Environmental Quality

Waste Management and Radiation Control, Waste Management

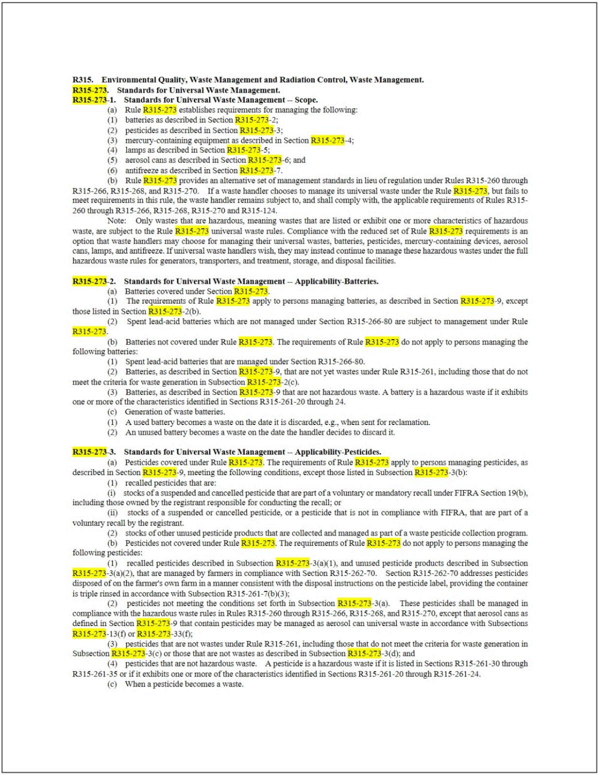
Rule 273: Standards for Universal Waste Management

Effective Date: 12/09/2021

Admin. Code Reference: R315-273

Rule Type: Current Rule

Download PDF
Download HTML
Copy Link



R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.
R315-273. Standards for Universal Waste Management.
R315-273-1. Standards for Universal Waste Management -- Scope.

(a) Rule R315-273 establishes requirements for managing the following:
(1) batteries as described in Section R315-273-2;
(2) pesticides as described in Section R315-273-3;
(3) mercury-containing equipment as described in Section R315-273-4;
(4) lamps as described in Section R315-273-5;
(5) aerosol cans as described in Section R315-273-6; and
(6) antifreeze as described in Section R315-273-7.

(b) Rule R315-273 provides an alternative set of management standards in lieu of regulation under Rules R315-260 through R315-266, R315-268, and R315-270. If a waste handler chooses to manage its universal waste under the Rule R315-273, but fails to meet requirements in this rule, the waste handler remains subject to, and shall comply with, the applicable requirements of Rules R315-260 through R315-266, R315-268, R315-270 and R315-124.

Note: Only wastes that are hazardous, meaning wastes that are listed or exhibit one or more characteristics of hazardous waste, are subject to the Rule R315-273 universal waste rules. Compliance with the reduced set of Rule R315-273 requirements is an option that waste handlers may choose for managing their universal wastes, batteries, pesticides, mercury-containing devices, aerosol cans, lamps, and antifreeze. If universal waste handlers wish, they may instead continue to manage these hazardous wastes under the full hazardous waste rules for generators, transporters, and treatment, storage, and disposal facilities.

R315-273-2. Standards for Universal Waste Management -- Applicability-Batteries.

(a) Batteries covered under Section R315-273.

(1) The requirements of Rule R315-273 apply to persons managing batteries, as described in Section R315-273-9, except those listed in Section R315-273-2(b).

(2) Spent lead-acid batteries which are not managed under Section R315-266-80 are subject to management under Rule R315-273.

(b) Batteries not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following batteries:

(1) Spent lead-acid batteries that are managed under Section R315-266-80.

(2) Batteries, as described in Section R315-273-9, that are not yet wastes under Rule R315-261, including those that do not meet the criteria for waste generation in Subsection R315-273-2(c).

(3) Batteries, as described in Section R315-273-9 that are not hazardous waste. A battery is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24.

(c) Generation of waste batteries.
(1) A used battery becomes a waste on the date it is discarded, e.g., when sent for reclamation.
(2) An unused battery becomes a waste on the date the handler decides to discard it.

R315-273-3. Standards for Universal Waste Management -- Applicability-Pesticides.

(a) Pesticides covered under Rule R315-273. The requirements of Rule R315-273 apply to persons managing pesticides, as described in Section R315-273-9, meeting the following conditions, except those listed in Subsection R315-273-3(b):

(1) recalled pesticides that are:

(i) stocks of a suspended and cancelled pesticide that are part of a voluntary or mandatory recall under FIFRA Section 19(b), including those owned by the registrant responsible for conducting the recall; or

(ii) stocks of a suspended or cancelled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant.

(2) stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.

(b) Pesticides not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following pesticides:

(1) recalled pesticides described in Subsection R315-273-3(a)(1), and unused pesticide products described in Subsection R315-273-3(a)(2), that are managed by farmers in compliance with Section R315-262-70. Section R315-262-70 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 Subsection R315-261-7(b)(3);

(2) pesticides not meeting the conditions set forth in Subsection R315-273-3(a). These pesticides shall be managed in compliance with the hazardous waste rules in Rules R315-260 through R315-266, R315-268, and R315-270, except that aerosol cans as defined in Section R315-273-9 that contain pesticides may be managed as aerosol can universal waste in accordance with Subsections R315-273-13(f) or R315-273-33(f);

(3) pesticides that are not wastes under Rule R315-261, including those that do not meet the criteria for waste generation in Subsection R315-273-3(c) or those that are not wastes as described in Subsection R315-273-3(d); and

(4) pesticides that are not hazardous waste. A pesticide is a hazardous waste if it is listed in Sections R315-261-30 through R315-261-35 or if it exhibits one or more of the characteristics identified in Sections R315-261-20 through R315-261-24.

