, a report summarizing the types, quantities, frequency and ultimate destination of all hazardous secondary materials exported during the previous calendar year. Annual reports must be submitted electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system. Such reports must include the following information:

- I. Name, mailing and site address, and EPA ID number (if applicable) of the hazardous secondary material generator;
- II. The calendar year covered by the report;
- III. The name and site address of each reclaimer and intermediate facility;
- IV. By reclaimer and intermediate facility, for each hazardous secondary material exported, a description of the hazardous secondary material and the EPA hazardous waste number that would apply if the hazardous secondary material was managed as hazardous waste, the DOT hazard class, the name and U.S. EPA ID number (where applicable) for each transporter used, the total amount of hazardous secondary material shipped and the number of shipments pursuant to each notification;
- V. A certification signed by the hazardous secondary material generator which states: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

(XII) All persons claiming an exclusion under this subpart must provide notification as required by [40 CFR 260.42 subparagraph \(5\)\(c\) of Rule 0400-12-01-.01](#).

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Item (VI) of subpart (xviii) of part 2 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (VI) The solvent-contaminated wipes are sent for disposal:
- I. To a municipal solid waste landfill regulated under Chapter 0400-11-01 [or 40 CFR Part 258](#), including Rule 0400-11-01-.04 regarding a Class I disposal facility [or 40 CFR 258.40](#), or to a hazardous waste landfill regulated under Rules 0400-12-01-.05 or 0400-12-01-.06 [or 40 CFR Parts 264 or 265, or comparable rules of an EPA authorized state](#); or

- II. To a municipal waste combustor or other combustion facility regulated under T.C.A. ~~§§ 68-201-101 et seq.~~ title 68, chapter 201, part 1, or section 129 of the Clean Air Act, or to a hazardous waste combustor, boiler, or industrial furnace regulated under Rules 0400-12-01-.05 or 0400-12-01-.06 or paragraph (8) of Rule 0400-12-01-.09 or regulated under 40 CFR Parts 264 or 265, or 40 CFR Part 266, Subpart H, or comparable rules of an EPA-authorized state.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 8 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

8. Carbon dioxide stream injected for geologic sequestration. Carbon dioxide streams that are captured and transported for purposes of injection into an underground injection well subject to the requirements for Class VI Underground Injection Control wells, including the requirements in 40 CFR Parts 144 and 146 of the Underground Injection Control Program of the Safe Drinking Water Act ~~and Chapter 0400-45-06 Underground Injection Control~~, are not a hazardous waste, provided the following conditions are met:
- (i) Transportation of the carbon dioxide stream shall be in compliance with U.S. Department of Transportation requirements, including the pipeline safety laws (49 U.S.C. 60101 et seq.) and regulations (49 CFR Parts 190- 199) of the U.S. Department of Transportation, and pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. 60105, as applicable;
  - (ii) Injection of the carbon dioxide stream shall be in compliance with the applicable requirements for Class VI Underground Injection Control wells, including the applicable requirements in 40 CFR Parts 144 and 146 ~~and Tennessee Chapter 0400-45-06~~;
  - (iii) No hazardous wastes shall be mixed with, or otherwise co-injected with, the carbon dioxide stream; and
  - (iv) (I) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under this part, shall have an authorized representative (as defined in subparagraph (2)(a) of Rule 0400-12-01-.01) sign a certification statement worded as follows:

“I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under part (1)(d)8 of Rule 0400-12-01-.02 has not been mixed with hazardous wastes, and I have transported the carbon dioxide stream in compliance with (or have contracted with a pipeline operator or transporter to transport the carbon dioxide stream in compliance with) Department of Transportation requirements, including the pipeline safety laws (49 U.S.C. 60101 et seq.) and regulations (49 CFR Parts 190-199) of the U.S. Department of Transportation, and the pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. 60105, as applicable, for injection into a well subject to the requirements for the Class VI Underground Injection Control Program of the Safe Drinking Water Act ~~and Tennessee Chapter 0400-45-06~~. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.”
  - (II) Any Class VI Underground Injection Control well owner or operator, who claims that a carbon dioxide stream is excluded under this part, shall have an authorized representative (as defined in subparagraph (2)(a) of

Rule 0400-12-01-.01) sign a certification statement worded as follows:

"I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under part (1)(d)8 of Rule 0400-12-01-.02 has not been mixed with, or otherwise co-injected with, hazardous waste at the Underground Injection Control (UIC) Class VI permitted facility, and that injection of the carbon dioxide stream is in compliance with the applicable requirements for UIC Class VI wells, including the applicable requirements in 40 CFR Parts 144 and 146 ~~and Tennessee Chapter 0400-45-06~~. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

- (III) The signed certification statement shall be kept on-site for no less than three years, and it shall be made available within 72 hours of a written request from the Commissioner. The signed certification statement shall be renewed every year that the exclusion is claimed, by having an authorized representative (as defined in subparagraph (2)(a) of Rule 0400-12-01-.01) annually prepare and sign a new copy of the certification statement within one year of the date of the previous statement. The signed certification statement shall also be readily accessible on the facility's ~~publicly-available~~ publicly available website (if such website exists) as a public notification with the title of "Carbon Dioxide Stream Certification" at the time the exclusion is claimed.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (j) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(j) Requirements for Universal Waste [40 CFR 261.9]

The wastes listed in ~~Rule 0400-12-01-.12(1)(a)~~ this subparagraph are exempt from regulation under Rules 0400-12-01-.03 through ~~0400-12-01-.07, 0400-12-01-.09, and 0400-12-01-.10~~ except as specified in Rule 0400-12-01-.12 and, therefore, are not fully regulated as hazardous waste. The wastes listed in this subparagraph are subject to regulation under Rule 0400-12-01-.12:

1. Batteries as described in subparagraph (1)(b) of Rule 0400-12-01-.12;
2. Pesticides as described in subparagraph (1)(c) of Rule 0400-12-01-.12;
3. Mercury-containing equipment as described in subparagraph (1)(d) of Rule 0400-12-01-.12;
4. Lamps as described in subparagraph (1)(e) of Rule 0400-12-01-.12; and
5. Aerosol cans as described in subparagraph (1)(f) of Rule 0400-12-01-.12.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (b) of paragraph (3) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(b) Characteristic of Ignitability [40 CFR 261.21]

1. A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:
  - (i) It is a liquid, other than ~~an aqueous~~ a solution containing less than 24 percent alcohol by volume and at least 50 percent water by weight, that has flash point less than 60°C (140°F), as determined by ~~a Pensky-Martens Closed Cup Tester,~~

~~using the test method specified in ASTM Standard D 93-79 or D 93-80 (see 40 CFR 260.11; Rule 0400-12-01-.01(2)(b)1), or a Setflash Closed Cup Tester, using the test method specified in ASTM Standard D 3278-78 using one of the following ASTM standards: ASTM D93-79, D93-80, D3278-78, D8174-18, or D8175-18 as specified in SW-846 Test Methods 1010B or 1020C (see 40 CFR 260.11; and subparagraph (2)(b) of Rule 0400-12-01-.01(2)(b)4).~~

(ii) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(iii) It is an ignitable compressed gas.

(I) The term “compressed gas” shall designate any material or mixture having in the container an absolute pressure exceeding 40 p.s.i. at 70 [deg] F or, regardless of the pressure at 70 [deg] F, having an absolute pressure exceeding 104 p.s.i. at 130 [deg] F; or any liquid flammable material having a vapor pressure exceeding 40 p.s.i. absolute at 100 [deg] F as determined by ASTM Test D-323.

(II) A compressed gas shall be characterized as ignitable if any one of the following occurs:

I. Either a mixture of 13 percent or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12 percent regardless of the lower limit. These limits shall be determined at atmospheric temperature and pressure. The method of sampling and test procedure shall be ~~acceptable to the Bureau of Explosives and approved by the director, the ASTM E 681-85 (incorporated by reference, see 40 CFR 260.11 and subparagraph (2)(b) of Rule 0400-12-01-.01), or other equivalent methods approved by the Associate Administrator, Pipeline and Hazardous Materials Technology Safety Administration, U.S. Department of Transportation (see Note 2).~~

II. ~~Using the Bureau of Explosives’ Flame Projection Apparatus (see Note 1), the flame projects more than 18 inches beyond the ignition source with valve opened fully or the flame flashes back and burns at the valve with any degree of valve opening. It is determined to be flammable or extremely flammable using 49 CFR 173.115(l).~~

~~III. Using the Bureau of Explosives’ Open Drum Apparatus (see Note 1), there is any significant propagation of flame away from the ignition source.~~

~~IV. Using the Bureau of Explosives’ Closed Drum Apparatus (see Note 1), there is any explosion of the vapor-air mixture in the drum.~~

(iv) It is an oxidizer.

