# Hazardous Waste Generator Regulations Compendium

Volume 10: Universal Waste September 2021

U.S. Environmental Protection Agency
Office of Resource Conservation and Recovery
Materials Recovery and Waste Management Division



#### **Main Index**

# Volume 10: Universal Waste

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| Code of Federal Regulations (CFR) View Index |   |
| CFR View                                     |   |

# This document includes the following sections:

- Resource View outlines the document types by which resources are organized.
- Resources by Document Category lists resources for each document category outlined in the *Resource View*.
- CFR View provides relevant Code of Federal Regulations (CFR) language reformatted for easy reading.

These three main sections are cross-referenced, i.e., each section includes hyperlinks to the other sections. In addition, each section and its accompanying index include a hyperlink to the Main Index that allows the user to easily navigate from one section to another.

#### Introduction

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### About the Compendium

The Hazardous Waste Generator Regulations Compendium serves as a user-friendly reference to assist regulators, industrial facilities generating and managing solid and hazardous wastes, and the general public in locating resources relevant to specific regulatory topics within the federal hazardous waste generator program.

The objective of this document is to consolidate and streamline the various resources on a topic into a user-friendly format, including references to relevant CFR language, Federal Register (FR) notices, documents posted on RCRA Online (i.e., guidance in the form of memoranda issued by EPA, Q&As, and other publications), and other resources, such as Frequent Questions webpages. The Compendium has been divided into multiple volumes that are available here: <a href="https://www.epa.gov/hwgenerators/hazardous-waste-generator-regulations-compendium">www.epa.gov/hwgenerators/hazardous-waste-generator-regulations-compendium</a>.

This document does not change any of the existing solid or hazardous waste requirements, nor does it offer an exhaustive list of relevant resources, as new resources may come into being or older ones may be relevant to a specific issue, but not included. Certain available resources, such as superseded RCRA Online documents, have not been referenced. Rather than including or reproducing referenced resources, this document generally provides hyperlinks to individual resources. As an exception, the Compendium does include relevant sections of the most current CFR regulatory language (as of the date on the cover of the Compendium). The included CFR language has been reformatted to make it easier to read, but it is not a substitute for the official CFR itself, or for the requirements in the CFR. The Government Printing Office frequently updates the e-CFR website; where appropriate, hyperlinks to the respective CFR section at the e-CFR website are provided.

Most states are authorized to administer their own RCRA Subtitle C hazardous waste program. Therefore, states may have their own set of regulations that apply in lieu of federal regulations. State regulations must be at least as stringent as the federal standards, but they can be more stringent. Please visit the following website to determine if the state regulatory program is different from the federal program: <a href="https://www.epa.gov/hwgenerators/links-hazardous-waste-programs-and-us-state-environmental-agencies">https://www.epa.gov/hwgenerators/links-hazardous-waste-programs-and-us-state-environmental-agencies</a>, and check with your state agency.

#### About the Universal Waste Volume

This volume of the Compendium lists resources pertaining to the universal waste provisions that are found at 40 CFR 273. For more information regarding other topics that apply to facilities generating hazardous waste, refer to other volumes of the Compendium and <u>EPA's Hazardous Waste Generators Webpage</u>.

Please note that the Hazardous Waste Generator Improvements rule of 2016 created new sections in Part 262, which contains the regulations pertaining to generators. Accordingly, some citations in the generator requirements in older resources in this Compendium are outdated, including references to § 261.5, § 262.34, and others. Please see the preamble to the final Hazardous Waste Generator Improvements rule for a discussion of the reorganization of the regulations (81 FR

85735–85740, November 28, 2016). For a specific crosswalk of the regulation citation changes, refer to www.epa.gov/hwgenerators/hazardous-waste-generator-regulations-crosswalk.

For more information on these regulations and any other questions or comments concerning this document, please contact EPA's Office of Resource Conservation and Recovery:

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# **Resource View**

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# **Universal Waste**

# Resource Index:

- Resource Type:
  - o <u>EPA Memoranda</u>
  - o Questions and Answers (Q&A)
  - o <u>Publications</u>
  - o Federal Register Notices