(c) When a pesticide becomes a waste.

(1) A recalled pesticide described in Subsection R315-273-3(a)(1) 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, for example, burn the pesticide for energy recovery.

(2) An unused pesticide product described in Subsection R315-273-3(a)(2) becomes a waste on the date the generator decides to discard it.

(d) Pesticides that are not wastes. The following pesticides are not wastes:

(1) Recalled pesticides described in Subsection R315-273-3(a)(1), if the person conducting the recall:

(i) Has not made a decision to discard, for example, burn for energy recovery, the pesticide. Until such a decision is made, the pesticide does not meet the definition of solid waste under Section R315-261-2; thus the pesticide is not a hazardous waste and is not subject to hazardous waste requirements, including Rule R315-273. This pesticide remains subject to the requirements of FIFRA; or

(ii) Has made a decision to use a management option that, under Section R315-261-2, does not cause the pesticide to be a solid waste; that is, 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 Rule R315-273. This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.

(2) unused pesticide products described in Subsection R315-273-3(a)(2), if the generator of the unused pesticide product has not decided to discard, for example, burn for energy recovery, them. These pesticides remain subject to the requirements of FIFRA.

R315-273-4. Standards for Universal Waste Management -- Applicability -- Mercury-Containing Equipment.

(a) Mercury-containing equipment covered under Rule R315-273. The requirements of Rule R315-273 apply to persons managing mercury-containing equipment, as described in Section R315-273-9, except those listed in Subsection R315-273-4(b).

(b) Mercury-containing equipment not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following mercury-containing equipment:

(1) Mercury-containing equipment that is not yet a waste under Rule R315-261. Subsection R315-273-4(c) describes when mercury-containing equipment becomes a waste;

(2) Mercury-containing equipment that is not a hazardous waste. Mercury-containing equipment is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24 or is listed in Sections R315-261-30 through 35; and

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

(c) Generation of waste mercury-containing equipment.

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

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

R315-273-5. Standards for Universal Waste Management -- Applicability-Lamps.

(a) Lamps covered under Rule R315-273. The requirements of Rule R315-273 apply to persons managing lamps as described in Section R315-273-9, except those listed in Subsection R315-273-5(b).

(b) Lamps not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following lamps:

(1) Lamps that are not yet wastes under Rule R315-261 as provided in Subsection R315-273-5(c).

(2) Lamps that are not hazardous waste. A lamp is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through 24.

(c) Generation of waste lamps.

(1) A used lamp becomes a waste on the date it is discarded, e.g., sent for reclamation.

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

R315-273-6. Standards for Universal Waste Management -- Applicability-Aerosol Cans.

(a) Aerosol cans covered under Rule R315-273. The requirements of Rule R315-273 apply to persons managing aerosol cans, as described in Section R315-273-9, except those listed in Subsection R315-273-6(b).

(b) Aerosol cans not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following types of aerosol cans:

(1) Aerosol cans that are not yet waste under Rule R315-261. Subsection R315-273-6(c) describes when an aerosol can becomes a waste.

(2) Aerosol cans that are not hazardous waste. An aerosol can is a hazardous waste if the aerosol can exhibits one or more of the characteristics identified in Sections R315-261-20 through R315-261-24 or the aerosol can contains a substance that is listed in Sections R315-261-30 through R315-261-35.

(3) Aerosol cans that meet the standard for empty containers under Section R315-261-7.

(c) Generation of waste aerosol cans.

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

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

R315-273-7. Standards for Universal Waste Management -- Applicability for Utah Specific Wastes.

(a) Antifreeze.

(1) The requirements of Rule R315-273 apply to persons managing antifreeze, as described in Section R315-273-9, except those listed in Subsection R315-273-6(a)(2).

(2) Antifreeze not covered under Rule R315-273. The requirements of Rule R315-273 do not apply to persons managing the following antifreeze:

(i) antifreeze, as described in Section R315-273-9,that is not yet a waste under Rule R315-261, including antifreeze that does not meet the criteria for waste generation in Subsection R315-273-6(a)(4);

(ii) antifreeze, as described in Section R315-273-9 that is not hazardous waste. Antifreeze is a hazardous waste if it exhibits one or more of the characteristics identified in Sections R315-261-20 through R315-261-24.

(3) Generation of waste antifreeze.

(i) Antifreeze becomes a waste on the date it is discarded, for example, when sent for reclamation.

(ii) Antifreeze becomes a waste on the date the handler decides to discard it.

R315-273-8. Standards for Universal Waste Management -- Applicability -- Household and Very Small Quantity Generator Waste.

(a) Persons managing the wastes listed below may, at their option, manage them under the requirements of Rule R315-273:

(1) Household wastes that are exempt under Subsection R315-261-4(b)(1) and are also of the same type as the universal wastes defined at Section R315-273-9; and/or

(2) Very small quantity generator wastes that are exempt under Section R315-262-14 and are also of the same type as the universal wastes defined at Section R315-273-9.

(b) Persons who commingle the wastes described in Subsections R315-273-8(a)(1) and (a)(2) together with universal waste regulated under Rule R315-273 shall manage the commingled waste under the requirements of Rule R315-273.