An oxidizer for the purpose of this rule is a substance such as a chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter ~~(see Note 4).~~

(I) An organic compound containing the bivalent – O – O – structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless:

- I. The material meets the definition of a ~~Class A explosive or a Class B explosive~~ Division 1.1, 1.2, or 1.3 explosive, as defined in subpart (3)(d)1(viii) of this rule, in which case it must be classed as an explosive,
  - II. The material is forbidden to be offered for transportation according to 49 CFR 172.101 and 49 CFR 173.21,
  - III. It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide, or
  - IV. According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation (~~see Note 3~~), it has been determined that the material does not present a hazard in transportation.
2. A solid waste that exhibits the characteristic of ignitability has the Hazardous Waste Code of D001.

~~Note 1: A description of the Bureau of Explosives' Flame Projection Apparatus, Open Drum Apparatus, Closed Drum Apparatus, and method of tests may be procured from the Bureau of Explosives.~~

~~Note 2: As part of a U.S. Department of Transportation (DOT) reorganization, the Office of Hazardous Materials Technology (OHMT), which was the office listed in the 1980 publication of 49 CFR 173.300 for the purposes of approving sampling and test procedures for a flammable gas, ceased operations on February 20, 2005. OHMT programs have moved to the Pipeline and Hazardous Materials Safety Administration (PHMSA) in the DOT.~~

~~Note 3: As part of a U.S. Department of Transportation (DOT) reorganization, the Research and Special Programs Administration (RSPA), which was the office listed in the 1980 publication of 49 CFR 173.151a for the purposes of determining that a material does not present a hazard in transport, ceased operations on February 20, 2005. RSPA programs have moved to the Pipeline and Hazardous Materials Safety Administration (PHMSA) in the DOT.~~

~~Note 4: The DOT regulatory definition of an oxidizer was contained in Sec. 173.151 of 49 CFR, and the definition of an organic peroxide was contained in paragraph 173.151a. An organic peroxide is a type of oxidizer.~~

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 4 of subparagraph (a) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

4. The following hazardous wastes listed in subparagraph (b) of this paragraph are subject to the exclusion limits for acutely hazardous wastes established in subparagraph (1)(e) of this rule subpart (1)(e)1(iii) of Rule 0400-12-01-.03: Hazardous Wastes Codes F020, F021, F022, F023, F026, and F027.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (d) of paragraph (5) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (ii) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A) Land and

Emergency Management, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, International Branch (Mail Code 2255A), Environmental Protection Agency, 1200 Pennsylvania Ave. N.W., Washington, D.C. 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A) Land and Emergency Management, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, International Branch (Mail Code 2255A), Environmental Protection Agency, William Jefferson Clinton South Building, Room 6144, 1200 Pennsylvania Ave. N.W., Washington, D.C. 20004. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export CRTs."

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Parts 1 and 2 of subparagraph (a) of paragraph (13) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste are amended by deleting them in their entirety and substituting instead the following:

1. A generator of hazardous secondary material, or an intermediate or reclamation facility ~~excluded from managing hazardous secondary material excluded from~~ regulation under subpart (1)(d)1(xxiv) of this rule that accumulates 6000 kg or less of hazardous secondary material at any time must comply with subparagraphs (b) and (c) of this paragraph.
2. A generator of hazardous secondary material, or an intermediate or reclamation facility ~~excluded from managing hazardous secondary material excluded from~~ regulation under subpart (1)(d)1(xxiv) of this rule that accumulates more than 6000 kg of hazardous secondary material at any time must comply with subparagraphs (b) and (d) of this paragraph.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (f) of paragraph (3) of Rule 0400-12-01-.04 Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

1. Electronic manifest signature shall meet the criteria described in ~~40 CFR 262.25(a) subparagraph (3)(f) of Rule 0400-12-01-.03.~~

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (xii) of part 2 of subparagraph (b) of paragraph (1) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended, by deleting it in its entirety and substituting instead the following (the comment that follows remains unchanged):

- (xii) Universal waste handlers and universal waste transporters (as defined in Rule 0400-12-01-.01(2)(a)) handling the wastes listed in ~~Rule 0400-12-01-.12(1)(a) items (I) through (V) of this subpart.~~ These handlers are subject to regulation under Rule 0400-12-01-.12, when handling the universal wastes listed in ~~Rule 0400-12-01-.12(1)(a). items (I) through (V) of this subpart~~
  - (I) ~~Batteries as described in subparagraph (1)(b) of Rule 0400-12-01-.12;~~
  - (II) ~~Pesticides as described in subparagraph (1)(c) of Rule 0400-12-01-.12;~~
  - (III) ~~Mercury-containing equipment as described in subparagraph (1)(d) of Rule 0400-12-01-.12;~~
  - (IV) ~~Lamps as described in subparagraph (1)(e) of Rule 0400-12-01-.12; and~~
  - (V) ~~Aerosol cans as described in subparagraph (1)(f) of Rule 0400-12-01-~~

.12.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (iv) of part 6 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting in its entirety and substituting instead the following:

- (iv) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector ~~or the Commissioner~~.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (i) of part 11 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities without amending its parts is amended by deleting the title of the subparagraph and substituting a new title to read as follows:

- (i) Electronic manifest signatures shall meet the criteria described in ~~40 C.F.R. 262.25(a)~~ subparagraph (3)(f) of Rule 0400-12-01-.03.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (i) of part 2 of subparagraph (a) of paragraph (15) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- (i) Except as provided by subparts (ii) and (iii) of this part, the standards of this rule no longer apply when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR Part 63, Subpart EEE by conducting a comprehensive performance test and submitting to the ~~Commissioner~~ Administrator a Notification of Compliance under 40 CFR 63.1207(j) and 40 CFR ~~263.1210(d)~~ 63.1210(d) documenting compliance with the requirements of 40 CFR Part 63, Subpart EEE.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (x) of part 2 of subparagraph (b) of paragraph (1) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- (x) Universal waste handlers and universal waste transporters (as defined in Rule 0400-12-01-.01(2)(a)) handling the wastes listed in ~~Rule 0400-12-01-.12(1)(a) items (I) through (V) of this subpart.~~ These handlers are subject to regulation under Rule 0400-12-01-.12, when handling the universal wastes listed in ~~Rule 0400-12-01-.12(1)(a) items (I) through (V) of this subpart.~~
  - (I) Batteries as described in subparagraph (1)(b) of Rule 0400-12-01-.12;
  - (II) Pesticides as described in subparagraph (1)(c) of Rule 0400-12-01-.12;
  - (III) Mercury-containing equipment as described in subparagraph (1)(d) of Rule 0400-12-01-.12;
  - (IV) Lamps as described in subparagraph (1)(e) of Rule 0400-12-01-.12; and
  - (V) Aerosol cans as described in subparagraph (1)(f) of Rule 0400-12-01-.12.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (c) of paragraph (5) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities without amending its parts is amended by deleting language “265.72” and substituting instead the language “264.72” so that the amended portion of the subparagraph reads as follows:

- (c) Manifest Discrepancies [40 CFR ~~265.72~~ 264.72]

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (i) of part 2 of subparagraph (a) of paragraph (15) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- (i) Except as provided by subparts (ii) through (iv) of this part, the standards of this rule do not apply to a new hazardous waste incineration unit that becomes subject to RCRA permit requirements after October 12, 2005; or no longer apply when an owner or operator of an existing hazardous waste incineration unit demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR Part 63, Subpart EEE by conducting a comprehensive performance test and submitting to the Commissioner Administrator a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with the requirements of 40 CFR Part 63, Subpart EEE. Nevertheless, even after this demonstration of compliance with the MACT standards, Hazardous Waste permit conditions that were based on the standards of this rule will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ix) of part 4 of subparagraph (b) of paragraph (1) of Rule 0400-12-01-.07 Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- (ix) Universal waste handlers and universal waste transporters (as defined in Rule 0400-12-01-.01(2)(a)) managing the wastes listed in ~~Rule 0400-12-01-.12(1)(a) items (I) through (V) of this subpart~~. These handlers are subject to regulation under Rule 0400-12-01-.12.
- ~~(I) Batteries as described in subparagraph (1)(b) of Rule 0400-12-01-.12;~~
- ~~(II) Pesticides as described in subparagraph (1)(c) of Rule 0400-12-01-.12;~~
- ~~(III) Mercury-containing equipment as described in subparagraph (1)(d) of Rule 0400-12-01-.12;~~
- ~~(IV) Lamps as described in subparagraph (1)(e) of Rule 0400-12-01-.12; and~~
- ~~(V) Aerosol cans as described in subparagraph (1)(f) of Rule 0400-12-01-.12.~~

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (h) of paragraph (2) of Rule 0400-12-01-.07 Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

1. If the Commissioner concludes, based on one or more of the factors listed in subpart (i) of this part that compliance with the standards of 40 CFR Part 63, Subpart EEE alone

may not be protective of human health or the environment, the Commissioner shall require the additional information or assessment(s) necessary to determine whether additional controls are necessary to ensure protection of human health and the environment. This includes information necessary to evaluate the potential risk to human health and/or the environment resulting from both direct and indirect exposure pathways. The Commissioner may also require a permittee or applicant to ~~prove~~ provide information necessary to determine whether such an assessment(s) should be required.

