

**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 (b) of this paragraph;
  - (ii) Pesticides as described in subparagraph (c) of this paragraph;
  - (iii) Mercury-containing equipment as described in subparagraph (d) of this paragraph;
  - (iv) Lamps as described in subparagraph (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 0400-12-01-.10.

## (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 (i) of this paragraph, except those listed in part 2 of this subparagraph.
- (ii) Spent lead-acid batteries that are not managed under paragraph (7) of Rule 0400-12-01-.09 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.
- (ii) Batteries, as described in subparagraph (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 (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. 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.

(Rule 0400-12-01-.12, continued)

(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 (i) of this paragraph, meeting the following conditions, except those listed in part 2 of this subparagraph:

(i) 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.

(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 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;
- (ii) Pesticides not meeting the conditions set forth in part 1 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 or if it exhibits one or more of the characteristics identified in paragraph (3) of Rule 0400-12-01-.02.

3. Generation of Waste Pesticides

(Rule 0400-12-01-.12, continued)

- (i) A recalled pesticide described in subpart 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 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 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; 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, 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 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.

#### (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 (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:

(Rule 0400-12-01-.12, continued)

- (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 or is listed in paragraph (4) of Rule 0400-12-01-.02; 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.

(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 (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. 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.

(f) 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:

(Rule 0400-12-01-.12, continued)

- (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.
- (g) (RESERVED) [40 CFR 273.7]
- (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 (i) of this paragraph;
    - (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 (i) of this paragraph; and/or
    - (iii) Non-hazardous wastes that are of the same type as the universal wastes defined at subparagraph (i) of this paragraph.
  - 2. Persons who commingle the wastes described in subparts 1(i), (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.
- (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

(Rule 0400-12-01-.12, continued)

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 parts (2)(d)1 and 3 and (3)(d)1 and 3 of this rule. 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 generator as defined in subparagraph (2)(a) of Rule 0400-12-01-.01.

“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 subparagraph) 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 on-site as defined in subparagraph (2)(a) of Rule 0400-12-01-.01.

“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);
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 parts 1 or 2 of this definition.

“Small 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, 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.

(Rule 0400-12-01-.12, continued)

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

1. Batteries as described in subparagraph (b) of this paragraph;
2. Pesticides as described 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”:

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 or 3 of this rule or part (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.

“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.

(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)(i) of this rule).

(b) Prohibitions [40 CFR 273.11]

A small quantity handler of universal waste is:

(Rule 0400-12-01-.12, continued)

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.

(Rule 0400-12-01-.12, continued)

- (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;
- (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;
- (iii) A tank that meets the requirements of paragraph (10) of Rule 0400-12-01-.05, 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. 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;

(Rule 0400-12-01-.12, continued)

- (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 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 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;
- (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).

(Rule 0400-12-01-.12, continued)

- (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 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;

(Rule 0400-12-01-.12, continued)

- (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]

(Rule 0400-12-01-.12, continued)

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)(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)(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 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 Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."
5. 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)."

(Rule 0400-12-01-.12, continued)

(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.

(Rule 0400-12-01-.12, continued)

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 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.

(Rule 0400-12-01-.12, continued)

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)(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)(c)1(i) of this rule 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 subparagraph.
2. This notification must include:
  - (i) The universal waste handler's name and mailing address;

(Rule 0400-12-01-.12, continued)

- (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 the types of universal waste managed by the handler (e.g., batteries, pesticides, mercury-containing equipment, 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 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.

(Rule 0400-12-01-.12, continued)

- (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;
- (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;
- (iii) A tank that meets the requirements of paragraph (10) of Rule 0400-12-01-.05, 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;
- (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;

(Rule 0400-12-01-.12, continued)

- (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 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 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.
- (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).

(Rule 0400-12-01-.12, continued)

- (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.

(Rule 0400-12-01-.12, continued)

- (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]

(Rule 0400-12-01-.12, continued)

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)(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)(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 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)."

(Rule 0400-12-01-.12, continued)

(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-

(Rule 0400-12-01-.12, continued)

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 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.

(Rule 0400-12-01-.12, continued)

(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, aerosol cans); 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, aerosol cans); 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 Commissioner. If a site inspection of the records by the 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 Commissioner.

(k) Exports [40 CFR 273.40]

(Rule 0400-12-01-.12, continued)

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 paragraph applies to universal waste transporters (as defined in subparagraph (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 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, (I) 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.

(Rule 0400-12-01-.12, continued)

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 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 (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 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.

(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

(Rule 0400-12-01-.12, continued)

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, aerosol cans); 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. Except as provided in part 4 of this subparagraph, 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 subparagraphs (3)(a) and (d) of Rule 0400-12-01-.01.

(Rule 0400-12-01-.12, continued)

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. 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.
  4. Hazardous waste pharmaceuticals are regulated by paragraph (16) of Rule 0400-12-01-.09 and may not be added as a category of hazardous waste for management under this rule.
- (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, 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. (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 and subparagraph (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;

(Rule 0400-12-01-.12, continued)

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)(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-by-rule requirement of subpart (1)(c)1(iv) of Rule 0400-12-01-.07 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 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 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.

(Rule 0400-12-01-.12, continued)

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 in parts 1 or 2 of this subparagraph:

1. Universal waste lamps (i.e., each lamp); or
2. 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 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

(Rule 0400-12-01-.12, continued)

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. §§ 4-5-201, et seq., and 68-212-101, et seq. **Administrative History:** Original rule filed June 19, 2012; effective September 17, 2012. Rule was renumbered from 1200-01-11-.12. Amendment filed August 7, 2013; effective November 5, 2013. Amendment filed November 12, 2014; effective February 10, 2015. Amendments filed February 12, 2021; effective May 13, 2021. Amendments filed March 5, 2021; effective June 3, 2021. Amendments filed January 11, 2022; effective April 11, 2022.