R315-273-9. Standards for Universal Waste Management -- Definitions.

(a) "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.

(b) "Ampule" means an air-tight vial made of glass, plastic, metal, or any combination of these materials.

(c) "Antifreeze" means ethylene glycol or propylene glycol including aggregated batches of ethylene glycol or propylene glycol used as a heat transfer medium in an internal combustion engine; heating, ventilating, and air conditioning units; and electronics cooling applications; or used for winterizing equipment.

(d) "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.

(e) "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in Subsections R315-273-13(a) and R315-273-13(c) and Subsections R315-273-33(a) and R315-273-33(c). A facility, at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

(f) "Drum-top lamp crusher" means a device attached to a drum or container that mechanically reduces the size of lamps and includes a bag filter followed in series by a HEPA filter and an activated carbon filter. Drum-top crushers are the only devices that can be approved for the use of crushing lamps.

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

(h) "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in Rule R315-261 or whose act first causes a hazardous waste to become subject to regulation.

(i) "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 fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

(j) "Large Quantity Handler of Universal Waste" means a universal waste handler, as defined in Section R315-273-9 who accumulates 5,000 kilograms or more total of universal waste; batteries, pesticides, mercury-containing equipment, lamps, aerosol cans, or any other universal waste regulated in Rule R315-273, 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.

(k) "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.

(l) "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, if 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 a person but connected by a right-of-way which he controls and to which the public does not have access, are also considered on-site property.

(m) "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 Federal Food, Drug, and Cosmetic Act (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 Subsections R315-273-9(m)(1) or R315-273-9(m)(2).

(n) "Small Quantity Handler of Universal Waste" means a universal waste handler, as defined in this Section R315-273-9 who does not accumulate 5,000 kilograms or more of universal waste, batteries, pesticides, mercury-containing equipment, lamps, aerosol cans, or any other universal waste regulated in Rule R315-273, calculated collectively, at any time.

(o) "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 Subsections R315-273-13(c)(2) or R315-273-33(c)(2).

(p) "Universal Waste" means any of the following hazardous wastes that are subject to the universal waste requirements of Rule R315-273:

(1) batteries as described in Section R315-273-2;
(2) pesticides as described in Section R315-273-3;
(3) mercury-containing equipment as described in Section R315-273-4;
(4) lamps as described in Section R315-273-5;
(5) aerosol cans as described in Section R315-273-6; and
(6) antifreeze as described in Section R315-273-7.

(q) "Universal Waste Handler:"

(1) means:

(i) a generator, as defined in Section R315-273-9, of universal waste; or

(ii) the owner or operator of a facility, including any 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 Subsections R315-273-13(a) or R315-273-13(c), or R315-273-33(a) or R315-273-33(c), disposes of, or recycles, except under Subsections R315-273-13(f) or R315-273-33(f), 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.

(r) "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.

(s) "Universal Waste Transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

R315-273-10. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Applicability.

Sections R315-273-10 through 20 apply to small quantity handlers of universal waste, as defined in Section R315-273-9.

R315-273-11. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- 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 Section R315-273-17; or by managing specific wastes as provided in Section R315-273-13.

R315-273-12. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Notification.

A small quantity handler of universal waste is not required to notify the Director of universal waste handling activities except as required under Subsection R315-273-13(3).

R315-273-13. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Waste Management.

(a) Batteries. A small quantity handler of universal waste shall 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 shall 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 shall be closed, structurally sound, compatible with the contents of the battery, and shall 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 shall 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, such as battery pack materials or discarded consumer products, as a result of the activities listed in Subsection R315-273-13(a)(2), shall determine whether the electrolyte and other solid waste exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through R315-261-24.

(i) If the electrolyte or other solid waste exhibit a characteristic of hazardous waste, it is subject to the applicable requirements of Rules R315-260 through R315-266, R315-268 and R315-270. The handler is considered the generator of the hazardous electrolyte and other waste and is subject to Rule R315-262.

(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 rules or regulations.

(b) Pesticides. A small quantity handler of universal waste shall 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 shall 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;

(2) a container that does not meet the requirements of Subsection R315-273-13(b)(1), if the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(b)(1);

(3) a tank that meets the requirements of Sections R315-265-190 through R315-265-202, except for Subsection R315-265-197(c) and Section R315-265-200; or

(4) a transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

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

(1) A small quantity handler of universal waste shall 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 shall be closed, structurally sound, compatible with the contents of the device, shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(2) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment if the handler:

(i) removes and manages the ampules in a manner designed to prevent breakage of the ampules;

(ii) removes the ampules only over or in a containment device, such as a 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 the applicable requirements of Rules R315-260 through R315-270;

(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 Rules R315-260 through R315-270;

(v) ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(vi) ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;

(vii) stores removed ampules in closed, non-leaking containers that are in good condition;

(viii) packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;

(3) A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment if 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