- (i) The Commissioner shall base the evaluation of whether compliance with the standards of 40 CFR Part 63 Subpart EEE alone is protective of human health or the environment on factors relevant to the potential risk from a hazardous waste combustion unit, including as appropriate, any of the following factors:
  - (I) Particular site-specific considerations such as proximity to receptors (such as schools, hospitals, nursing homes, day care centers, parks, community activity centers, or other potentially sensitive receptors), unique dispersion patterns, etc.;
  - (II) Identities and quantities of emissions of persistent, bioaccumulative or toxic pollutants considering enforceable controls in place to limit those pollutants;
  - (III) Identities and quantities of nondioxin products of incomplete combustion most likely to be emitted and to pose significant risk based on known toxicities (confirmation of which should be made through emissions testing);
  - (IV) Identities and quantities of other off-site sources of pollutants in proximity of the facility that significantly influence interpretation of a facility-specific risk assessment;
  - (V) Presence of significant ecological considerations, such as the proximity of a particularly sensitive ecological area;
  - (VI) Volume and types of wastes, for example wastes containing highly toxic constituents;
  - (VII) Other on-site sources of hazardous air pollutants that significantly influence interpretation of the risk posed by the operation of the source in question;
  - (VIII) Adequacy of any previously conducted risk assessment, given any subsequent changes in conditions likely to affect risk; and
  - (IX) Such other factors as may be appropriate.

(ii) Reserved.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 8 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.07 Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities without amending its subparts is amended by deleting the current introductory paragraph and substituting a new introductory paragraph to read as follows:

- 8. Specific Part B Information Requirements for Boilers and Industrial Furnaces Burning Hazardous Waste [40 CFR 270.22]

When an owner or operator of a cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric acid production furnace becomes subject to RCRA permit requirements after October 12, 2005, or when an owner or operator of an existing cement kiln, lightweight aggregate kiln, solid fuel boiler, liquid fuel boiler, or hydrochloric

acid production furnace demonstrates compliance with the air emission standards and limitations in 40 CFR [Part 63 Subpart EEE](#) (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with all applicable requirements of 40 CFR ~~[Subpart Part 63, Subpart EEE](#)~~, the requirements of this part do not apply. The requirements of this part do apply, however, if the Commissioner determines certain provisions are necessary to ensure compliance with subpart (8)(c)5(i) and item (8)(c)5(ii)(III) of Rule 0400-12-01-.09 if you elect to comply with subpart (12)(a)1(i)(I) of this rule to minimize emissions of toxic compounds from startup, shutdown, and malfunction events; or if you are an area source and elect to comply with the subparagraphs (8)(f), (8)(g), and (8)(h) of Rule 0400-12-01-.09 standards and associated requirements for particulate matter, hydrogen chloride and chlorine gas, and non-mercury metals; or the Commissioner determines certain provisions apply, on a case-by-case basis, for purposes of information collection in accordance with subparagraphs (2)(g) and (h) and subparts (8)(b)2(ii) and (iii) of this rule. ~~Nevertheless, the Commissioner may apply the provisions of this part, on a case-by-case basis, for purposes of information collection in accordance with subparagraph (2)(g) and subpart (8)(b)2(ii) of this rule.~~

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subitem II of item (II) of subpart (xi) of part 5 of subparagraph (c) of paragraph (9) of Rule 0400-12-01-.07 Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- II. The Commissioner may elect to approve or deny the request ~~contingent~~ contingent upon approval of the test plans.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 6 of subparagraph (a) of paragraph (1) of Rule 0400-12-01-.10 Land Disposal Restrictions is amended by deleting it in its entirety and substituting instead the following:

6. Universal waste handlers and universal waste transporters (as defined in Rule 0400-12-01-.01(2)(a)) are exempt from subparagraphs (1)(g) and (4)(a) of this rule for the hazardous wastes listed in ~~Rule 0400-12-01-.12(1)(a) subparts (i) through (v) of this part.~~ These handlers are subject to regulation under Rule 0400-12-01-.12.

~~(i) Batteries as described in subparagraph (1)(b) of Rule 0400-12-01-.12;~~

~~(ii) Pesticides as described in subparagraph (1)(c) of Rule 0400-12-01-.12;~~

~~(iii) Mercury-containing equipment as described in subparagraph (1)(d) of Rule 0400-12-01-.12;~~

~~(iv) Lamps as described in subparagraph (1)(e) of Rule 0400-12-01-.12; and~~

~~(v) Aerosol cans as described in subparagraph (1)(f) of Rule 0400-12-01-.12.~~

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Rule 0400-12-01-.12 Standards for Universal Waste Management is amended by deleting it in its entirety and substituting instead the following:

0400-12-01-.12 Standards for Universal Waste Management [40 CFR PART 273]

(1) General [40 CFR 273 Subpart A]

(a) SCOPE [40 CFR 273.1]

1. This rule establishes requirements for managing the following:

- (i) Batteries as described in subparagraph ~~(d)~~(b) of this paragraph;
  - (ii) Pesticides as described in subparagraph ~~(e)~~(c) of this paragraph;
  - (iii) Mercury-containing equipment as described in subparagraph ~~(f)~~(d) of this paragraph; ~~and~~
  - (iv) Lamps as described in subparagraph ~~(g)~~(e) of this paragraph; ~~and~~
  - (v) Aerosol cans described in subparagraph (f) of this paragraph.
2. This rule provides an alternative set of management standards in lieu of regulation under Rules 0400-12-01-.01 through .10.

~~(d)~~(b) Applicability -- Batteries [40 CFR 273.2]

1. Batteries Covered Under this Rule

- (i) The requirements of this rule apply to persons managing batteries described in subparagraph ~~(b)~~(i) of this paragraph, except those listed in part 2 of this subparagraph.
- (ii) Spent lead-acid batteries ~~which that~~ are not managed under paragraph (7) of Rule 0400-12-01-.09~~(7)~~, are subject to management under this rule.

2. Batteries Not Covered Under this Rule

The requirements of this rule do not apply to persons managing the following batteries:

- (i) Spent lead-acid batteries that are managed under paragraph (7) of Rule 0400-12-01-.09~~(7)~~.
- (ii) Batteries, as described in subparagraph ~~(b)~~(i) of this paragraph that are not yet wastes under Rule 0400-12-01-.02, including those that do not meet the criteria for waste generation in part 3 of this subparagraph.
- (iii) Batteries, as described in subparagraph ~~(b)~~(i) of this paragraph that are not hazardous waste. A battery is a hazardous waste if it exhibits one or more of the characteristics identified in paragraph (3) of Rule 0400-12-01-.02~~(3)~~.

3. Generation of Waste Batteries

- (i) A used battery becomes a waste on the date it is discarded (e.g., when sent for reclamation).
- (ii) An unused battery becomes a waste on the date the handler decides to discard it.

~~(e)~~(c) Applicability - Pesticides [40 CFR 273.3]

1. Pesticides Covered Under this Rule

The requirements of this rule apply to persons managing pesticides described in subparagraph ~~(b)~~(i) of this paragraph, meeting the following conditions, except those listed in part 2 of this subparagraph:

- (i) Recalled pesticides that are:
  - (l) Stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under FIFRA Section 19(b), including, but

not limited to those owned by the registrant responsible for conducting the recall; or

- (II) Stocks of a suspended or cancelled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant.
- (ii) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.

## 2. Pesticides Not Covered Under this Rule

The requirements of this rule do not apply to persons managing the following pesticides:

- (i) Recalled pesticides described in subpart 1(i) of this subparagraph, and unused pesticide products described in subpart 1(ii) of this subparagraph, that are managed by farmers in compliance with subpart (1)(a)2(vi) of Rule 0400-12-01-.03~~(1)(a)6.~~ that addresses pesticides disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the pesticide label, providing the container is triple rinsed in accordance with subpart (1)(g)2(iii) of Rule 0400-12-01-.02~~(1)(g)2-(iii);~~
- (ii) Pesticides not meeting the conditions set forth in part 1~~r~~ of this subparagraph. These pesticides must be managed in compliance with the hazardous waste regulations in Rules 0400-12-01-.01 through 0400-12-01-.10, except that aerosol cans as defined in subparagraph (i) of this paragraph that contain pesticides may be managed as aerosol can universal waste under part (2)(d)5 of this rule or part (3)(d)5 of this rule;
- (iii) Pesticides that are not wastes under Rule 0400-12-01-.02, including those that do not meet the criteria for waste generation in part 3 of this subparagraph or those that are not wastes as described in part 4 of this subparagraph; and
- (iv) Pesticides that are not hazardous waste. A pesticide is a hazardous waste if it is listed in paragraph (4) of Rule 0400-12-01-.02~~(4)~~ or if it exhibits one or more of the characteristics identified in paragraph (3) of Rule 0400-12-01-.02~~(3)~~.

