

PART 273 - STANDARDS FOR UNIVERSAL WASTE MANAGEMENT

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Subpart A -- General

§ 273.1 Scope.

(a) This part establishes requirements for managing the following:

- (1) Batteries as described in § 273.2(a);
- (2) Pesticides as described in § 273.2(b);
- (3) Mercury-containing devices as described in § 273.2(c);
- (4) Aerosol cans as described in § 273.2(d); and
- (5) Lamps as described in § 273.2(e).

(b) This part provides an alternative set of management standards in lieu of regulation under Parts 260 through 268, and Parts 99 and 100 of these regulations.

Note: Only wastes that are hazardous (i.e., are listed or exhibit one or more characteristics of hazardous waste) are subject to the Part 273 universal waste regulations. Compliance with the reduced set of Part 273 requirements is an option that waste handlers may choose for managing their universal wastes (batteries, pesticides, mercury-containing devices, aerosol cans, and lamps). If universal waste handlers wish, they may instead continue to manage these hazardous wastes under the full hazardous waste regulations for generators, transporters, and treatment, storage, and disposal facilities.

§ 273.2 Applicability.

(a) **Applicability -- batteries.**

(1) **Batteries covered under Part 273.**

- (i) The requirements of this part apply to persons managing batteries, as described in § 273.9 of this part, except those listed in paragraph (a)(2) of this section.
- (ii) Spent lead-acid batteries which are not managed under Part 267, Subpart G, are subject to management under this part.

(2) **Batteries not covered under Part 273.**

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

- (i) Spent lead-acid batteries that are managed under Part 267, Subpart G.

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(ii) Batteries, as described in § 273.9 of this part, that are not yet wastes under Part 261 of these regulations, including those that do not meet the criteria for waste generation in paragraph (a)(3) of this section.

(iii) Batteries, as described in § 273.9 of this part, 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 these regulations.

(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.

(b) Applicability -- pesticides.

(1) Pesticides covered under Part 273. The requirements of this part apply to persons managing pesticides, as described in § 273.9 of this part, meeting the following conditions, except those listed in paragraph (b)(2) of this section:

(i) Recalled pesticides that are:

(A) Stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under Section 19(b) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), including, but not limited to those owned by the registrant responsible for conducting the recall; or

(B) 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 Part 273.

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

(i) Recalled pesticides described in paragraph (b)(1)(i) of this section, and unused pesticide products described in paragraph (b)(1)(ii) of this section, that are managed by farmers in compliance with § 262.70. (§ 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 § 261.7(b)(3));

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(ii) Pesticides not meeting the conditions set forth in paragraph (b)(1) of this section. These pesticides must be managed in compliance with the hazardous waste regulations in Parts 260 through 268, and Parts 99 and 100 of these regulations;

(iii) Pesticides that are not wastes under Part 261 of these regulations, including those that do not meet the criteria for waste generation in paragraph (b)(3) of this section or those that are not wastes as described in paragraph (b)(4) of this section; and

(iv) Pesticides that are not hazardous waste. A pesticide is a hazardous waste if it is listed in Part 261, Subpart D or if it exhibits one or more of the characteristics identified in Part 261, Subpart C.

(3) When a pesticide becomes a waste.

(i) A recalled pesticide described in paragraph (b)(1)(i) of this section becomes a waste on the first date on which both of the following conditions apply:

(A) The generator of the recalled pesticide agrees to participate in the recall;
and

(B) The person conducting the recall decides to discard (e.g., burn the pesticide for energy recovery).

(ii) An unused pesticide product described in paragraph (b)(1)(ii) of this section 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 paragraph (b)(1)(i) of this section, provided that the person conducting the recall:

(A) 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 § 261.2; thus the pesticide is not a hazardous waste and is not subject to hazardous waste requirements, including Part 273 of these regulations. This pesticide remains subject to the requirements of FIFRA; or

(B) has made a decision to use a management option that, under § 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 Part 273 of these regulations. This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.

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(ii) Unused pesticide products described in paragraph (b)(1)(ii) 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.

(c) Applicability -- mercury-containing devices.