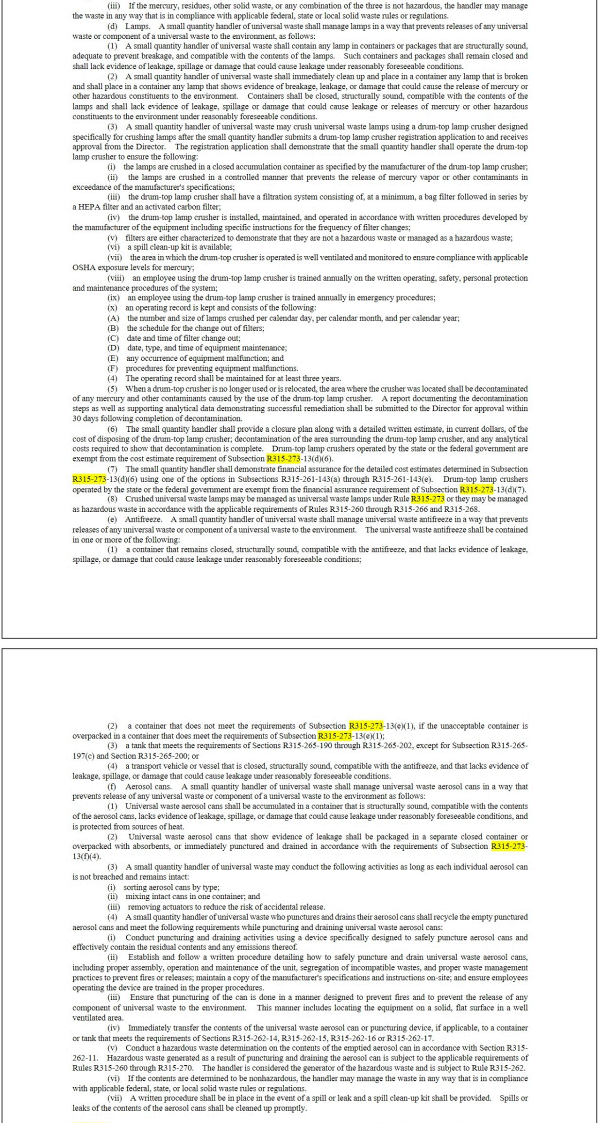
(ii) follows the requirements for removing ampules and managing removed ampules under Subsection R315-273-13(c)(2); and

(4)(i) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing shall determine whether one or both of the following exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through R315-261-24:

(A) mercury or clean-up residues resulting from spills or leaks;

(B) other solid waste generated as a result of the removal of mercury-containing ampules or housings, such as the remaining mercury-containing device; or both.

(ii) If the mercury, residues, other solid waste, or any combination of the three exhibits a characteristic of hazardous waste, it shall be managed in compliance with the applicable requirements of Rules R315-260 through R315-266, R315-268, and R315-270. The handler is considered the generator of the mercury, residues, other waste, or any combination of the three and shall manage it in compliance with Rule R315-262.



(iii) If the mercury, residues, other solid waste, or any combination of the three is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste rules or regulations.

(d) Lamps. A small quantity handler of universal waste shall 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 shall 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 shall remain closed and shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

(2) A small quantity handler of universal waste shall immediately clean up and place in a container any lamp that is broken and shall 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 shall be closed, structurally sound, compatible with the contents of the lamps and shall 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 using a drum-top lamp crusher designed specifically for crushing lamps after the small quantity handler submits a drum-top lamp crusher registration application to and receives approval from the Director. The registration application shall demonstrate that the small quantity handler shall operate the drum-top lamp crusher to ensure the following:

(i) the lamps are crushed in a closed accumulation container as specified by the manufacturer of the drum-top lamp crusher;

(ii) the lamps are crushed in a controlled manner that prevents the release of mercury vapor or other contaminants in exceedance of the manufacturer's specifications;

(iii) the drum-top lamp crusher shall have a filtration system consisting of, at a minimum, a bag filter followed in series by a HEPA filter and an activated carbon filter;

(iv) the drum-top lamp crusher is installed, maintained, and operated in accordance with written procedures developed by the manufacturer of the equipment including specific instructions for the frequency of filter changes;

(v) filters are either characterized to demonstrate that they are not a hazardous waste or managed as a hazardous waste;

(vi) a spill clean-up kit is available;

(vii) the area in which the drum-top crusher is operated is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(viii) an employee using the drum-top lamp crusher is trained annually on the written operating, safety, personal protection and maintenance procedures of the system;

(ix) an employee using the drum-top lamp crusher is trained annually in emergency procedures;

(x) an operating record is kept and consists of the following:

(A) the number and size of lamps crushed per calendar day, per calendar month, and per calendar year;

(B) the schedule for the change out of filters;

(C) date and time of filter change out;

(D) date, type, and time of equipment maintenance;

(E) any occurrence of equipment malfunction; and

(F) procedures for preventing equipment malfunctions.

(4) The operating record shall be maintained for at least three years.

(5) When a drum-top crusher is no longer used or is relocated, the area where the crusher was located shall be decontaminated of any mercury and other contaminants caused by the use of the drum-top lamp crusher. A report documenting the decontamination steps as well as supporting analytical data demonstrating successful remediation shall be submitted to the Director for approval within 30 days following completion of decontamination.

(6) The small quantity handler shall provide a closure plan along with a detailed written estimate, in current dollars, of the cost of disposing of the drum-top lamp crusher; decontamination of the area surrounding the drum-top lamp crusher, and any analytical costs required to show that decontamination is complete. Drum-top lamp crushers operated by the state or the federal government are exempt from the cost estimate requirement of Subsection R315-273-13(d)(6).

(7) The small quantity handler shall demonstrate financial assurance for the detailed cost estimates determined in Subsection R315-273-13(d)(6) using one of the options in Subsections R315-261-143(a) through R315-261-143(e). Drum-top lamp crushers operated by the state or the federal government are exempt from the financial assurance requirement of Subsection R315-273-13(d)(7).