## 3. Generation of Waste Pesticides

- (i) A recalled pesticide described in subpart ~~4-(i)~~ 1(i) of this subparagraph becomes a waste on the first date on which both of the following conditions apply:
  - (I) The generator of the recalled pesticide agrees to participate in the recall; and
  - (II) The person conducting the recall decides to discard (e.g., burn the pesticide for energy recovery).
- (ii) An unused pesticide product described in subpart ~~4-(ii)~~ 1(ii) of this subparagraph becomes a waste on the date the generator decides to discard it.

## 4. Pesticides That Are Not Wastes

The following pesticides are not wastes:

- (i) Recalled pesticides described in subpart ~~4-(i)~~ 1(i) of this subparagraph, provided that the person conducting the recall:
  - (I) Has not made a decision to discard (e.g., burn for energy recovery) the pesticide. Until such a decision is made, the pesticide does not meet the definition of "solid waste" under subparagraph (1)(b) of Rule 0400-12-01-

.02~~(1)(b)~~; thus the pesticide is not a hazardous waste and is not subject to hazardous waste requirements, including those of this rule. This pesticide remains subject to the requirements of FIFRA; or

(II) Has made a decision to use a management option that, under subparagraph (1)(b) of Rule 0400-12-01-.02~~(1)(b)~~, does not cause the pesticide to be a solid waste (i.e., the selected option is use (other than use constituting disposal) or reuse (other than burning for energy recovery) or reclamation). Such a pesticide is not a solid waste and therefore is not a hazardous waste, and it is not subject to the hazardous waste requirements including this rule. This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.

(ii) Unused pesticide products described in subpart ~~4.(ii)~~ 1(ii) of this subparagraph, if the generator of the unused pesticide product has not decided to discard (e.g., burn for energy recovery) them. These pesticides remain subject to the requirements of FIFRA.

~~(f)(d)~~ Applicability – Mercury-containing Equipment [40 CFR 273.4]

1. Mercury-containing Equipment Covered Under this Rule

The requirements of this rule apply to persons managing mercury-containing equipment described in subparagraph ~~(b)(i)~~ of this paragraph, except those listed in part 2 of this subparagraph.

2. Mercury-containing Equipment Not Covered Under this Rule

The requirements of this rule do not apply to persons managing the following mercury-containing equipment:

(i) Mercury-containing equipment that are not yet wastes under Rule 0400-12-01-.02. Part ~~3-~~ of this subparagraph describes when mercury-containing equipment become wastes-;

(ii) Mercury-containing equipment that are not hazardous wastes. Mercury-containing equipment is a hazardous waste if it exhibits one or more of the characteristics identified in paragraph (3) of Rule 0400-12-01-.02~~(3)~~ or is listed in paragraph (4) of Rule 0400-12-01-.02~~(4)~~; and

(iii) Equipment and devices from which the mercury-containing components have been removed.

3. Generation of Waste Mercury-containing Equipment

(i) Used mercury-containing equipment becomes a waste on the date it is discarded.

(ii) Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.

~~(g)(e)~~ Applicability - Lamps [40 CFR 273.5]

1. Lamps covered under this rule.

The requirements of this rule apply to persons managing lamps described in subparagraph ~~(b)(i)~~ of this paragraph, except those listed in part ~~2-~~ of this subparagraph.

2. Lamps not covered under this rule.

The requirements of this rule do not apply to persons managing the following lamps:

- (i) Lamps that are not yet wastes under Rule 0400-12-01-.02. Part 3- of this subparagraph describes when lamps become wastes.
- (ii) Lamps that are not hazardous waste. A lamp is a hazardous waste if it exhibits one or more of the characteristics identified in paragraph (3) of Rule 0400-12-01-.02~~(3)~~.

3. Generation of Waste Lamps.

- (i) A used lamp becomes a waste on the date it is discarded.
- (ii) A used or an unused lamp becomes a waste on the date the handler decides to discard it.

~~(h)(f)~~ ~~(RESERVED)~~ Applicability-Aerosol cans [40 CFR 273.6]

1. Aerosol cans covered under this rule. The requirements of this rule apply to persons managing aerosol cans, as described in subparagraph (i) of this paragraph, except those listed in part 2 of this subparagraph.

2. Aerosol cans not covered under this rule. The requirements of this rule do not apply to persons managing the following types of aerosol cans:

(i) Aerosol cans that are not yet waste under Rule 0400-12-01-.02. Part 3 of this subparagraph describes when an aerosol can becomes a waste;

(ii) Aerosol cans that are not hazardous waste. An aerosol can is a hazardous waste if the aerosol can exhibits one or more of the characteristics identified in paragraph (3) of Rule 0400-12-01-.02 or the aerosol can contains a substance that is listed in paragraph (4) of Rule 0400-12-01-.02; and

(iii) Aerosol cans that meet the standard for empty containers under subparagraph (1)(g) of Rule 0400-12-01-.02.

3. Generation of waste aerosol cans.

(i) A used aerosol can becomes a waste on the date it is discarded.

(ii) An unused aerosol can becomes a waste on the date the handler decides to discard it.

~~(h)(g)~~ (RESERVED) [40 CFR 273.7]

~~(e)(h)~~ Applicability -- Household and Very Small Quantity Generator Waste and Non-Hazardous Waste [40 CFR 273.8]

1. Persons managing the wastes listed in subparts (i) through (iii) of this part may, at their option, manage them under the requirements of this rule:

(i) Household wastes that are exempt under subpart (1)(d)2(i) of Rule 0400-12-01-.02 and are also of the same type as the universal wastes defined at subparagraph ~~(b)(i)~~ of this paragraph; ~~and/or~~

(ii) Very small quantity generator wastes that are exempt under subparagraph (1)(e) of Rule 0400-12-01-.03 and are also of the same type as the universal wastes defined at subparagraph ~~(b)(i)~~ of this paragraph; and/or

(iii) Non-hazardous wastes that are of the same type as the universal wastes defined at subparagraph ~~(b)(i)~~ of this paragraph.

2. Persons who commingle the wastes described in subparts ~~4-(i)~~ 1(i), ~~and (ii)~~, ~~and (iii)~~ of this subparagraph together with universal waste regulated under this rule must manage the commingled waste under the requirements of this rule.

~~(b)(i)~~ Definitions [40 CFR 273.9]

“Aerosol can” means a non-refillable receptacle containing a gas compressed, liquefied, or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

“Ampule” means an airtight vial made of glass, plastic, metal, or any combination of these materials.

“Battery” means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

“Destination ~~Facility~~ facility” means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in parts (2)(d)1~~7~~ and 3~~7~~ and (3)(d)1~~7~~ and 3~~7~~ of this rule. A facility~~7~~ at which a particular category of universal waste is only accumulated~~7~~ is not a destination facility for purposes of managing that category of universal waste.

“FIFRA” means the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. § 136-136y).

“Generator” means any person, by site, whose act or process produces hazardous waste identified or listed in Rule 0400-12-01-.02 or whose act first causes a hazardous waste to become subject to regulation.

“Lamp,” also referred to as “universal waste lamp,” is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

“Large ~~Quantity Handler of Universal Waste~~ quantity handler of universal waste” means a universal waste handler (as defined in this subparagraph) who accumulates 5,000 kilograms or more total of universal waste (batteries, pesticides, ~~lamps,~~ ~~or~~ mercury-containing equipment, lamps, or aerosol cans, calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which the 5,000~~7~~-kilogram limit is met or exceeded.

“Mercury-containing equipment” means a device or part of a device (including thermostats~~7~~ but excluding batteries and lamps) that contains elemental mercury integral to its function.

“On-site” means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access~~7~~, are also considered on-site property.

“Pesticide” means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

1. Is a new animal drug under FFDCFA section 201(w)~~7~~; ~~or~~

2. Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug; ~~or~~
3. Is an animal feed under FFDCFA section 201(x) that bears or contains any substances described by parts ~~1-~~ or ~~2-~~ of this definition.