(1) **Mercury-containing devices covered under Part 273.** The requirements of this part apply to persons managing mercury-containing devices, as described in § 273.9 of this part, except those listed in paragraph (c)(2) of this section.

(2) **Mercury-containing devices not covered under Part 273.** The requirements of this part do not apply to persons managing the following mercury-containing devices:

(i) Mercury-containing devices that are not yet wastes under Part 261 of these regulations. Paragraph (c)(3) of this section describes when mercury-containing devices become wastes.

(ii) Mercury-containing devices that are not hazardous waste. A mercury-containing device is a hazardous waste if it exhibits one or more of the characteristics identified in Part 261, Subpart C.

(iii) Mercury-containing devices containing greater than 5 kilograms (about 11 pounds) of elemental mercury per device.

(3) Generation of waste mercury-containing devices.

(i) A used mercury-containing device becomes a waste on the date it is discarded (e.g., sent for reclamation).

(ii) An unused mercury-containing device becomes a waste on the date the handler decides to discard it.

(d) Applicability -- Aerosol cans.

(1) Aerosol cans covered under Part 273. The requirements of this part apply to persons managing aerosol cans as described in § 273.9 of this part, except those listed in paragraph (d)(2) of this section.

(2) Aerosol cans not covered under Part 273. The requirements of this part do not apply to persons managing the following aerosol cans:

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(i) Aerosol cans, as described in § 273.6, that are not yet wastes under Part 261 of these regulations, including those that do not meet the criteria for waste generation in paragraph (d)(3) of this section.

(ii) Aerosol cans, as described in § 273.6, that are not hazardous waste. An aerosol can must be managed as a hazardous waste if its contents exhibit one or more of the characteristics identified in Part 261, Subpart C of these regulations, or if its contents are listed in Part 261, Subpart D of these regulations.

(3) Generation of waste aerosol cans.

(i) An aerosol can becomes a waste on the date it is discarded or is no longer useable. For purposes of these regulations, an aerosol can is considered to be no longer useable when: the can is as empty as proper work practices allow; the spray mechanism no longer operates as designed; the propellant is spent; or the product is no longer used.

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

(e) Applicability -- Lamps.

(1) 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 (e)(2) of this section.

(2) Lamps not covered under this Part 273. The requirements of this part do not apply to persons managing the following lamps:

(i) Lamps that are not yet wastes under Part 261 of these regulations as provided in paragraph (e)(3) of this section.

(ii) 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 these regulations.

(3) Generation of waste lamps.

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

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

§§ 273.3 -- 273.7 [Reserved]

§ 273.8 Applicability -- household and conditionally exempt 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 these regulations and are also of the same type as the universal wastes defined at § 273.9; and/or

(2) Conditionally exempt small quantity generator wastes that are exempt under § 261.5 of these regulations 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 container in which gas under pressure is used to aerate and dispense any material through a valve in the form of a spray or foam.

"**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 subparagraphs (a) and (c) of §§ 273.13 and 273.33. 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 these regulations 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 devices, aerosol cans, or lamps, 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 5,000 kilograms or more total of universal waste is accumulated.

"**Mercury-containing device**" means any electrical or medical product or component (excluding batteries and lamps) which contains elemental mercury that is necessary for its operation where the mercury acts as a conductor of temperature, pressure or electricity. The mercury must be housed within an outer metal, glass or plastic casing. Mercury-containing devices include but are not limited to: barometers, blood pressure cuffs, electrical switches and relays, gauges and flow regulators, manometers, pyrometers, thermostats, thermometers, thermocouples, and mercury-filled vacuum pumps.

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"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/she 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:

(a) is a new animal drug under section 201(w) of the Federal Food, Drug and Cosmetic Act (FFDCA), or

(b) 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

(c) is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (a) or (b) of this section.

"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 total of universal waste (batteries, pesticides, mercury-containing devices, aerosol cans, or lamps, calculated collectively) at any time.

"Universal Waste" means any of the following hazardous wastes that are subject to the universal waste requirements of Part 273:

(a) Batteries as described in § 273.2(a);

(b) Pesticides as described in § 273.2(b);

(c) Mercury-containing devices as described in § 273.2(c);

(d) Aerosol cans as described in § 273.2(d); and

(e) Lamps as described in § 273.2(e).