# **Resources by Document Category**

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| Document  | RCRA<br>Online/ |  | Document   |   |  |
|-----------|-----------------|--|------------|---|--|
| Category  | Resource        | Resource Title   | Document   | Keyword(s)  | Notes  |
| Memoranda | 11736           | Discussion Paper<br>on Possible<br>Universal Waste                     | 04/19/1993 | Fluorescent Bulbs;<br>Mercury and NiCad<br>Batteries; Antifreeze;<br>Spent Solvents;<br>Contaminated Rags and<br>Wipers; Used Oil;<br>Treated Poles/Lumber;<br>Sandblast Grit;<br>Construction Debris | This document predates the promulgation of the 1995 Universal Waste Rule but provides interesting information about the development of the Rule. |
|           | <u>11906</u>    | Guidance from the U.S. EPA on the Crushing of Mercury-Containing Lamps | 06/05/1995 | Mercury Lamps;<br>Generator Treatment;<br>Lamp Crushing   |  |
|           | 11952           | Universal Waste<br>Notification<br>Requirements                        | 02/05/1996 | Notification; 8700-12<br>Forms  | Since the publication of this memo, a box to check for generation of universal waste has been added to form 8700-12.                             |
|           | 11960           | Universal Waste<br>Rule –<br>Implementation                            | 04/10/1996 | Universal Waste<br>Program; State<br>Adoption; State<br>Authorization   |  |
|           | 14081           | Universal Waste Consolidation Point Regulation                         | 02/01/1997 | Consolidators; Universal<br>Waste Handlers  |  |
|           | 14088           | Universal Waste<br>Questions and<br>Answers<br>Document                | 02/13/1997 | Batteries; Pesticides; State-Only Universal Wastes; New Universal Wastes; Disposal; Recycling; Labeling; Mixtures; Land Disposal Restrictions; Recordkeeping; Transportation                          |  |

|          | RCRA     |   |            |   |  |
|----------|----------|---|------------|---|--|
| Document | Online/  | D 77'41   | Document   | 1( )  | NT 4   |
| Category | Resource | Resource Title  | Date       | Keyword(s)  | Notes  |
|          | 14146    | Labeling Requirements for Universal Waste Batteries   | 05/13/1997 | Batteries; Leakage;<br>Spillage; Containers;<br>Labeling  |  |
|          | 14124    | Implementation of<br>the Mercury<br>Containing and<br>Rechargeable<br>Battery<br>Management Act | 10/31/1997 | Battery Act; Treatment;<br>State Authorization  |  |
|          | 14292    | Universal Waste Rule – Enforcement Issues and Addition of State- Only Universal Wastes          | 07/20/1998 | State Universal Waste<br>Programs; Enforcement;<br>State-Only Universal<br>Wastes   |  |
|          | 14756    | Guidance for Generators Disposing of Fully-Discharged Lithium Sulfur Dioxide Batteries          | 06/08/2006 | Batteries; Lithium Sulfur<br>Dioxide; Reactivity;<br>Discharged   |  |
| Q&A      | 13772    | Lead-Acid<br>Batteries and<br>Universal Waste   | 12/01/1995 | Exclusions; Part 266<br>Subpart G   |  |
|          | 13783    | Frequently Asked<br>Questions on the<br>Universal Waste<br>Regulations                          | 05/01/1996 | Batteries; Pesticides;<br>Mercury Wastes;<br>Notification;<br>Accumulation Time<br>Limit                                      | Since this was published, EPA has added lamps, mercury-containing equipment, and aerosol cans. |
|          | 14107    | Universal Waste<br>Handler Status   | 05/01/1997 | Small Quantity Handler of Universal Waste (SQHUW); Large Quantity Handler of Universal Waste (LQHUW); Accumulation Provisions | Universal waste definitions are now found in section 273.9.                                    |

|          | RCRA         |   |            |  |  |
|----------|--------------|---|------------|--|--|
| Document | Online/      |   | Document   |  |  |
| Category | Resource     | Resource Title                                | Date       | Keyword(s)   | Notes                                    |
|          | <u>14179</u> | Universal Waste<br>Storage Time<br>Limits and | 03/01/1998 | Accumulation<br>Provisions; Handlers               | Universal waste definitions are          |
|          |              | Multiple Handlers                             |            |  | now found in section 273.9. In addition, |
|          |              |   |            |  | since this was<br>published,<br>EPA has  |
|          |              |   |            |  | added lamps,<br>mercury-                 |
|          |              |   |            |  | containing equipment, and aerosol        |
|          |              |   |            |  | cans.                                    |
|          | 14186        | Universal Waste<br>Transfer Facility          | 04/01/1998 | Transfer Facility; Ten Day Limit; Handler          | Universal waste                          |
|          |              | Storage Time                                  |            | Requirements                                       | definitions are                          |
|          |              | Limit   |            |  | now found in                             |
|          |              |   |            |  | section 273.9. In addition,              |
|          |              |   |            |  | since this was                           |
|          |              |   |            |  | published,                               |
|          |              |   |            |  | EPA has added lamps,                     |
|          |              |   |            |  | mercury-                                 |
|          |              |   |            |  | containing                               |
|          |              |   |            |  | equipment,                               |
|          |              |   |            |  | and aerosol cans.                        |
|          | 14273        | Universal Waste                               | 05/01/1998 | Large Quantity Handler                             | Universal                                |
|          |              | Handler                                       |            | of Universal Waste                                 | waste                                    |
|          |              | Recordkeeping<br>Requirements                 |            | (LQHUW);<br>Recordkeeping;                         | definitions are now found in             |
|          |              | 1.0quilonionio                                |            | Shipments  | section 273.9.                           |
|          | <u>14560</u> | Universal Waste<br>Release Response           | 06/01/2001 | Spill; Cleanup; Residue;<br>Pesticides; Subtitle C |  |
|          | 14500        | TT  | 04/01/2002 | Requirements                                       |  |
|          | <u>14598</u> | Universal Waste<br>Employee                   | 04/01/2002 | Annual Review;<br>Employee Training                |  |
|          |              | Training Requirements                         |            | Employee Huming                                    |  |
|          | <u>14634</u> | Broken Batteries                              | 09/01/2002 | Batteries; Damage;                                 |  |
|          |              | as Universal                                  |            | Leakage; Spillage;                                 |  |
|          |              | Wastes  |            | Handling Requirement                               |  |