“Small ~~Quantity Handler of Universal Waste~~ quantity handler of universal waste” means a universal waste handler (as defined in this subparagraph) who does not accumulate 5,000 kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, ~~or~~ lamps, or aerosol cans, calculated collectively) at any time.

“Thermostat” means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of subpart (2)(d)3(ii) of this rule or subpart (3)(d)3(ii) of this rule.

“Universal ~~Waste~~ waste” means any of the following hazardous wastes ~~listed in subparagraph (a) of this paragraph~~ that are subject to the universal waste requirements of this rule: ~~;~~

1. Batteries as described in subparagraph (b) of this paragraph;
2. Pesticides as describe in subparagraph (c) of this paragraph;
3. Mercury-containing equipment as described in subparagraph (d) of this paragraph;
4. Lamps as described in subparagraph (e) of this paragraph; and
5. Aerosol cans as described in subparagraph (f) of this paragraph.

“Universal ~~Waste Handler~~ waste handler”:

1. Means:

- (i) A generator (as defined in this subparagraph) of universal waste; or
- (ii) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

2. Does not mean:

- (i) A person who treats (except under the provisions of parts ~~(2)(d)1-, 3-, or 4-~~ (2)(d)1 or 3 of this rule, or parts ~~(3)(d)1-, 3-, or 4-~~ (3)(d)1 or 3 of this rule), disposes of, or recycles (except under the provisions of part (2)(d)5 of this rule or part (3)(d)5 of this rule) universal waste; or
- (ii) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility ~~(except under the provisions of part (4)(b)2-) of this rule.~~

“Universal ~~Waste Transfer Facility~~ waste transfer facility” means any transportation-related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

“Universal ~~Waste Transporter~~ waste transporter” means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

(Also, see Rule 0400-12-01-.01(2)(a).)

(2) Standards for Small Quantity Handlers of Universal Waste [40 CFR 273 Subpart B]

(a) Applicability [40 CFR 273.10]

This paragraph applies to small quantity handlers of universal waste (as defined in subparagraph ~~(1)(b)~~ (1)(i) of this rule).

(b) Prohibitions [40 CFR 273.11]

A small quantity handler of universal waste is:

1. Prohibited from disposing of universal waste; and
2. Prohibited from diluting or treating universal waste, except by responding to releases as provided in subparagraph (h) of this paragraph; or by managing specific wastes as provided in subparagraph (d) of this paragraph.

(c) Notification [40 CFR 273.12]

A small quantity handler of universal waste is not required to notify the Commissioner of universal waste handling activities.

(d) Waste Management [40 CFR 273.13]

1. Universal Waste Batteries:

A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (i) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (ii) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):
  - (I) sorting batteries by type;
  - (II) mixing battery types in one container;
  - (III) discharging batteries so as to remove the electric charge;
  - (IV) regenerating used batteries;
  - (V) disassembling batteries or battery packs into individual batteries or cells;
  - (VI) removing batteries from consumer products; or
  - (VII) removing electrolyte from batteries.
- (iii) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed in subpart (ii) of this part, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in [paragraph \(3\) of Rule 0400-12-01-.02](#) ~~(3)~~.

- (I) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of Rules 0400-12-01-.01 through ~~0400-12-01-.10~~. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to Rule 0400-12-01-.03.
- (II) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

## 2. Universal Waste Pesticides

A small quantity handler of universal waste must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:

- (i) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; ~~or~~
- (ii) A container that does not meet the requirements of subpart (i) of this part, provided that the unacceptable container is overpacked in a container that does meet the requirements of subpart (i) of this part; ~~or~~
- (iii) A tank that meets the requirements of paragraph (10) of Rule 0400-12-01-.05~~(10)~~, except for part (h)3~~,~~ and subparagraphs (k) and (l); or
- (iv) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

## 3. Mercury-containing Equipment:

A small quantity handler of universal waste must manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (i) A small quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with noncontained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions ~~in a container~~. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means~~;~~.
- (ii) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:
  - (I) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;
  - (II) Removes the ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);
  - (III) Ensures that a mercury clean-up system is readily available to

immediately transfer any mercury resulting from spills or leaks from broken ampules, from that containment device to a container that ~~meets the requirements of Rule 0400-12-01-.03(4)(e)~~ is subject to all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10;

- (IV) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that ~~meets the requirements of Rule 0400-12-01-.03(4)(e)~~ is subject to all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10;
  - (V) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
  - (VI) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
  - (VII) Stores removed ampules in closed, non-leaking containers that are in good condition; and
  - (VIII) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and
- (iii) A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:
- (I) Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and
  - (II) Follows all requirements for removing ampules and managing removed ampules under subpart (ii) of this part; and
- (iv) (I) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing must determine whether the following exhibit a characteristic of hazardous waste identified in paragraph (3) of Rule 0400-12-01-.02:
- I. Mercury or clean-up residues resulting from spills or leaks and/or
  - II. Other solid waste generated as a result of the removal of mercury-containing ampules or housings (e.g., the remaining mercury-containing device).
- (II) If the mercury, residues, and/or other solid waste exhibit a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of ~~Rule~~ Rules 0400-12-01-.01 through 0400-12-01-.10. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it subject to Rule 0400-12-01-.03.
- (III) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state, or local solid waste regulations.

#### 4. Universal Waste Lamps.

- (i) A small quantity handler of universal waste must manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment as follows:
  - (I) A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
  - (II) A small quantity handler of universal waste must immediately clean up and place in a container any lamp that is broken and must place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers must be closed, structurally sound, compatible with the contents of the lamps and must lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.
- (ii) Small quantity handlers of universal waste mercury-containing lamps may treat mercury-containing lamps for volume reduction at the site where they were generated under the provisions of paragraph (8) of this rule.

#### 5. Aerosol Cans.

A small quantity handler of universal waste must manage universal waste aerosol cans in a way that prevents releases of any universal waste or component of a universal waste to the environment as follows:

- (i) Universal waste aerosol cans must be accumulated in a container that is structurally sound; compatible with the contents of the aerosol cans; lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; and is protected from sources of heat;
- (ii) Universal waste aerosol cans that show evidence of leakage must be packaged in a separate closed container or overpacked with absorbents, or they must be immediately punctured and drained in accordance with the requirements of subpart (iv) of this part;
- (iii) A small quantity handler of universal waste may conduct the following activities as long as each individual aerosol can is not breached and remains intact:
  - (I) Sorting aerosol cans by type;
  - (II) Mixing intact cans in one container; and
  - (III) Removing actuators to reduce the risk of accidental release; and
- (iv) A small quantity handler of universal waste who punctures and drains its aerosol cans must recycle the empty punctured aerosol cans and meet the following requirements while puncturing and draining universal waste aerosol cans:
  - (I) Conduct puncturing and draining activities using a device specifically designed to safely puncture aerosol cans and effectively contain the residual contents and any emissions thereof;
  - (II) Establish and follow a written procedure detailing how to safely puncture and drain the universal waste aerosol can (including proper assembly, operation and maintenance of the unit, segregation of incompatible

wastes, and proper waste management practices to prevent fires or releases); maintain a copy of the manufacturer's specification and instruction on site; and ensure employees operating the device are trained in the proper procedures;

- (III) Ensure that puncturing of the can is done in a manner designed to prevent fires and to prevent the release of any component of universal waste to the environment. This manner includes, but is not limited to, locating the equipment on a solid, flat surface in a well-ventilated area;
- (IV) Immediately transfer the contents from the waste aerosol can or puncturing device, if applicable, to a container or tank that meets the applicable requirements of subparagraph (1)(e), (1)(f), (1)(g), or (1)(h) of Rule 0400-12-01-.03;
- (V) Conduct a hazardous waste determination on the contents of the emptied aerosol can per subparagraph (1)(b) of Rule 0400-12-01-.03. Any hazardous waste generated as a result of puncturing and draining the aerosol can is subject to all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10. The handler is considered the generator of the hazardous waste and is subject to Rule 0400-12-01-.03;
- (VI) If the contents are determined to be nonhazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state, or local solid waste regulations; and
- (VII) A written procedure must be in place in the event of a spill or leak and a spill clean-up kit must be provided. All spills or leaks of the contents of the aerosol cans must be cleaned up promptly.