Universal Waste Handler:

(a) Means:

- (1) A generator (as defined in this section) of universal waste; or
- (2) 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.

(b) Does not mean:

- (1) A person who treats (except under the provisions of § 273.13(a), (c), (d) or (e), or 273.33(a), (c), (d) or (e)), disposes of, or recycles universal waste; or
- (2) 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 § 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 § 273.17; or by managing specific wastes as provided in § 273.13.

§ 273.12 Notification.

A small quantity handler of universal waste is not required to notify the Department 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 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 Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to 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 (1), provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (1); or
- (3) A tank that meets the requirements of Part 265 Subpart J, except for § 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.

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(c) **Universal waste mercury-containing devices:** A small quantity handler of universal waste must manage universal waste mercury-containing devices 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 mercury-containing device 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 mercury-containing device, 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 remove mercury-containing ampules from universal waste mercury-containing devices provided the handler:

- (i) Removes the ampules in a manner designed to prevent breakage of the ampules;
- (ii) Removes 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 the containment device to a container that meets the requirements of § 262.34;
- (iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of § 262.34;
- (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.

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(3)(i) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing devices must determine whether the following exhibit a characteristic of hazardous waste identified in 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 (e.g., remaining mercury-containing device units).

(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 Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the mercury, residues, and/or other waste and is subject to 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.

(4) A small quantity handler of universal waste may drain elemental mercury from open-ended mercury-containing devices provided the handler:

(i) Ensures that the universal waste mercury-containing devices are drained only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from a device in case of breakage or spill);

(ii) Ensures that the draining operations are performed safely by developing and implementing a written procedure detailing how to safely drain the universal waste mercury-containing devices. This procedure must include: the type of equipment to be used to drain the universal waste mercury-containing devices safely; operation and maintenance of the equipment; segregation of incompatible wastes; proper waste management practices, and waste characterization;

(iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste mercury-containing device which may occur during the mercury draining operation;

(iv) Immediately transfers the drained elemental mercury to a container that meets the requirements of § 262.34;

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(v) Ensures that the area in which the universal waste mercury-containing devices are drained is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) Ensures that employees are thoroughly familiar with the procedure for draining universal waste mercury-containing devices, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(vii) Stores the drained elemental mercury in a closed, non-leaking container that is in good condition; and

(viii) Maintains documentation of the date of accumulation, a description of the device drained, and the amount of mercury drained.

(ix) May accumulate up to 35 kilograms (about 77 pounds) of elemental mercury at any one time.

(5)(i) A small quantity handler of universal waste who drains universal waste mercury-containing devices, or who generates other solid waste as a result of draining the mercury-containing devices, must determine whether the following exhibit a characteristic of hazardous waste identified in 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 (e.g., remaining mercury-containing device units and filters).

(ii) If the mercury, residues, and/or other solid waste exhibit a characteristic of hazardous waste, they must be managed in accordance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the newly generated hazardous waste and is subject to the requirements of Part 262 of these regulations.

(iii) If the mercury, residues and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

(d) **Universal Waste Aerosol Cans.** A small quantity handler of universal waste must manage universal waste aerosol cans in a way that prevents release of any universal waste or component of a universal waste to the environment as follows:

(1) A small quantity handler of universal waste must immediately contain any universal waste aerosol can that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a separate individual container. The

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individual container must be closed, structurally sound, compatible with the contents of the universal waste aerosol can, 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 accumulate universal waste aerosol cans in a specially designated accumulation container provided it is clearly marked for such use. The accumulation container must be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The universal waste aerosol cans must be sorted by type and compatibility of contents to ensure that incompatible materials are segregated and managed appropriately in separate accumulation containers.