(8) Crushed universal waste lamps may be managed as universal waste lamps under Rule R315-273 or they may be managed as hazardous waste in accordance with the applicable requirements of Rules R315-260 through R315-266 and R315-268.

(e) Antifreeze. A small quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste antifreeze shall be contained in one or more of the following:

(1) a container that remains closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(2) a container that does not meet the requirements of Subsection R315-273-13(e)(1), if the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(e)(1);

(3) a tank that meets the requirements of Sections R315-265-190 through R315-265-202, except for Subsection R315-265-197(c) and Section R315-265-200; or

(4) a transport vehicle or vessel that is closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(f) Aerosol cans. A small quantity handler of universal waste shall 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) Universal waste aerosol cans shall be accumulated in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.

(2) Universal waste aerosol cans that show evidence of leakage shall be packaged in a separate closed container or overpacked with absorbents, or immediately punctured and drained in accordance with the requirements of Subsection R315-273-13(f)(4).

(3) A small quantity handler of universal waste may conduct the following activities as long as each individual aerosol can is not breached and remains intact:

(i) sorting aerosol cans by type;

(ii) mixing intact cans in one container; and

(iii) removing actuators to reduce the risk of accidental release.

(4) A small quantity handler of universal waste who punctures and drains their aerosol cans shall 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 universal waste aerosol cans, 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 specifications and instructions 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 locating the equipment on a solid, flat surface in a well ventilated area.

(iv) Immediately transfer the contents of the universal waste aerosol can or puncturing device, if applicable, to a container or tank that meets the requirements of Sections R315-262-14, R315-262-15, R315-262-16 or R315-262-17.

(v) Conduct a hazardous waste determination on the contents of the emptied aerosol can in accordance with Section R315-262-11. Hazardous waste generated as a result of puncturing and draining the aerosol can is subject to the applicable requirements of Rules R315-260 through R315-270. The handler is considered the generator of the hazardous waste and is subject to Rule R315-262.

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

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

R315-273-14. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Labeling and Marking.

A small quantity handler of universal waste shall label or mark the universal waste to identify the type of universal waste as specified in Subsections R315-273-14(a) through R315-273-14(g).

(a) Universal waste batteries, that is, each battery, or a container in which the batteries are contained, shall 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 Subsection R315-273-3(a)(1) are contained shall 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 Subsection R315-273-3(a)(2) are contained shall 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 Subsection R315-273-14(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 Subsections R315-273-14(c)(1)(i) and (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)(1) Universal waste mercury-containing equipment, that is, each device, or a container in which the equipment is contained, shall be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Containing Equipment", "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment".

(2) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Thermostat(s)", "Waste Mercury Thermostat(s)", or "Used Mercury Thermostat(s)".

(e) Each lamp or a container or package in which such lamps are contained shall be labeled or marked clearly with one of the following phrases: "Universal Waste-Lamp(s)", or "Waste Lamp(s)", or "Used Lamp(s)".

(f) A container, tank, or transport vehicle or vessel in which antifreeze is contained shall be labeled or marked clearly with the words "Universal Waste-antifreeze".

(g) Universal waste aerosol cans, that is, each aerosol can, or a container in which the aerosol cans are contained, shall 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)".

R315-273-15. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- 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 Subsection R315-273-15(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 shall 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 with the date it became a waste or was received;

(3) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;

(4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

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

R315-273-16. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Employee Training.

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

R315-273-17. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Response to Releases.

(a) A small quantity handler of universal waste shall immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A small quantity handler of universal waste shall determine whether any material resulting from the release is hazardous waste, and if so, shall manage the hazardous waste in compliance with all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the material resulting from the release, and shall manage it in compliance with Rule R315-262.

R315-273-18. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Off-Site Shipments.

(a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and shall comply with the transporter requirements of Sections R315-273-50 through 56 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 shall 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 shall ensure that the receiving handler agrees to receive the shipment.

(e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler shall either:

(1) Receive the waste back when notified that the shipment has been rejected, or

(2) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he shall contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler shall:

(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 shall immediately notify the Director of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Director shall 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.

R315-273-19. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Tracking Universal Waste Shipments.

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

R315-273-20. Standards for Universal Waste Management, Standards for Small Quantity Handlers of Universal Waste -- Exports.

A small quantity handler of universal waste who sends universal waste to a foreign destination is subject to the requirements of Sections R315-262-80 through 262-84, shall:

(a) Comply with the requirements applicable to a primary exporter in Section R315-262-53, Subsections R315-262-56(a)(1) through (4), (6), and (b) and Section R315-262-57;

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in Sections R315-262-50 through 58; and

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

R315-273-30. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Applicability.

Sections R315-273-30 through 40 apply to large quantity handlers of universal waste, as defined in Section R315-273-9.

R315-273-31. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- 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 Section R315-273-37; or by managing specific wastes as provided in Section R315-273-33.

R315-273-32. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Notification.

(a)(1) Except as provided in Subsections R315-273-32(a)(2) and R315-273-32(a)(3), a large quantity handler of universal waste shall have sent written notification of universal waste management to the Director, and received an EPA Identification Number, before meeting or exceeding the 5,000 kilogram storage limit.

(2) A large quantity handler of universal waste who has already notified the Director of his hazardous waste management activities and has received an EPA Identification Number is not required to renotify under Section R315-273-32 except as required in Subsection R315-273-33(d)(3).

(3) A large quantity handler of universal waste who manages recalled universal waste pesticides as described in Subsection R315-273-3(a)(1) and who has sent notification to EPA as required by 40 CFR part 165 is not required to notify for those recalled universal waste pesticides under Section R315-273-32.