(e) Labeling/Marking [40 CFR 273.14]

A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

1. Universal waste batteries (i.e., each battery), or a container in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste - Battery(ies)" or "Waste Battery(ies)" or "Used Battery(ies)."
2. A container (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in subpart ~~(1)(e)1.(i)~~ (1)(c)1(i) of this rule are contained must be labeled or marked clearly with:
  - (i) The label that was on or accompanied the product as sold or distributed; and
  - (ii) The words "Universal Waste - Pesticide(s)" or "Waste Pesticide(s)."
3. A container, tank, or transport vehicle or vessel in which unused pesticide products as described in subpart ~~(1)(e)1.(i)~~ (1)(c)1(i) of this rule are contained must be labeled or marked clearly with:
  - (i) (I) The label that was on the product when purchased, if still legible;
  - (II) If using the labels described in item (I) of this subpart is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR ~~part~~ Part 172;
  - (III) If using the labels described in items (I) and (II) of this subpart is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and

- (ii) The words "Universal Waste - Pesticide(s)" or "Waste Pesticide(s)."
4. (i) Universal waste mercury-containing equipment (i.e., each device), or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste--Mercury Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."
  - (ii) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste--Mercury Thermostats(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."
5. ~~Universal waste lamps (i.e., each lamp),~~ Each lamp or a container or package in which such lamps are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste - Lamp(s)" or "Waste Lamp(s)" or "Used Lamp(s)" or "Universal Waste - Bulb(s)" or "Waste Bulb(s)" or "Used Bulb(s)". Containers or packages destined for out-of-state shipment shall use the term "Lamps" in lieu of "Bulbs".
6. Universal waste aerosol cans (i.e., each aerosol can), or a container in which the aerosol cans are contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste--Aerosol Can(s)," "Waste Aerosol Can(s)," or "Used Aerosol Can(s)".
- (f) Accumulation Time Limits [40 CFR 273.15]
    1. A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of part 2- of this subparagraph are met.
    2. A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
    3. A small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
      - (i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
      - (ii) Marking or labeling each individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;
      - (iii) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;
      - (iv) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
      - (v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

- (vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(g) Employee Training [40 CFR 273.16]

A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.

(h) Response to Releases [40 CFR 273.17]

1. A small quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.
2. A small quantity handler of universal waste must determine whether any material resulting from the release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of Rules 0400-12-01-.01 through [0400-12-01-.10](#). The handler is considered the generator of the material resulting from the release, and must manage it in compliance with Rule 0400-12-01-.03.

(i) Off-site Shipments [40 CFR 273.18]

1. A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
2. If a small quantity handler of universal waste self-transportes universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of paragraph (4) of this rule while transporting the universal waste.
3. If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR [Parts](#) 171 through 180, a small quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR [parts Parts](#) 172 through 180.
4. Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
5. If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
  - (i) Receive the waste back when notified that the shipment has been rejected, or
  - (ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.
6. A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:
  - (i) Send the shipment back to the originating handler, or
  - (ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.

7. If a small quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Commissioner of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Commissioner will provide instructions for managing the hazardous waste.
8. If a small quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state, or local solid waste regulations.

(j) Tracking Universal Waste Shipments [40 CFR 273.19]

A small quantity handler of universal waste shall follow the procedures set forth for large quantity handlers in subparagraph (3)(j) of this rule.

(k) Exports [40 CFR 273.20]

A small quantity handler of universal waste who sends universal waste to a foreign destination is subject to the requirements of paragraph (9) of Rule 0400-12-01-.03.

(3) Standards for Large Quantity Handlers of Universal Waste [40 CFR 273 Subpart C]

(a) Applicability [40 CFR 273.30]

This paragraph applies to large quantity handlers of universal waste (as defined in subparagraph ~~(1)(b)~~ (1)(i) of this rule).

(b) Prohibitions [40 CFR 273.31]

A large quantity handler of universal waste is:

1. Prohibited from disposing of universal waste; and
2. Prohibited from diluting or treating universal waste, except by responding to releases as provided in subparagraph (h) of this paragraph; or by managing specific wastes as provided in subparagraph (d) of this paragraph.

(c) Notification [40 CFR 273.32]

1.
  - (i) Except as provided in subparts (ii) and (iii) of this part, a large quantity handler of universal waste must have sent written notification of universal waste management to the Commissioner, and received an Installation Identification Number, before meeting or exceeding the 5,000-kilogram storage limit.
  - (ii) A large quantity handler of universal waste who has already notified the Commissioner of his hazardous waste management activities and has received an Installation Identification Number is not required to renotify under this subparagraph.
  - (iii) A large quantity handler of universal waste who manages recalled universal waste pesticides as described in subpart ~~(1)(e)1.(i)~~ (1)(c)1(i) of this rule and who has sent notification to ~~the Commissioner~~ EPA as required by ~~Rule 0400-12-01-.05 40 CFR Part 165~~ is not required to notify for those recalled universal waste pesticides under this subparagraph.
2. This notification must include:
  - (i) The universal waste handler's name and mailing address;
  - (ii) The name and business telephone number of the person at the universal waste

handler's site who should be contacted regarding universal waste management activities;

- (iii) The address or physical location of the universal waste management activities;
- (iv) A list of all ~~of~~ the types of universal waste managed by the handler (e.g., batteries, pesticides, mercury-containing equipment, ~~and~~ lamps, and aerosol cans); and
- (v) A statement indicating that the handler is accumulating more than 5,000 kilograms of universal waste at one time.

(d) Waste Management [40 CFR 273.33]

1. Universal Waste - Batteries:

A large quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (i) A large quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (ii) A large quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):
  - (I) Sorting batteries by type;
  - (II) Mixing battery types in one container;
  - (III) Discharging batteries so as to remove the electric charge;
  - (IV) Regenerating used batteries;
  - (V) Disassembling batteries or battery packs into individual batteries or cells;
  - (VI) Removing batteries from consumer products; or
  - (VII) Removing electrolyte from batteries.
- (iii) A large quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above in subpart (ii) of this part, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in paragraph (3) of Rule 0400-12-01-.02~~(3)~~.
  - (I) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to Rule 0400-12-01-.03.
  - (II) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable

federal, state, or local solid waste regulations.

2. Universal Waste - Pesticides:

A large quantity handler of universal waste must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:

- (i) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; ~~or~~
- (ii) A container that does not meet the requirements of subpart (i) of this part, provided that the unacceptable container is overpacked in a container that does meet the requirements of subpart (i) of this part; ~~or~~
- (iii) A tank that meets the requirements of paragraph (10) of Rule 0400-12-01-.05(10), except for part (h)3, and subparagraphs (k) and (l); or
- (iv) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

3. Universal Waste – Mercury-containing Equipment:

A large quantity handler of universal waste must manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (i) A large quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means; ~~i~~
- (ii) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:
  - (I) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;
  - (II) Removes the ampules only over or in a containment device (e.g., tray or pan sufficient to contain any mercury released from an ampule in case of breakage);
  - (III) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks of broken ampules, from that containment device to a container that ~~meets the requirements of Rule 0400-12-01-.03(4)(e) is subject to all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10;~~
  - (IV) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that ~~meets the requirements of Rule 0400-12-01-.03(4)(e) is subject to all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10;~~

- (V) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
  - (VI) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
  - (VII) Stores removed ampules in closed, non-leaking containers that are in good condition; ~~and~~
  - (VIII) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; ~~and~~
- (iii) A large quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:
- (I) Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and
  - (II) Follows all requirements for removing ampules and managing removed ampules under subpart (ii) of this part; and
- (iv) (I) A large quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing must determine whether the following exhibit a characteristic of hazardous waste identified in paragraph (3) of Rule 0400-12-01-.02:
- I. Mercury or clean-up residues resulting from spills or leaks and/or
  - II. Other solid waste generated as a result of the removal of mercury-containing ampules or housings (e.g., remaining mercury-containing devices).
- (II) If the mercury, residues, and/or other solid waste exhibit a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10. The handler is considered the generator of the mercury, residues, and/or other waste and is subject to Rule 0400-12-01-.03.
- (III) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

4. Universal Waste - Lamps.

- (i) A large quantity handler of universal waste must manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment as follows:
  - (I) A large quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

- (II) A large quantity handler of universal waste must immediately clean up and place in a container any lamp that is broken and must place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers must be closed, structurally sound, compatible with the contents of the lamps and must lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.
- (ii) Large quantity handlers of universal waste lamps may treat the lamps for volume reduction at the site where they were generated under the provisions of paragraph (8) of this rule.