| _            | RCRA                 |                               | _                |                           |       |
|--------------|----------------------|-------------------------------|------------------|---------------------------|-------|
| Document     | Online/<br>Resource  | Resource Title                | Document<br>Date | Keyword(s)                | Notes |
| Category     | 14719                | Contractors as                | 07/01/2004       | Lamps; Liability; Co-     | Notes |
|              | 14/19                | Cogenerators of               | 07/01/2004       | generators                |       |
|              |                      | Universal Waste               |                  | generators                |       |
|              |                      | Lamps                         |                  |                           |       |
|              | 14740                | Applicability of              | 01/01/2005       | Exports; Manifest;        |       |
|              |                      | the Export                    |                  | Notification; Reporting;  |       |
|              |                      | Regulations to                |                  | Recordkeeping; Consent    |       |
|              |                      | Universal Waste               |                  |                           |       |
|              | <u>Weblink</u>       | Frequent                      | Last             | Batteries; Pesticides;    |       |
|              |                      | Questions About               | Updated          | Mercury-Containing        |       |
|              |                      | Universal Waste               | 10/16/2020       | Equipment; Lamps;         |       |
|              |                      |                               |                  | Aerosol Cans              |       |
| Publications | <u>50555</u>         | Implementation of             | 11/01/1997       | Batteries; State          |       |
|              |                      | the Mercury-                  |                  | Authority; Preemption     |       |
|              |                      | Containing and Rechargeable   |                  |                           |       |
|              |                      | Battery                       |                  |                           |       |
|              |                      | Management Act                |                  |                           |       |
|              | 51185                | Mercury Lamp                  | 08/24/2006       | Mercury-Containing        |       |
|              |                      | Drum-Top                      |                  | Lamps; Drum Top           |       |
|              |                      | Crusher Study                 |                  | Crushers; Field Testing;  |       |
|              |                      | •                             |                  | Air Emissions             |       |
| Federal      | <u>60 FR</u>         | Universal Waste               | 5/11/1995        | Streamlined Universal     |       |
| Register     | <u>25492</u>         | Rule (Hazardous               |                  | Waste Management          |       |
| Notices      |                      | Waste                         |                  | Regulations               |       |
|              |                      | Management                    |                  |                           |       |
|              |                      | System;                       |                  |                           |       |
|              |                      | Modification of the Hazardous |                  |                           |       |
|              |                      | Waste Recycling               |                  |                           |       |
|              |                      | Regulatory                    |                  |                           |       |
|              |                      | Program)                      |                  |                           |       |
|              | 63 FR                | Universal Waste               | 12/24/1998       | Lead-acid Batteries; Part |       |
|              | $\frac{5511}{71225}$ | Rule (Hazardous               |                  | 266 Subpart G             |       |
|              |                      | Waste                         |                  | •                         |       |
|              |                      | Management                    |                  |                           |       |
|              |                      | System;                       |                  |                           |       |
|              |                      | Modification of               |                  |                           |       |
|              |                      | the Hazardous                 |                  |                           |       |
|              |                      | Waste Recycling               |                  |                           |       |
|              |                      | Regulatory                    |                  |                           |       |
|              |                      | Program)                      |                  |                           |       |

| Document<br>Category | RCRA<br>Online/<br>Resource | Resource Title  | Document<br>Date | Keyword(s)   | Notes |
|----------------------|-----------------------------|---|------------------|--|-------|
|                      | 64 FR<br>36466              | Hazardous Waste Management System; Modification of the Hazardous Waste Program; Hazardous Waste                                 | 7/6/1999         | Lamps  |       |
|                      | 70 FR<br>45507              | Lamps Hazardous Waste Management System; Modification of the Hazardous Waste Program; Mercury- Containing Equipment; Final Rule | 8/5/2005         | Mercury-Containing Equipment; Thermostats; Thermometers; Mercury Ampules |       |
|                      | 84 FR<br>67202              | Increasing Recycling: Adding Aerosol Cans to the Universal Waste Regulations; Final Rule  | 12/9/2019        | Aerosol Cans   |       |

# **CFR View Index**

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| CFR Location | Title/Topic                              |
|--------------|--|
| <u>273</u>   | Standards for Universal Waste Management |

#### **CFR View**

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# NOTE: The CFR language may have been excerpted, reformatted and appended with subheadings and explanations/terms in brackets.