(b) This notification shall 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 the types of universal waste managed by the handler, for example, batteries, pesticides, mercury-containing equipment, lamps, and aerosol cans; and

(5) a statement indicating that the handler is accumulating more than 5,000 kilograms of universal waste at one time.

R315-273-33. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Waste Management.

(a) Batteries. A large quantity handler of universal waste shall 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 shall 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 shall be closed, structurally sound, compatible with the contents of the battery, and shall 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 shall 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, such as battery pack materials or discarded consumer products, as a result of the activities listed in Subsection R315-273-33(a)(2), shall determine whether the electrolyte and other solid waste exhibit a characteristic of hazardous waste identified in Sections R315-261-20

through R315-261-24.

(i) If the electrolyte or other solid waste exhibit a characteristic of hazardous waste, it shall be managed in compliance with the applicable requirements of Rules R315-260 through R315-266, R315-268 and R315-270. The handler is considered the generator of the hazardous electrolyte and other waste and is subject to Rule R315-262.

(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 rules or regulations.

(b) Pesticides. A large quantity handler of universal waste shall 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 shall 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;

(2) a container that does not meet the requirements of Subsection R315-273-33(b)(1), if the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-33(b)(1);

(3) a tank that meets the requirements of Sections R315-265-190 through R315-265-202, except for Subsection R315-265-197(c) and Section R315-265-200; or

(4) a transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

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

(1) A large quantity handler of universal waste shall 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 shall be closed, structurally sound, compatible with the contents of the device, shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

(2) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment if the handler:

(i) removes and manages the ampules in a manner designed to prevent breakage of the ampules;

(ii) removes the ampules only over or in a containment device, such as a tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage;

(iii) ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks of broken ampules from that containment device to a container that is subject to the applicable requirements of Rules R315-260 through R315-270;

(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 Rules R315-260 through R315-270;

(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) 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 if 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 the requirements for removing ampules and managing removed ampules under Subsection R315-273-33(c)(2); and

(4)(i) a large quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing shall determine whether one or both of the following exhibit a characteristic of hazardous waste identified in Sections R315-261-20 through R315-261-24:

(A) mercury or clean-up residues resulting from spills or leaks;

(B) other solid waste generated as a result of the removal of mercury-containing ampules or housings, such as the remaining mercury-containing device; or both.

(ii) If the mercury, residues, other solid waste, or any combination of the three exhibits a characteristic of hazardous waste, it shall be managed in compliance with the applicable requirements of Rules R315-260 through R315-266, R315-268 and R315-270. The handler is considered the generator of the mercury, residues, other waste, or any combination of the three and shall manage it in compliance with Rule R315-262.

(iii) If the mercury, residues, other solid waste, or any combination of the three is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste rules or regulations.

(d) Lamps. A large quantity handler of universal waste shall 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 shall 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 shall remain closed and shall lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

(2) A large quantity handler of universal waste shall immediately clean up and place in a container any lamp that is broken and shall 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 shall be closed, structurally sound, compatible with the contents of the lamps and shall 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 using a drum-top lamp crusher designed specifically for crushing lamps after the large quantity handler submits a drum-top lamp crusher registration application to and receives approval from the Director. The registration application shall demonstrate that the large quantity handler shall operate the drum-top lamp crusher to ensure the following:

(i) the lamps are crushed in a closed accumulation container as specified by the manufacturer of the drum-top lamp crusher;

(ii) the lamps are crushed in a controlled manner that prevents the release of mercury vapor or other contaminants in exceedance of the manufacturer's specifications;

(iii) the drum-top lamp crusher shall have a filtration system consisting of, at a minimum, a bag filter followed in series by a HEPA filter and an activated carbon filter;

(iv) the drum-top lamp crusher is installed, maintained, and operated in accordance with written procedures developed by the manufacturer of the equipment including specific instructions for the frequency of filter changes;

(v) filters are either characterized to demonstrate that they are not a hazardous waste or managed as a hazardous waste;

(vi) a spill clean-up kit is available;

(vii) the area in which the drum-top crusher is operated is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;

(viii) the employee using the drum-top lamp crusher is trained annually on the written operating, safety, personal protection and maintenance procedures of the system;

(ix) an employee using the drum-top lamp crusher is trained annually in emergency procedures; and

(x) an operating record is kept and consists of the following:

(A) the number and size of lamps crushed per calendar day, per calendar month, and per calendar year;

(B) the schedule for the change out of filters;

(C) date and time of filter change out;

(D) date, type, and time of equipment maintenance;

(E) any occurrence of equipment malfunction; and

(F) procedures for preventing equipment malfunctions.

(4) The operating record shall be maintained for at least three years.

(5) When a drum-top crusher is no longer used or is relocated, the area where the crusher was located shall be decontaminated of any mercury and other contaminants caused by the use of the drum-top lamp crusher. A report documenting the decontamination steps as well as supporting analytical data demonstrating successful remediation shall be submitted to the Director for approval within 30 days following completion of decontamination.

(6) The large quantity handler shall provide a closure plan along with a detailed written estimate, in current dollars, of the cost of disposing the drum-top lamp crusher; decontamination of the area surrounding the drum-top lamp crusher, and any analytical costs required to show that decontamination is complete. Drum-top lamp crushers operated by the state or the federal government are exempt from the cost estimate requirement of Subsection R315-273-33(d)(6).