#### 5. Aerosol Cans.

A large quantity handler of universal waste must manage universal waste aerosol cans in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (i) Universal waste aerosol cans must be accumulated in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.
- (ii) Universal waste aerosol cans that show evidence of leakage must be packaged in a separate closed container or overpacked with absorbents, or they must be immediately punctured and drained in accordance with the requirements of subpart (iv) of this part.
- (iii) A large quantity handler of universal waste may conduct the following activities as long as each individual aerosol can is not breached and remains intact:
  - (I) Sorting aerosol cans by type;
  - (II) Mixing intact cans in one container; and
  - (III) Removing actuators to reduce the risk of accidental release; and
- (iv) A large quantity handler of universal waste who punctures and drains its aerosol cans must recycle the empty punctured aerosol cans and meet the following requirements while puncturing and draining universal waste aerosol cans:
  - (I) Conduct puncturing and draining activities using a device specifically designed to safely puncture aerosol cans and effectively contain the residual contents and any emissions thereof.
  - (II) Establish and follow a written procedure detailing how to safely puncture and drain the universal waste aerosol can (including proper assembly, operation, and maintenance of the unit; segregation of incompatible wastes; and proper waste management practices to prevent fires or releases); maintain a copy of the manufacturer's specification and instruction on site; and ensure employees operating the device are trained in the proper procedures.
  - (III) Ensure that puncturing of the can is done in a manner designed to prevent fires and to prevent the release of any component of universal waste to the environment. This manner includes, but is not limited to, locating the equipment on a solid, flat surface in a well-ventilated area.
  - (IV) Immediately transfer the contents from the waste aerosol can or

puncturing device, if applicable, to a container or tank that meets the applicable requirements of subparagraph (1)(e), (1)(f), (1)(g), or (1)(h) of Rule 0400-12-01-.03.

(V) Conduct a hazardous waste determination on the contents of the emptied aerosol can per subparagraph (1)(b) of Rule 0400-12-01-.03. Any hazardous waste generated as a result of puncturing and draining the aerosol can is subject to all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10. The handler is considered the generator of the hazardous waste and is subject to Rule 0400-12-01-.03.

(VI) If the contents are determined to be nonhazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state, or local solid waste regulations.

(VII) A written procedure must be in place in the event of a spill or leak and a spill clean-up kit must be provided. All spills or leaks of the contents of the aerosol cans must be cleaned up promptly.

(e) Labeling/Marking [40 CFR 273.34]

A large quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

1. Universal waste batteries (i.e., each battery), or a container or tank in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste - Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"
2. A container (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in subpart ~~(1)(e)1-(i)~~ (1)(c)1(i) of this rule are contained must be labeled or marked clearly with:
  - (i) The label that was on or accompanied the product as sold or distributed; and
  - (ii) The words "Universal Waste - Pesticide(s)" or "Waste - Pesticide(s);"
3. A container, tank, or transport vehicle or vessel in which unused pesticide products as described in subpart ~~(1)(e)1-(i)~~ (1)(c)1(i) of this rule are contained must be labeled or marked clearly with:
  - (i)
    - (I) The label that was on the product when purchased, if still legible;
    - (II) If using the labels described in item (I) of this subpart, the appropriate label as required under the Department of Transportation regulation 49 CFR ~~part~~ Part 172;
    - (III) If using the labels described in items (I) and (II) of this subpart is not feasible, another label prescribed or designated by the pesticide collection program; and
  - (ii) The words "Universal Waste - Pesticide(s)" or "Waste Pesticide(s)."
4.
  - (i) Mercury-containing equipment (i.e., each device), or a container in which the equipment is contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste-- Mercury Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."
  - (ii) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste – Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury

Thermostat(s).”

5. Universal waste lamps (i.e., each lamp), or a container or package in which such lamps are contained must be labeled or marked clearly with any one of the following phrases: “Universal Waste - Lamp(s)”, or “Waste Lamp(s)”, or “Used Lamp(s)” or “Universal Waste - Bulb(s)” or “Waste Bulb(s)” or “Used Bulb(s)”. Containers or packages destined for out-of-state shipment shall use the term “Lamps” in lieu of “Bulbs”.

6. Universal waste aerosol cans (i.e., each aerosol can), or a container in which the aerosol cans are contained, must be labeled or marked clearly with any of the following phrases: “Universal Waste--Aerosol Can(s).” “Waste Aerosol Can(s).” or “Used Aerosol Can(s).”

(f) Accumulation Time Limits [40 CFR 273.35]

1. A large quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of part 2- of this subparagraph are met.
2. A large quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity was solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
3. A large quantity handler of universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
  - (i) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
  - (ii) Marking or labeling the individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;
  - (iii) Maintaining an inventory system on-site that identifies the date the universal waste being accumulated became a waste or was received;
  - (iv) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
  - (v) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
  - (vi) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(g) Employee Training [40 CFR 273.36]

A large quantity handler of universal waste must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.

(h) Response to Releases [40 CFR 273.37]

1. A large quantity handler of universal waste must immediately contain all releases of

universal wastes and other residues from universal wastes.

2. A large quantity handler of universal waste must determine whether any material resulting from the release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of Rules 0400-12-01-.01 through [0400-12-01-.10](#). The handler is considered the generator of the material resulting from the release, and is subject to Rule 0400-12-01-.03.

(i) Off-site Shipments [40 CFR 273.38]

1. A large quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
2. If a large quantity handler of universal waste self-transportes universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of paragraph (4) of this rule while transporting the universal waste.
3. If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR [Parts](#) 171 through 180, a large quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR [parts](#) [Parts](#) 172 through 180.
4. Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
5. If a large quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
  - (i) Receive the waste back when notified that the shipment has been rejected, or
  - (ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.
6. A large quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:
  - (i) Send the shipment back to the originating handler, or
  - (ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
7. If a large quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Commissioner of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Commissioner will provide instructions for managing the hazardous waste.
8. If a large quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

(j) Tracking Universal Waste Shipments [40 CFR 273.39]

1. Receipt of Shipments

A large quantity handler of universal waste must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document, or other shipping document. The record for each shipment of universal waste received must include the following information:

- (i) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent; (Pesticide collection programs operated under the authority of the Tennessee Department of Agriculture are exempt from the requirements of this subpart provided that the pesticides are received by a universal waste handler for proper management);
- (ii) The quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats, lamps); and
- (iii) The date of receipt of the shipment of universal waste.

2. Shipments Off-site

A large quantity handler of universal waste must keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading, movement document, or other shipping document. The record for each shipment of universal waste sent must include the following information:

- (i) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;
- (ii) The quantity of each type of universal waste sent (e.g., batteries, pesticides, thermostats, lamps); and
- (iii) The date the shipment of universal waste left the facility.

3. Record Retention

- (i) A large quantity handler of universal waste must retain the records described in part 1 of this subparagraph for at least three years from the date of receipt of a shipment of universal waste.
- (ii) A large quantity handler of universal waste must retain the records described in part 2 of this subparagraph for at least three years from the date a shipment of universal waste left the facility.
- (iii) An organization with multiple locations may retain their universal waste records at an in-state consolidation point acceptable to the Division Commissioner. If a site inspection of the records by the Division Commissioner is not feasible due to the use of a records consolidation point, a copy of the site's universal waste records shall be sent, within seven working days of the request, to the Division Commissioner.

(k) Exports [40 CFR 273.40]

A large quantity handler of universal waste who sends universal waste to a foreign destination is subject to the requirements of paragraph (9) of Rule 0400-12-01-.03.

(4) Standards for Universal Waste Transporters [40 CFR 273 Subpart D]

(a) Applicability [40 CFR 273.50]

This subpart paragraph applies to universal waste transporters (as defined in subparagraph ~~(1)(b)~~)

(1)(i) of this rule).

(b) Prohibitions [40 CFR 273.51]

A universal waste transporter is:

1. Prohibited from disposing of universal waste; and
2. Prohibited from diluting or treating universal waste, except by responding to releases as provided in subparagraph (e) of this paragraph.

(c) Waste Management [40 CFR 273.52]

1. A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 CFR ~~part~~ Parts 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 CFR 171.8. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest requirements of the Department specified in Rule 0400-12-01-.03. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.
2. Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 CFR 173.2. As universal waste shipments do not require a manifest under Rule 0400-12-01-.03, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste".

(d) Storage Time Limits [40 CFR 273.53]

1. A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.
2. If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements of paragraphs (2) or (3) of this rule while storing the universal waste.

(e) Response to Releases [40 CFR 273.54]

1. A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.
2. A universal waste transporter must determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10. If the waste is determined to be a hazardous waste, the transporter is subject to Rule 0400-12-01-.03.

(f) Off-site Shipments [40 CFR 273.55]

1. A universal waste transporter is prohibited from transporting the universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.
2. If the universal waste being shipped off-site meets the Department of Transportation's definition of hazardous materials under 49 CFR 171.8, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 CFR ~~part~~ Part 172.

(g) Exports [40 CFR 273.56]

A universal waste transporter transporting a shipment of universal waste to a foreign destination

is subject to the requirements of paragraph (9) of Rule 0400-12-01-.03.