#### Part 273 Universal Waste

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# **Subpart A—General**

§273.1 Scope.

- (a) This part establishes requirements for managing the following:
  - (1) Batteries as described in 40 CFR 273.2;
  - (2) Pesticides as described in § 273.3;
  - (3) Mercury-containing equipment as described in § 273.4;
  - (4) Lamps as described in § 273.5; and
  - (5) Aerosol cans as described in §2 73.6.
- (b) This part provides an alternative set of management standards in lieu of regulation under 40 CFR parts 260 through 272.
- § 273.2 Applicability—batteries.
- (a) Batteries covered under 40 CFR part 273.
  - (1) The requirements of this part apply to persons managing batteries, as described in § 273.9, except those listed in paragraph (b) of this section.
  - (2) Spent lead-acid batteries which are not managed under 40 CFR part 266, subpart G, are subject to management under this part.
- (b) Batteries not covered under 40 CFR part 273. The requirements of this part do not apply to persons managing the following batteries:
  - (1) Spent lead-acid batteries that are managed under 40 CFR part 266, subpart G.

- (2) Batteries, as described in § 273.9, that are not yet wastes under part 261 of this chapter, including those that do not meet the criteria for waste generation in paragraph (c) of this section.
- (3) Batteries, as described in § 273.9, that are not hazardous waste. A battery is a hazardous waste if it exhibits one or more of the characteristics identified in part 261, subpart C of this chapter.
- (c) Generation of waste batteries.
  - (1) A used battery becomes a waste on the date it is discarded (e.g., when sent for reclamation).
  - (2) An unused battery becomes a waste on the date the handler decides to discard it

# § 273.3 Applicability—pesticides.

- (a) Pesticides covered under this part 273. The requirements of this part apply to persons managing pesticides, as described in § 273.9, meeting the following conditions, except those listed in paragraph (b) of this section:
  - (1) Recalled pesticides that are:
    - (i) 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.
  - (2) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.
- (b) Pesticides not covered under 40 CFR part 273. The requirements of this part do not apply to persons managing the following pesticides:
  - (1) Recalled pesticides described in paragraph (a)(1) of this section, and unused pesticide products described in paragraph (a)(2) of this section, that are managed by farmers in compliance with 40 CFR 262.70. (40 CFR 262.70 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 40 CFR 261.7(b)(3));
  - (2) Pesticides not meeting the conditions set forth in paragraph (a) of this section. These pesticides must be managed in compliance with the hazardous waste

regulations in 40 CFR parts 260 through 272, except that aerosol cans as defined in § 273.9 that contain pesticides may be managed as aerosol can universal waste under § 273.13(e) or § 273.33(e);

- (3) Pesticides that are not wastes under part 261 of this chapter, including those that do not meet the criteria for waste generation in paragraph (c) of this section or those that are not wastes as described in paragraph (d) of this section; and
- (4) Pesticides that are not hazardous waste. A pesticide is a hazardous waste if it is listed in 40 CFR part 261, subpart D or if it exhibits one or more of the characteristics identified in 40 CFR part 261, subpart C.
- (c) When a pesticide becomes a waste.
  - (1) A recalled pesticide described in paragraph (a)(1) of this section 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).
  - (2) An unused pesticide product described in paragraph (a)(2) of this section becomes a waste on the date the generator decides to discard it.
- (d) Pesticides that are not wastes. The following pesticides are not wastes:
  - (1) Recalled pesticides described in paragraph (a)(1) of this section, 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 40 CFR 261.2; thus the pesticide is not a hazardous waste and is not subject to hazardous waste requirements, including this part 273. This pesticide remains subject to the requirements of FIFRA; or
    - (ii) Has made a decision to use a management option that, under 40 CFR 261.2, 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 is not subject to the hazardous waste requirements including this part 273. This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.

(2) Unused pesticide products described in paragraph (a)(2) of this section, 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.

# § 273.4 Applicability—Mercury-containing equipment.

- (a) Mercury-containing equipment covered under this part 273. The requirements of this part apply to persons managing mercury-containing equipment, as described in § 273.9, except those listed in paragraph (b) of this section.
- (b) Mercury-containing equipment not covered under this part 273. The requirements of this part do not apply to persons managing the following mercury-containing equipment:
  - (1) Mercury-containing equipment that is not yet a waste under part 261 of this chapter. Paragraph (c) of this section describes when mercury-containing equipment becomes a waste;
  - (2) Mercury-containing equipment that is not a hazardous waste. Mercury-containing equipment is a hazardous waste if it exhibits one or more of the characteristics identified in part 261, subpart C of this chapter or is listed in part 261, subpart D of this chapter; and
  - (3) Equipment and devices from which the mercury-containing components have been removed.
- (c) Generation of waste mercury-containing equipment.
  - (1) Used mercury-containing equipment becomes a waste on the date it is discarded.
  - (2) Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.