(7) The large quantity handler shall demonstrate financial assurance for the detailed cost estimates determined in Subsection R315-273-33(d)(6) using one of the options in Subsections R315-261-143(a) through R315-261-143(e). Drum-top lamp crushers operated by the state or the federal government are exempt from the financial assurance requirement of Subsection R315-273-33(d)(7).

(8) Crushed universal waste lamps may be managed as universal waste lamps under Rule R315-273 or they may be managed as hazardous waste in accordance with the applicable requirements of Rules R315-260 through R315-266 and R315-268.

(e) Antifreeze. A large quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste antifreeze shall be contained in one or more of the following:

(1) a container that remains closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

(2) a container that does not meet the requirements of Subsection R315-273-13(e)(1), if the unacceptable container is overpacked in a container that does meet the requirements of Subsection R315-273-13(e)(1);

(3) a tank that meets the requirements of Sections R315-265-190 through R315-265-202, except for Subsection R315-265-197(c) and Section R315-265-200; or

(4) a transport vehicle or vessel that is closed, structurally sound, compatible with the antifreeze, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(f) Aerosol cans. A large quantity handler of universal waste shall 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) Universal waste aerosol cans shall be accumulated in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.

(2) Universal waste aerosol cans that show evidence of leakage shall be packaged in a separate closed container or overpacked with absorbents, or immediately punctured and drained in accordance with the requirements of Subsection R315-273-33(f).

(3) A large quantity handler of universal waste may conduct the following activities as long as each individual aerosol can is not breached and remains intact:

(i) sorting aerosol cans by type;

(ii) mixing intact cans in one container; and

(iii) removing actuators to reduce the risk of accidental release.

(4) A large quantity handler of universal waste who punctures and drains their aerosol cans shall 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 cans, 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 specifications and instructions 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 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 requirements of Sections R315-262-14, R315-262-15, R315-262-16, or R315-262-17.

(v) Conduct a hazardous waste determination on the contents of the emptied aerosol can in accordance with Section R315-262-11. Any hazardous waste generated as a result of puncturing and draining the aerosol can is subject to the applicable requirements of Rules R315-260 through R315-270. The handler is considered the generator of the hazardous waste and is subject to Rule R315-262.

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

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

R315-273-34. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Labeling and Marking.

A large quantity handler of universal waste shall label or mark the universal waste to identify the type of universal waste as specified in Subsections R315-273-34(a) through R315-273-34(g).

(a) Universal waste batteries, that is, each battery, or a container or tank in which the batteries are contained, shall 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 Subsection R315-273-3(a)(1) are contained shall 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 Subsection R315-273-3(a)(2) are contained shall 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 Subsection R315-273-34(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 Subsections R315-273-34(c)(1)(i) and R315-273-34(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)(1) Mercury-containing equipment, that is, each device, or a container in which the equipment is contained, shall be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Containing Equipment", "Waste Mercury-Containing Equipment", or "Used Mercury-Containing Equipment".

(2) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste-Mercury Thermostat(s)", "Waste Mercury Thermostat(s)", or "Used Mercury Thermostat(s)".

(e) Each lamp or a container or package in which such lamps are contained shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Lamp(s)", or "Waste Lamp(s)", or "Used Lamp(s)".

(f) A container, tank, or transport vehicle or vessel in which antifreeze is contained shall be labeled or marked clearly with the words "Universal Waste-antifreeze".

(g) Universal waste aerosol cans, that is, each aerosol can, or a container in which the aerosol cans are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste-Aerosol Can(s)", "Waste Aerosol Can(s)", or "Used Aerosol Can(s)".

R315-273-35. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- 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 Subsection R315-273-35(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 shall be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

(1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

(2) Marking or labeling the individual item of universal waste, e.g., each battery or thermostat, with the date it became a waste or was received;

(3) Maintaining an inventory system on-site that identifies the date the universal waste being accumulated became a waste or was received;

(4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;

(5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or

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

R315-273-36. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Employee Training.

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

R315-273-37. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Response To Releases.

(a) A large quantity handler of universal waste shall immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A large quantity handler of universal waste shall determine whether any material resulting from the release is hazardous waste, and if so, shall manage the hazardous waste in compliance with all applicable requirements of Rules R315-260 through 266, 268 and 270. The handler is considered the generator of the material resulting from the release, and is subject to Rule R315-262.

R315-273-38. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Off-Site Shipments.

(a) A large quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

(b) If a large quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and shall comply with the transporter requirements of Sections R315-273-50 through 56 while transporting the universal waste.

(c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR 171 through 180, a large quantity handler of universal waste shall 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 shall 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 shall either:

(1) Receive the waste back when notified that the shipment has been rejected, or

(2) Agree with the receiving handler on a destination facility to which the shipment will be sent.

(f) A large quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he shall contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler shall:

(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 shall immediately notify the Director of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Director shall 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.

R315-273-39. Standards for Universal Waste Management, Standards For Large Quantity Handlers Of Universal Waste -- Tracking Universal Waste Shipments.

(a) Receipt of shipments. A large quantity handler of universal waste shall 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 shall 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;

(3) The date of receipt of the shipment of universal waste.

(b) Shipments off-site. A large quantity handler of universal waste shall 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 shall include the following information:

(1) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;

(2) The quantity of each type of universal waste sent;

(3) The date the shipment of universal waste left the facility.

(c) Record retention.

(1) A large quantity handler of universal waste shall retain the records described in Subsection R315-273-39(a) for at least three years from the date of receipt of a shipment of universal waste.