(5) Standards for Destination Facilities [40 CFR 273 Subpart E]

(a) Applicability [40 CFR 273.60]

1. The owner or operator of a destination facility (as defined in subparagraph ~~(4)(b)~~ (1)(i) of this rule) is subject to all applicable requirements of Rules 0400-12-01-.05, 0400-12-01-.06, 0400-12-01-.07, 0400-12-01-.08, 0400-12-01-.09, and 0400-12-01-.10, including the notification ~~requirement under Rule 0400-12-01-.03(2)~~ requirements.
2. The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with subpart (1)(f)3(ii) of Rule 0400-12-01-.02~~(1)(f)3-(ii)~~.

(b) Off-site Shipments [40 CFR 273.61]

1. The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or foreign destination.
2. The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, he must contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:
  - (i) Send the shipment back to the original shipper, or
  - (ii) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.
3. If the owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the Commissioner of the illegal shipment, and provide the name, address, and phone number of the shipper. The Commissioner will provide instructions for managing the hazardous waste.
4. If the owner or operator of a destination facility receives a shipment of non-hazardous, non-universal waste, the owner or operator may manage the waste in any way that is in compliance with applicable federal or state solid waste regulations.

(c) Tracking Universal Waste Shipments [40 CFR 273.62]

1. The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document, or other shipping document. The record for each shipment of universal waste received must include the following information:
  - (i) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;
  - (ii) The quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats, lamps); and
  - (iii) The date of receipt of the shipment of universal waste.
2. The owner or operator of a destination facility must retain the records described in part 1 of this subparagraph for at least three years from the date of receipt of a shipment of universal waste.

(6) Import Requirements [40 CFR 273 Subpart F]

(a) Imports [40 CFR 273.70]

Persons managing universal waste that is imported from a foreign country into the United States are subject to the applicable requirements of paragraph (9) of Rule 0400-12-01-.03, immediately after the waste enters the United States, as indicated in parts 1- through 3- of this subparagraph:

1. A universal waste transporter is subject to the universal waste transporter requirements of paragraph (4) of this rule.
2. A universal waste handler is subject to the small or large quantity handler of universal waste requirements of paragraphs (2) or (3) of this rule, as applicable.
3. An owner or operator of a destination facility is subject to the destination facility requirements of paragraph (5) of this rule.

(7) Petitions to Include Other Wastes under this Rule [40 CFR 273 Subpart G]

(a) General [40 CFR 273.80]

1. Any person seeking to add a hazardous waste or a category of hazardous waste to this rule may petition for a regulatory amendment under this paragraph and ~~Rules 0400-12-01-.01(3)(a)1. and 4~~ subparagraphs (3)(a) and (d) of Rule 0400-12-01-.01.
2. To be successful, the petitioner must demonstrate to the satisfaction of the Commissioner that regulation under the universal waste regulations of Rule 0400-12-01-.12 is: appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition must include the information required by part (3)(a)2 of Rule 0400-12-01-.01(3)(a)1.(ii). The petition should also address as many of the factors listed in subparagraph (b) of this paragraph as are appropriate for the waste or waste category addressed in the petition.
3. The Commissioner will evaluate petitions using the factors listed in subparagraph (b) of this paragraph. The Commissioner will grant or deny a petition using the factors listed in subparagraph (b) of this paragraph. The decision will be based on the weight of evidence showing that regulation under this rule is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.

(b) Factors for Petitions to Include Other Wastes under this Rule [40 CFR 273.81]

1. The waste or category of waste, as generated by a wide variety of generators, is listed in paragraph (4) of Rule 0400-12-01-.02(4), or (if not listed) a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in paragraph (3) of Rule 0400-12-01-.02(3). (When a characteristic waste is added to the universal waste regulations of this rule by using a generic name to identify the waste category (e.g., batteries), the definition of universal waste in subparagraph (2)(a) of Rules 0400-12-01-.01(2)(a) and subparagraph (1)(b) (1)(i) of this rule will be amended to include only the hazardous waste portion of the waste category (e.g., hazardous waste batteries). Thus, only the portion of the waste stream that does exhibit one or more characteristics (i.e., is hazardous waste) is subject to the universal waste regulations of this rule;
2. The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, very small quantity generators, small businesses, government organizations, as well as large industrial facilities);
3. The waste or category of waste is generated by a large number of generators (e.g., more

than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;

4. Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;
5. The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to subparagraphs (2)(d), (3)(d) and (4)(c) of this rule; and/or applicable Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;
6. Regulation of the waste or category of waste under this rule will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (e.g., the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with the Act;
7. Regulation of the waste or category of waste under this rule will improve implementation of and compliance with the hazardous waste regulatory program; and/or
8. Such other factors as may be appropriate.

(8) Standards for the Owner or Operator of a “Universal Waste Lamp Crusher System”

(a) Applicability

This paragraph applies to handlers of universal waste lamps (defined in subparagraph ~~(1)(b)~~ (1)(i) of this rule) operating a “crusher system” for the purpose of volume reduction.

(b) Prohibitions

A crusher of universal waste lamps is:

1. Prohibited from disposing of universal waste; and
2. Prohibited from diluting or treating universal waste, except by crushing for volume reduction purposes in compliance with the ~~Permit~~ permit-by-rule requirement of subpart (1)(c)1(iv) of Rule 0400-12-01-.07 ~~(1)(e)1.(iv)~~ or as otherwise provided in this rule.
3. Prohibited from mixing in any hazardous or non-hazardous waste with the crushed lamps. No filters, tools, solid waste, etc., shall be placed in the container of crushed lamps.

(c) Operation

The following standards for operation shall be adhered to:

1. The lamps must be crushed in a system designed and operated to minimize the loss of mercury to the atmosphere. Any air exhausted from the unit shall pass through a well-maintained high efficiency particulate air filter (HEPA) designed to minimize such loss. Detailed records regarding this operation must be kept and made available for review for at least three ~~(3)~~ years, including, but not limited to, the technology employed for crushing, including any certification or testing data provided by the manufacturer of the crushing unit.
2. The handler immediately transfers any material recovered from a spill or leak to a container and has the available equipment necessary to comply with ~~this container that meets the requirements of Rule 0400-12-01-.03(4)(e), requirements~~ all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10.

3. The handler ensures that the area in which the lamps are crushed is well-ventilated and monitored to ensure compliance with applicable Occupational Safety and Health Administration (OSHA) exposure levels for mercury.
4. The handler ensures that employees crushing lamps are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers.
5. The crushed lamps are stored in closed, non-leaking containers that are in good condition (e.g., no severe rusting, apparent structural defects or deterioration), suitable to prevent releases during storage, handling and transportation.

(d) Labeling/Marking

A handler of universal waste lamps and crushing device must label or mark the universal waste lamps or containers as specified ~~below in parts 1 or 2 of this subparagraph~~:

1. Universal waste lamps (i.e., each lamp); or
2. ~~a~~ A container in which the lamps or crushed lamps are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste - Lamp(s)", or "Waste Lamp(s)", or "Used Mercury Lamp(s)", or placing "Crushed", as appropriate, first on the label.

(e) Accumulation Time Limits

1. A handler of universal waste lamps and crusher operator may accumulate such universal waste for no longer than one year from the date it is generated, or received from another handler.
2. A handler of universal waste mercury-containing lamps who accumulates them must be able to demonstrate the length of time they have been accumulated from the date the lamps ~~becomes~~ become a waste or are received. The handler may make this demonstration by:
  - (i) Placing the lamps in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received; and
  - (ii) Maintaining an inventory system available for review that identifies the date each shipment of universal waste lamps became a waste or was received, the date it was sent for recycling, and the name and address of the destination facility or handler.

(f) Employee Training

A handler of universal waste lamps must inform all employees who handle or have responsibility for managing them. The information must describe proper handling and emergency procedures.

(g) Response to Releases

1. A handler of universal waste lamps must immediately contain all releases and other residues.
2. A handler of universal waste lamps must determine whether any material resulting from the release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of Rules 0400-12-01-.01 through 0400-12-01-.10. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with Rule 0400-12-01-.03.

(h) Off-site Shipments

1. A handler of universal waste lamps is prohibited from sending or taking such waste to a place other than another universal waste handler or a destination facility.
2. If a handler of universal waste lamps self-transportes such waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of paragraph (4) of this rule while transporting the universal waste.
3. If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR [Parts](#) 171 through 180, a handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 100 through 185.
4. If a handler of universal waste lamps sends a shipment of such waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
  - (i) Receive the waste back when notified that the shipment has been rejected, or
  - (ii) Agree with the receiving handler on a destination facility to which the shipment will be sent.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

I certify that the information included in this filing is an accurate and complete representation of the intent and scope of rulemaking proposed by the agency.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Name of Officer: Lisa A. Hughey

Title of Officer: Director of the Division of Solid Waste Management

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Filed with the Department of State on: \_\_\_\_\_

\_\_\_\_\_  
Tre Hargett  
Secretary of State