(3) A small quantity handler of universal waste may puncture universal waste aerosol cans to remove and collect the contents of the aerosol can provided the handler:

(i) Ensures that the universal waste aerosol can is punctured in a manner designed to prevent the release of any universal waste or component of universal waste to the environment;

(ii) Ensures that the puncturing operations are performed safely by developing and implementing a written procedure detailing how to safely puncture universal waste aerosol cans. This procedure must include: the type of equipment to be used to puncture the universal waste aerosol cans safely; operation and maintenance of the unit; segregation of incompatible wastes; proper waste management practices, (i.e., ensuring that flammable wastes are stored away from heat or open flames); and waste characterization;

(iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste aerosol can which may occur during the can-puncturing operation;

(iv) Immediately transfers the contents of the universal waste aerosol can, or puncturing device if applicable, to a container that meets the requirements of § 262.34;

(v) Ensures that the area in which the universal waste aerosol cans are punctured is well ventilated; and

(vi) Ensures that employees are thoroughly familiar with the procedure for sorting and puncturing universal waste aerosol cans, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

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(4)(i) A small quantity handler of universal waste who punctures universal waste aerosol cans to remove the contents of the aerosol can, or who generates other solid waste as a result of the activities listed above, must determine whether the contents of the universal waste aerosol can, residues and/or other solid wastes exhibit a characteristic of hazardous waste identified in Part 261, Subpart C of these regulations, or are listed as a hazardous waste identified in Part 261, Subpart D of these regulations.

(ii) If the contents of the universal waste aerosol can, residues and/or other solid waste exhibit a characteristic of hazardous waste or are listed hazardous wastes, they must be managed in compliance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the contents of the universal waste aerosol can, residues, and/or other waste and is subject to the requirements of Part 262 of these regulations. In addition to the Part 262 labeling requirements, the container used to accumulate, store, or transport the hazardous waste contents removed from the punctured universal waste aerosol can must be labeled with all applicable EPA Hazardous Waste Codes found in Subpart C and Subpart D of Part 261 of these regulations.

(iii) If the contents of the universal waste aerosol can, residues, and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

(e) **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.

(3) A small quantity handler of universal waste may crush universal waste lamps provided the handler:

(i) Ensures that the universal waste lamps are crushed in a completely enclosed system that is designed to prevent the release of any universal waste or component of universal waste to the environment (e.g., a sealed tank or container that is equipped with a filter to capture mercury emissions);

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- (ii) Ensures that the crushing operations are performed safely by developing and implementing a written procedure detailing how to safely crush the universal waste lamps. This procedure must include: the type of equipment to be used to crush the universal waste lamps safely; operation and maintenance of the unit; segregation of incompatible wastes; proper waste management practices, and waste characterization;
- (iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste lamp which may occur during the lamp-crushing operation;
- (iv) Immediately transfers the crushed universal waste lamp to a container that meets the requirements of § 262.34;
- (v) Ensures that the area in which the universal waste lamps are crushed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury; and
- (vi) Ensures that employees are thoroughly familiar with the procedure for crushing universal waste lamps, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

(4)(i) A small quantity handler of universal waste who crushes universal waste lamps, or who generates other solid waste as a result of crushing the lamps, must determine whether the crushed universal waste lamp, its residues and/or other solid wastes exhibit a characteristic of hazardous waste identified in Part 261, Subpart C of these regulations, or are listed as a hazardous waste identified in Part 261, Subpart D of these regulations.

- (ii) If the crushed universal waste lamps exhibit a characteristic of hazardous waste, they may continue to be managed as universal waste lamps under this part or they may be managed in accordance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of these regulations. If the crushed universal waste lamps are not managed as universal waste under this part, then the handler is considered the generator of the newly generated hazardous waste and is subject to the requirements of Part 262 of these regulations.
- (iii) If the residues and/or other solid waste generated exhibit a characteristic of hazardous waste, they must be managed in accordance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the newly generated hazardous waste and is subject to the requirements of Part 262 of these regulations.
- (iv) If the crushed universal waste lamp, its residues and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

§ 273.14 Labeling/marketing.

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 § 273.2(b)(1)(i) 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 § 273.2(b)(1)(ii) 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) 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 (c)(1)(ii) 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) Universal waste mercury-containing devices (i.e., each mercury-containing device), or a container in which the mercury-containing devices are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste - Mercury-Containing Device(s)," or "Waste Mercury-Containing Device(s)," or "Used Mercury-Containing Device(s)".

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

(f) 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)."

§ 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) 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 mercury-containing device) 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

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- (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 Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with 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-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 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.