#### § 273.5 Applicability—lamps.

- (a) Lamps covered under this part 273. The requirements of this part apply to persons managing lamps as described in § 273.9, except those listed in paragraph (b) of this section.
- (b) Lamps not covered under this part 273. The requirements of this part do not apply to persons managing the following lamps:
  - (1) Lamps that are not yet wastes under part 261 of this chapter as provided in paragraph (c) of this section.
  - (2) Lamps that are not hazardous waste. A lamp is a hazardous waste if it exhibits one or more of the characteristics identified in part 261, subpart C of this chapter.

- (c) Generation of waste lamps.
  - (1) A used lamp becomes a waste on the date it is discarded.
  - (2) An unused lamp becomes a waste on the date the handler decides to discard it.
- § 273.6 Applicability—Aerosol cans.
- (a) Aerosol cans covered under this part. The requirements of this part apply to persons managing aerosol cans, as described in § 273.9, except those listed in paragraph (b) of this section.
- (b) Aerosol cans not covered under this part. The requirements of this part do not apply to persons managing the following types of aerosol cans:
  - (1) Aerosol cans that are not yet waste under part 261 of this chapter. Paragraph
  - (c) of this section describes when an aerosol can become a waste;
  - (2) 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 part 261, subpart C, of this chapter or the aerosol can contains a substance that is listed in part 261, subpart D, of this chapter; and
  - (3) Aerosol cans that meet the standard for empty containers under § 261.7 of this chapter.
- (c) Generation of waste aerosol cans.
  - (1) A used aerosol can become a waste on the date it is discarded.
  - (2) An unused aerosol can become a waste on the date the handler decides to discard it.
- § 273.8 Applicability—household and very small quantity generator waste.
- (a) Persons managing the wastes listed below may, at their option, manage them under the requirements of this part:
  - (1) Household wastes that are exempt under § 261.4(b)(1) of this chapter and are also of the same type as the universal wastes defined at § 273.9; and/or
  - (2) Very small quantity generator wastes that are exempt under § 262.14 of this chapter and are also of the same type as the universal wastes defined at § 273.9.
- (b) Persons who commingle the wastes described in paragraphs (a)(1) and (a)(2) of this section together with universal waste regulated under this part must manage the commingled waste under the requirements of this part.

# § 273.9 Definitions.

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 means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in § 273.13 (a) and (c) and § 273.33 (a) and (c). A facility at which a particular category of universal waste is only accumulated, 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 part 261 of this chapter 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 means a universal waste handler (as defined in this section) who accumulates 5,000 kilograms or more total of universal waste (batteries, pesticides, 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-kilogram limit is met or exceeded.

Mercury-containing equipment means a device or part of a device (including thermostats, 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 that 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, 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 FFDCA section 201(w); 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 FFDCA section 201(x) that bears or contains any substances described by paragraph (1) or (2) of this definition.

Small quantity handler of universal waste means a universal waste handler (as defined in this section) who does not accumulate 5,000 kilograms or more of universal waste (batteries, pesticides, mercury-containing equipment, 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 40 CFR 273.13(c)(2) or 273.33(c)(2).

Universal waste means any of the following hazardous wastes that are subject to the universal waste requirements of this part:

- (1) Batteries as described in § 273.2;
- (2) Pesticides as described in § 273.3;
- (3) Mercury-containing equipment as described in § 273.4;
- (4) Lamps as described in § 273.5; and
- (5) Aerosol cans as described in § 273.6.

Universal waste handler:

- (1) Means:
  - (i) A generator (as defined in this section) 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 § 273.13(a) or (c), or § 273.33(a) or (c)), disposes of, or recycles (except under the provisions of § 273.13(e) or § 273.33(e)) 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.

Universal 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 means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

# Subpart B—Standards for Small Quantity Handlers of Universal Waste

§273.10 Applicability.

This subpart applies to small quantity handlers of universal waste (as defined in 40 CFR 273.9).

§273.11 Prohibitions.

A small quantity handler of universal waste is:

- (a) Prohibited from disposing of universal waste; and
- (b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 40 CFR 273.17; or by managing specific wastes as provided in 40 CFR 273.13.

*§273.12 Notification.* 

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

§273.13 Waste management.

(a) 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:

- (1) 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.
- (2) 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.
- (3) 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 above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in 40 CFR part 261, subpart C.
  - (i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to 40 CFR part 262.
  - (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.
- (b) 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:

- (1) 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
- (2) A container that does not meet the requirements of paragraph (b)(1) of this Section, provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (b)(1) of this Section; or
- (3) A tank that meets the requirements of 40 CFR part 265 subpart J, except for 40 CFR 265.197(c), 265.200, and 265.201; or
- (4) 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.
- (c) 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:
  - (1) A small 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.
  - (2) 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 is subject to all applicable requirements of 40 CFR parts 260 through 272;
    - (iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that is subject to all applicable requirements of 40 CFR parts 260 through 272;

- (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;
- (viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;
- (3) 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 airtight seal to prevent the release of any mercury to the environment; and
  - (ii) Follows all requirements for removing ampules and managing removed ampules under paragraph (c)(2) of this section; and
- (4) (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 40 CFR part 261, subpart C:
  - (A) Mercury or clean-up residues resulting from spills or leaks and/or
  - (B) 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 exhibits a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it in compliance with 40 CFR part 262.
  - (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.

- (d) Lamps. 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:
  - (1) 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.
  - (2) 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.
- (e) 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:
  - (1) 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.
  - (2) Universal waste aerosol cans that show evidence of leakage must be packaged in a separate closed container or overpacked with absorbents, or immediately punctured and drained in accordance with the requirements of paragraph (e)(4) of this section.
  - (3) 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
  - (4) A small quantity handler of universal waste who punctures and drains their 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 40 CFR 262.14, 262.15, 262.16, or 262.17.
- (v) Conduct a hazardous waste determination on the contents of the emptied aerosol can per 40 CFR 262.11. Any hazardous waste generated as a result of puncturing and draining the aerosol can is subject to all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the hazardous waste and is subject to 40 CFR part 262.
- (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.

# §273.14 Labeling/marking.

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

- (a) 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);"
- (b) A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in 40 CFR 273.3(a)(1) are contained must be labeled or marked clearly with:

- (1) The label that was on or accompanied the product as sold or distributed; and
- (2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s);"
- (c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in 40 CFR 273.3(a)(2) are contained must be labeled or marked clearly with:
  - (1) (i) The label that was on the product when purchased, if still legible;
    - (ii) If using the labels described in paragraph (c)(1)(i) of this section is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;
    - (iii) If using the labels described in paragraphs (c)(1) (i) and (ii) of this section is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and
  - (2) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."
- (d) (1) 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."
  - (2) 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)."
- (e) Each lamp or a container or package in which such lamps are contained must be labeled or marked clearly with one of the following phrases: "Universal Waste—Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)".
- (f) 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)".

#### *§273.15 Accumulation time limits.*

- (a) 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 paragraph (b) of this section are met.
- (b) 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.

- (c) 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:
  - (1) 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;
  - (2) 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;
  - (3) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received:
  - (4) 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;
  - (5) 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
  - (6) 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.

#### §273.16 Employee training.

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.

# §273.17 Response to releases.

- (a) A small quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.
- (b) 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 40 CFR parts 260 through 272. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with 40 CFR part 262.

# §273.18 Off-site shipments.

- (a) 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.
- (b) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subpart D of this part while transporting the universal waste.
- (c) 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 172 through 180;
- (d) 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.
- (e) 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:
  - (1) Receive the waste back when notified that the shipment has been rejected, or
  - (2) Agree with the receiving handler on a destination facility to which the shipment will be sent.
- (f) 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:
  - (1) Send the shipment back to the originating handler, or
  - (2) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- (g) 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 appropriate regional EPA office of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The EPA regional office will provide instructions for managing the hazardous waste.

(h) 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.

§273.19 Tracking universal waste shipments.

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

§273.20 Exports.

A small quantity handler of universal waste who sends universal waste to a foreign destination is subject to the requirements of 40 CFR part 262, subpart H.

# Subpart C—Standards for Large Quantity Handlers of Universal Waste

§273.30 Applicability.

This subpart applies to large quantity handlers of universal waste (as defined in §273.9).

§273.31 Prohibitions.

A large quantity handler of universal waste is:

- (a) Prohibited from disposing of universal waste; and
- (b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 40 CFR 273.37; or by managing specific wastes as provided in 40 CFR 273.33.

§273.32 Notification.

- (a) (1) Except as provided in paragraphs (a) (2) and (3) of this section, a large quantity handler of universal waste must have sent written notification of universal waste management to the Regional Administrator, and received an EPA Identification Number, before meeting or exceeding the 5,000 kilogram storage limit.
  - (2) A large quantity handler of universal waste who has already notified EPA of his hazardous waste management activities and has received an EPA Identification Number is not required to renotify under this section.
  - (3) A large quantity handler of universal waste who manages recalled universal waste pesticides as described in 40 CFR 273.3(a)(1) and who has sent notification to EPA as required by 40 CFR part 165 is not required to notify for those recalled universal waste pesticides under this section.
- (b) This notification must include:
  - (1) The universal waste handler's name and mailing address;

- (2) 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;
- (3) The address or physical location of the universal waste management activities;
- (4) A list of all the types of universal waste managed by the handler (e.g., batteries, pesticides, mercury-containing equipment, lamps, and aerosol cans); and
- (5) A statement indicating that the handler is accumulating more than 5,000 kilograms of universal waste at one time.