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(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/she has received from another handler. If a handler rejects a shipment or a portion of a shipment, he/she must contact the originating handler to notify him/her 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 Department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Department 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 other than to those OECD countries specified in § 262.58(a)(1) (in which case the handler is subject to the requirements of Part 262, Subpart H) must:

(a) Comply with the requirements applicable to a primary exporter in § 262.53, § 262.56(a)(1) through (4), (6), and (b) and § 262.57;

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- (b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in Subpart E of Part 262 of these regulations; and
- (c) Provide a copy of the EPA Acknowledgement of Consent for the shipment to the transporter transporting the shipment for export.

**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 § 273.37; or by managing specific wastes as provided in § 273.33.

§ 273.32 Notification.

(a)(1) Except as provided in paragraph (a)(2) of this section, a large quantity handler of universal waste must send written notification of universal waste management to the Department, and obtain an EPA Identification Number, before meeting or exceeding the 5,000 kilogram storage limit. An EPA identification number may be obtained by applying to the Department using EPA form 8700-12.

(2) A large quantity handler of universal waste who manages recalled universal waste pesticides as described in § 273.2(b)(1)(i) 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 of the types of universal waste managed by the handler (e.g, batteries, pesticides, mercury-containing devices, aerosol cans, lamps);
- (5) A statement indicating that the handler is accumulating more than 5,000 kilograms of universal waste at one time and the types of universal waste (e.g, batteries, pesticides, mercury-containing devices, aerosol cans, lamps) the handler is accumulating above this quantity.

§ 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 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 Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to 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), provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (b)(1); or

(3) A tank that meets the requirements of Part 265 Subpart J, except for § 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) **Universal waste mercury-containing devices:** A large quantity handler of universal waste must manage universal waste mercury-containing devices 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 mercury-containing device 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 mercury-containing device, 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 remove mercury-containing ampules from universal waste mercury-containing devices provided the handler:

- (i) removes the ampules in a manner designed to prevent breakage of the ampules;
- (ii) removes 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 from broken ampules, from the containment device to a container that meets the requirements of § 262.34;
- (iv) immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of § 262.34;
- (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.

(3)(i) A large quantity handler of universal waste who removes mercury-containing ampules from mercury-containing devices must determine whether the following exhibit a characteristic of hazardous waste identified in 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 (e.g., remaining mercury-containing device units).

(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 Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the mercury, residues, and/or other waste and is subject to 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.

(4) A large quantity handler of universal waste may drain elemental mercury from open-ended mercury-containing devices provided the handler:

(i) Ensures that the universal waste mercury-containing devices are drained only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from a device in case of breakage or spill);

(ii) Ensures that the draining operations are performed safely by developing and implementing a written procedure detailing how to safely drain the universal waste mercury-containing devices. This procedure must include: the type of equipment to be used to drain the universal waste mercury-containing devices safely; operation and maintenance of the equipment; segregation of incompatible wastes; proper waste management practices, and waste characterization;

(iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste mercury-containing device which may occur during the mercury draining operation;

(iv) Immediately transfers the drained elemental mercury to a container that meets the requirements of § 262.34;

(v) Ensures that the area in which the universal waste mercury-containing devices are drained is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) Ensures that employees are thoroughly familiar with the procedure for draining universal waste mercury-containing devices, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(vii) Stores the drained elemental mercury in a closed, non-leaking container that is in good condition; and

(viii) Maintains documentation of the date of accumulation, a description of the device drained, and the amount of mercury drained.

(ix) May accumulate up to 35 kilograms (about 77 pounds) of elemental mercury at any one time.

(5)(i) A large quantity handler of universal waste who drains universal waste mercury-containing devices, or who generates other solid waste as a result of draining the mercury-containing devices, must determine whether the following exhibit a characteristic of hazardous waste identified in 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 (e.g., remaining mercury-containing device units and filters).

(ii) If the mercury, residues, and/or other solid waste exhibit a characteristic of hazardous waste, they must be managed in accordance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the newly generated hazardous waste and is subject to the requirements of Part 262 of these regulations.