### §273.33 Waste management.

- (a) 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:
  - (1) 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.
  - (2) 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.
  - (3) 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, must determine

whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in 40 CFR part 261, subpart C.

- (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 40 CFR parts 260 through 272. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to 40 CFR part 262.
- (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.
- (b) 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:
  - (1) 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
  - (2) A container that does not meet the requirements of paragraph (b)(1) of this section, provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (b)(1) of this section; or
  - (3) A tank that meets the requirements of 40 CFR part 265 subpart J, except for 40 CFR 265.197(c), 265.200, and 265.201; or
  - (4) 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.
- (c) 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:
  - (1) 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.
  - (2) 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 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 of broken ampules from that containment device to a container that is subject to all applicable requirements of 40 CFR parts 260 through 272;
- (iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container is subject to all applicable requirements of 40 CFR parts 260 through 272;
- (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;
- (viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;
- (3) 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 airtight seal to prevent the release of any mercury to the environment; and
  - (ii) Follows all requirements for removing ampules and managing removed ampules under paragraph (c)(2) of this section; and
- (4) (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 40 CFR part 261, subpart C:
  - (A) Mercury or clean-up residues resulting from spills or leaks and/or

- (B) 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 exhibits a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it in compliance with 40 CFR part 262.
- (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.
- (d) Lamps. 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:
  - (1) 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.
  - (2) 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.
- (e) 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:
  - (1) 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.
  - (2) Universal waste aerosol cans that show evidence of leakage must be packaged in a separate closed container or overpacked with absorbents, or immediately punctured and drained in accordance with the requirements of paragraph (e)(4) of this section.

- (3) 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
- (4) A large quantity handler of universal waste who punctures and drains their 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 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 40 CFR 262.14, 262.15, 262.16, or §262.17.
  - (v) Conduct a hazardous waste determination on the contents of the emptied can per 40 CFR 262.11. Any hazardous waste generated as a result of puncturing and draining the aerosol can is subject to all applicable requirements of 40 CFR parts 260 through 272. The handler is considered the generator of the hazardous waste and is subject to 40 CFR part 262.
  - (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 release 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.

# §273.34 Labeling/marking.

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

- (a) 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);"
- (b) A container (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in 40 CFR 273.3(a)(1) are contained must be labeled or marked clearly with:
  - (1) The label that was on or accompanied the product as sold or distributed; and
  - (2) The words "Universal Waste—Pesticide(s)" or "Waste—Pesticide(s);"
- (c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in 40 CFR 273.3(a)(2) are contained must be labeled or marked clearly with:
  - (1) (i) The label that was on the product when purchased, if still legible;
    - (ii) If using the labels described in paragraph (c)(1)(i) of this section is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;
    - (iii) If using the labels described in paragraphs (c) (1)(i) and (1)(ii) of this section is not feasible, another label prescribed or designated by the pesticide collection program; and
  - (2) The words "Universal Waste—Pesticide(s)" or "Waste—Pesticide(s)."
- (d) (1) 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."
  - (2) 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)."
- (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)".

(f) 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)".

# §273.35 Accumulation time limits.

- (a) 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 paragraph (b) of this section are met.
- (b) 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.
- (c) 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:
  - (1) 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;
  - (2) 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;
  - (3) Maintaining an inventory system on-site that identifies the date the universal waste being accumulated became a waste or was received;
  - (4) 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;
  - (5) 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
  - (6) 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.

# §273.36 Employee training.

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.

# §273.37 Response to releases.

- (a) A large quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.
- (b) 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 40 CFR parts 260 through 272. The handler is considered the generator of the material resulting from the release, and is subject to 40 CFR part 262.

# *§273.38 Off-site shipments.*

- (a) 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.
- (b) If a large quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subpart D of this part while transporting the universal waste.
- (c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR 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 172 through 180;
- (d) 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.
- (e) 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:
  - (1) Receive the waste back when notified that the shipment has been rejected, or
  - (2) Agree with the receiving handler on a destination facility to which the shipment will be sent.
- (f) 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:

- (1) Send the shipment back to the originating handler, or
- (2) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- (g) 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 appropriate regional EPA office of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The EPA regional office will provide instructions for managing the hazardous waste.
- (h) 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.

#### §273.39 Tracking universal waste shipments.

- (a) 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:
  - (1) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;
  - (2) The quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats);
  - (3) The date of receipt of the shipment of universal waste.
- (b) 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:
  - (1) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;
  - (2) The quantity of each type of universal waste sent (e.g., batteries, pesticides, thermostats);
  - (3) The date the shipment of universal waste left the facility.

- (c) Record retention.
  - (1) A large quantity handler of universal waste must retain the records described in paragraph (a) of this section for at least three years from the date of receipt of a shipment of universal waste.
  - (2) A large quantity handler of universal waste must retain the records described in paragraph (b) of this section for at least three years from the date a shipment of universal waste left the facility.