(iii) If the mercury, residues and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

(d) **Universal Waste Aerosol Cans.** A large quantity handler of universal waste must manage universal waste aerosol cans in a way that prevents release of any universal waste or component of a universal waste to the environment as follows:

(1) A large quantity handler of universal waste must immediately contain any universal waste aerosol can that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a separate individual container. The individual container must be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

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(2) A large quantity handler of universal waste may accumulate universal waste aerosol cans in a specially designated accumulation container provided it is clearly marked for such use. The accumulation container must be closed, structurally sound, compatible with the contents of the universal waste aerosol can, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The universal waste aerosol cans must be sorted by type and compatibility of contents to ensure that incompatible materials are segregated and managed appropriately in separate accumulation containers.

(3) A large quantity handler of universal waste may puncture universal waste aerosol cans to remove and collect the contents of the aerosol can provided the handler:

(i) Ensures that the universal waste aerosol can is punctured in a manner designed to prevent the release of any universal waste or component of universal waste to the environment;

(ii) Ensures that the puncturing operations are performed safely by developing and implementing a written procedure detailing how to safely puncture universal waste aerosol cans. This procedure must include: the type of equipment to be used to puncture the universal waste aerosol cans safely; operation and maintenance of the unit; segregation of incompatible wastes; proper waste management practices, (i.e., ensuring that flammable wastes are stored away from heat or open flames); and waste characterization;

(iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste aerosol can which may occur during the can-puncturing operation;

(iv) Immediately transfers the contents of the universal waste aerosol can, or puncturing device if applicable, to a container that meets the requirements of § 262.34;

(v) Ensures that the area in which the universal waste aerosol cans are punctured is well ventilated; and

(vi) Ensures that employees are thoroughly familiar with the procedure for sorting and puncturing universal waste aerosol cans, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

(4)(i) A large quantity handler of universal waste who punctures universal waste aerosol cans to remove the contents of the aerosol can, or who generates other solid waste as a result of the activities listed above, must determine whether the contents of the universal waste aerosol can, residues and/or other solid wastes exhibit a characteristic of hazardous waste identified in Part 261, Subpart C of these regulations, or are listed as a hazardous waste identified in Part 261, Subpart D of these regulations.

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(ii) If the contents of the universal waste aerosol can, residues and/or other solid waste exhibit a characteristic of hazardous waste or are listed hazardous wastes, they must be managed in compliance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the contents of the universal waste aerosol can, residues, and/or other waste and is subject to the requirements of Part 262 of these regulations. In addition to the Part 262 labeling requirements, the container used to accumulate, store, or transport the hazardous waste contents removed from the punctured universal waste aerosol can must be labeled with all applicable EPA Hazardous Waste Codes found in Subpart C and Subpart D of Part 261 of these regulations.

(iii) If the contents of the universal waste aerosol can, residues, and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

(e) **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.

(3) A large quantity handler of universal waste may crush universal waste lamps provided the handler:

(i) Ensures that the universal waste lamps are crushed in a completely enclosed system that is designed to prevent the release of any universal waste or component of universal waste to the environment (e.g., a sealed tank or container that is equipped with a filter to capture mercury emissions);

(ii) Ensures that the crushing operations are performed safely by developing and implementing a written procedure detailing how to safely crush the universal waste lamps. This procedure must include: the type of equipment to be used to crush the universal waste lamps safely; operation and maintenance of the unit; segregation of incompatible wastes; proper waste management practices, and waste characterization;

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(iii) Ensures that a spill clean-up kit is readily available to immediately clean up spills or leaks of the contents of the universal waste lamp which may occur during the lamp-crushing operation;

(iv) Immediately transfers the crushed universal waste lamp to a container that meets the requirements of § 262.34;

(v) Ensures that the area in which the universal waste lamps are crushed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury; and

(vi) Ensures that employees are thoroughly familiar with the procedure for crushing universal waste lamps, and proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

(4)(i) A large quantity handler of universal waste who crushes universal waste lamps, or who generates other solid waste as a result of crushing the lamps, must determine whether the crushed universal waste lamp, its residues and/or other solid wastes exhibit a characteristic of hazardous waste identified in Part 261, Subpart C of these regulations, or are listed as a hazardous waste identified in Part 261, Subpart D of these regulations.

(ii) If the crushed universal waste lamps exhibit a characteristic of hazardous waste, they may continue to be managed as universal waste lamps under this part or they may be managed in accordance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of these regulations. If the crushed universal waste lamps are not managed as universal waste under this part, then the handler is considered the generator of the newly generated hazardous waste and is subject to the requirements of Part 262 of these regulations.

(iii) If the residues and/or other solid waste generated exhibit a characteristic of hazardous waste, they must be managed in accordance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the newly generated hazardous waste and is subject to the requirements of Part 262 of these regulations.

(iv) If the crushed universal waste lamp, its residues and/or other solid waste are not hazardous, the handler may manage the waste in a way that is in compliance with applicable federal, state or local solid waste regulations.

§ 273.34 Labeling/markings.

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 the 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 § 273.2(b)(1)(i) 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 § 273.2(b)(1)(ii) 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) 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 (c)(1)(ii) 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) Universal waste mercury-containing devices (i.e., each mercury-containing device), or a container or tank in which the mercury-containing devices are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste - Mercury-Containing Device(s)," or "Waste Mercury-Containing Device(s)," or "Used Mercury-Containing Device(s)."

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

(f) 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)."

§ 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) 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 mercury-containing device) 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 Parts 260 through 268, and Parts 99 and 100 of these regulations. The handler is considered the generator of the material resulting from the release, and is subject to 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-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 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 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

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(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/she has received from another handler. If a handler rejects a shipment or a portion of a shipment, he/she must contact the originating handler to notify him/her 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 Department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Department 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, 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, mercury-containing devices, etc.);

(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 or other shipping document. The record for each shipment of universal waste sent must include the following information:

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(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, mercury-containing devices, etc.);

(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 other than to those OECD countries specified in § 262.58(a)(1) (in which case the handler is subject to the requirements of Part 262, Subpart H) must:

(a) Comply with the requirements applicable to a primary exporter in § 262.53, § 262.56(a)(1) through (4), (6), and (b) and § 262.57;

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in Subpart E of Part 262 of these regulations; and

(c) Provide a copy of the EPA Acknowledgement of Consent for the shipment to the transporter transporting the shipment for export.

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 § 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 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 U.S. Environmental Protection Agency specified in 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 Part 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.

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(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 Parts 260 through 268, and Parts 99 and 100 of these regulations. If the waste is determined to be a hazardous waste, the transporter is subject to Part 262 of these regulations.

§ 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 other than to those OECD countries specified in § 262.58(a)(1) (in which case the handler is subject to the requirements of Part 262, Subpart H) may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that:

(a) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and

(b) The shipment is delivered to the facility designated by the person initiating the shipment.

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 through 268, and Part 100 of these regulations; and the notification requirement under Part 99 of these regulations.

(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 § 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/she must contact the shipper to notify him/her 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 a 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 Department of the illegal shipment, and provide the name, address, and phone number of the shipper. The Department 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, 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, mercury-containing devices, etc.);

(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 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.
- (d) Persons managing universal waste that is imported from an OECD country as specified in § 262.58(a)(1) are subject to paragraphs (a) through (c) of this section, in addition to the requirements of Part 262, Subpart H.

Subpart G -- Petitions to Include Other Wastes under Part 273

§ 273.80 General.

- (a) Any person seeking to add a hazardous waste or a category of hazardous waste to this part may petition for a regulatory amendment under this subpart and § 260.20 and § 260.23.
- (b) To be successful, the petitioner must demonstrate to the satisfaction of the Commission that regulation under the universal waste regulations of 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 § 260.20(b). The petition should also address as many of the factors listed in § 273.81 as are appropriate for the waste or waste category addressed in the petition.
- (c) The Commission will evaluate petitions using the factors listed in § 273.81. The Commission will grant or deny a petition using the factors listed in § 273.81. The decision will be based on the weight of evidence showing that regulation under 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.

§ 273.81 Factors for Petitions to Include Other Wastes under 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 these regulations, 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 these regulations. (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 these regulations and § 273.9 of this part 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 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, conditionally exempt 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 §§ 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 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 Part 273 will improve implementation of and compliance with the hazardous waste regulatory program; and/or
- (h) Such other factors as may be appropriate.