§273.40 Exports.

A large quantity handler of universal waste who sends universal waste to a foreign destination is subject to the requirements of 40 CFR part 262, subpart H.

#### **Subpart D—Standards for Universal Waste Transporters**

§273.50 Applicability.

This subpart applies to universal waste transporters (as defined in §273.9).

§273.51 Prohibitions.

A universal waste transporter is:

- (a) Prohibited from disposing of universal waste; and
- (b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 40 CFR 273.54.

§273.52 Waste management.

- (a) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 CFR part 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 U.S. Environmental Protection Agency specified in 40 CFR part 262. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.
- (b) 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 40 CFR 262, 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".

# §273.53 Storage time limits.

- (a) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.
- (b) 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 subparts B or C of this part while storing the universal waste.

# §273.54 Response to releases.

- (a) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.
- (b) 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 40 CFR parts 260 through 272. If the waste is determined to be a hazardous waste, the transporter is subject to 40 CFR part 262.

# *§273.55 Off-site shipments.*

- (a) 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.
- (b) 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 172.

# §273.56 Exports.

A universal waste transporter transporting a shipment of universal waste to a foreign destination is subject to the requirements of 40 CFR part 262, subpart H.

#### **Subpart E—Standards for Destination Facilities**

# §273.60 Applicability.

- (a) The owner or operator of a destination facility (as defined in §273.9) is subject to all applicable requirements of parts 264, 265, 266, 268, 270, and 124 of this chapter, and the notification requirement under section 3010 of RCRA.
- (b) 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 40 CFR 261.6(c)(2).

# *§273.61 Off-site shipments.*

- (a) 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.
- (b) 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:
  - (1) Send the shipment back to the original shipper, or
  - (2) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.
- (c) 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 appropriate regional EPA office of the illegal shipment, and provide the name, address, and phone number of the shipper. The EPA regional office will provide instructions for managing the hazardous waste.
- (d) 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.

# §273.62 Tracking universal waste shipments.

- (a) 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:
  - (1) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;
  - (2) The quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats);
  - (3) The date of receipt of the shipment of universal waste.
- (b) The owner or operator of a destination facility must retain the records described in paragraph (a) of this section for at least three years from the date of receipt of a shipment of universal waste.

# **Subpart F—Import Requirements**

§273.70 Imports.

Persons managing universal waste that is imported from a foreign country into the United States are subject to the requirements of 40 CFR part 262 subpart H and the applicable requirements of this part, immediately after the waste enters the United States, as indicated in paragraphs (a) through (c) of this section:

- (a) A universal waste transporter is subject to the universal waste transporter requirements of subpart D of this part.
- (b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of subparts B or C, as applicable.
- (c) An owner or operator of a destination facility is subject to the destination facility requirements of subpart E of this part.

# **Subpart G—Petitions To Include Other Wastes Under 40 CFR Part 273**

§273.80 General.

- (a) Except as provided in paragraph (d) of this section, any person seeking to add a hazardous waste or category of hazardous waste to this part may petition for a regulatory amendment under this subpart and 40 CFR 260.20 and 260.23.
- (b) To be successful, the petitioner must demonstrate to the satisfaction of the Administrator that regulation under the universal waste regulations of 40 CFR part 273 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 40 CFR 260.20(b). The petition should also address as many of the factors listed in 40 CFR 273.81 as are appropriate for the waste or waste category addressed in the petition.
- (c) The Administrator will evaluate petitions using the factors listed in 40 CFR 273.81. The Administrator will grant or deny a petition using the factors listed in 40 CFR 273.81. The decision will be based on the weight of evidence showing that regulation under 40 CFR part 273 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.
- (d) Hazardous waste pharmaceuticals are regulated by 40 CFR part 266 subpart P and may not be added as a category of hazardous waste for management under this part.
- *§273.81 Factors for petitions to include other wastes under 40 CFR part 273.*
- (a) The waste or category of waste, as generated by a wide variety of generators, is listed in subpart D of part 261 of this chapter, or (if not listed) a proportion of the waste stream

exhibits one or more characteristics of hazardous waste identified in subpart C of part 261 of this chapter. (When a characteristic waste is added to the universal waste regulations of this part 273 by using a generic name to identify the waste category (e.g., batteries), the definition of universal waste in §260.10 of this chapter and §273.9 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 part 273;

- (b) 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);
- (c) 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;
- (d) 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;
- (e) 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 40 CFR 273.13, 273.33, and 273.52; and/or applicable Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;
- (f) Regulation of the waste or category of waste under 40 CFR part 273 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 Subtitle C of RCRA.
- (g) Regulation of the waste or category of waste under 40 CFR part 273 will improve implementation of and compliance with the hazardous waste regulatory program; and/or
- (h) Such other factors as may be appropriate.