(2) A large quantity handler of universal waste shall retain the records described in Subsection R315-273-39(b) for at least three years from the date a shipment of universal waste left the facility.

R315-273-40. Standards for Universal Waste Management, Standards for Large Quantity Handlers of Universal Waste -- Exports.

A large quantity handler of universal waste who sends universal waste to a foreign destination is subject to the requirements of Sections R315-262-80 through 262-84, shall:

(a) Comply with the requirements applicable to a primary exporter in Section R315-262-53, Subsections R315-262-56(a)(1) through (4), (6), and (b) and Section R315-262-57;

(b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in Sections R315-262-50 through 58; and

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

R315-273-50. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Applicability.

Sections R315-273-50 through 56 apply to universal waste transporters, as defined in Section R315-273-9.

R315-273-51. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- 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 Section R315-273-54.

R315-273-52. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Waste Management.

(a) A universal waste transporter shall comply with all applicable U.S. Department of Transportation regulations in 49 CFR part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 CFR 171.8. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of Rule R315-262. 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 Rule R315-262, 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".

R315-273-53. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- 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 shall comply with the applicable requirements of Sections R315-273-10 through 20 and 30 through 40 while storing the universal waste.

R315-273-54. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Response to Releases.

(a) A universal waste transporter shall immediately contain all releases of universal wastes and other residues from universal wastes.

(b) A universal waste transporter shall determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of Rules R315-260 through 266, 268 and 270. If the waste is determined to be a hazardous waste, the transporter is subject to Rule R315-262.

R315-273-55. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- 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 shall be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 CFR part 172.

R315-273-56. Standards for Universal Waste Management, Standards for Universal Waste Transporters -- Exports.

A universal waste transporter transporting a shipment of universal waste to a foreign destination is subject to the requirements of Sections R315-262-80 through 262-84, may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter shall 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.

R315-273-60. Standards for Universal Waste Management, Standards for Destination Facilities -- Applicability.

(a) The owner or operator of a destination facility, as defined in Section R315-273-9, is subject to all applicable requirements of Rules R315-264, 265, 266, 268, 270, and 124, and the notification requirement under section 3010 of RCRA.

(b) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled shall comply with Subsection R315-261-6(c)(2).

R315-273-61. Standards for Universal Waste Management, Standards for Destination Facilities -- 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 shall contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility shall:

(1) Send the shipment back to the original shipper, or

(2) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.

(c) If the owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility shall immediately notify the Director of the illegal shipment, and provide the name, address, and phone number of the shipper. The Director shall 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.

R315-273-62. Standards for Universal Waste Management, Standards for Destination Facilities -- Tracking Universal Waste Shipments.

(a) The owner or operator of a destination facility shall 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 shall 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;

(3) The date of receipt of the shipment of universal waste.

(b) The owner or operator of a destination facility shall retain the records described in Subsection R315-273-62(a) for at least three years from the date of receipt of a shipment of universal waste.

R315-273-70. Standards for Universal Waste Management -- Imports.

Persons managing universal waste that is imported from a foreign country into the United States are subject to the requirements of Sections R315-262-80 through 262-84 and the applicable requirements of Rule R315-273, immediately after the waste enters the United States, as indicated in Subsection R315-273-70(a) through (c):

(a) A universal waste transporter is subject to the universal waste transporter requirements of Sections R315-273-50 through 56.

(b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of Sections R315-273-10 through 20 or 30 through 40, as applicable.

(c) An owner or operator of a destination facility is subject to the destination facility requirements of Sections R315-273-60 through 62.

(d) Persons managing universal waste that is imported from an OECD country as specified in Subsection R315-262-58(a)(1) are subject to Subsections R315-273-70(a) through (c), in addition to the requirements of Sections R315-262-80 through 262-84.

R315-273-80. Standards for Universal Waste Management, Petitions to Include Other Wastes Under Rule R315-273 -- General.

(a) Except as provided in Subsection R315-273-80(e), any person seeking to add a hazardous waste or a category of hazardous waste to Rule R315-273 may petition for a rule amendment under Sections R315-273-80 and R315-273-81 and Sections R315-260-20 and R315-260-23.

(b) To be successful, the petitioner shall demonstrate to the satisfaction of the Board that regulation under the universal waste rules of Rule R315-273 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 shall include the information required by Subsection R315-260-20(b). The petition should also address as many of the factors listed in Section R315-273-81 as are appropriate for the waste or waste category addressed in the petition.

(c) The Board shall evaluate petitions using the factors listed in Section R315-273-81. The Board shall grant or deny a petition using the factors listed in Section R315-273-81. The decision shall be based on the weight of evidence showing that regulation under Rule R315-273 is appropriate for the waste or category of waste, shall improve management practices for the waste or category of waste, and shall improve implementation of the hazardous waste program.

(d) The Board may request additional information needed to evaluate the merits of the petition.

(e) Hazardous waste pharmaceuticals are regulated by Sections R315-266-500 through R315-266-510 and may not be added as a category of hazardous waste for management under Rule R315-273.

R315-273-81. Standards for Universal Waste Management -- Factors for Petitions to Include Other Wastes Under Rule R315-273.

(a) The waste or category of waste, as generated by a wide variety of generators, is listed in Sections R315-261-30 through 3, or, if not listed, a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in Sections R315-261-20 through 24. When a characteristic waste is added to the universal waste regulations of this Rule R315-273 by using a generic name to identify the waste category, e.g., batteries, the definition of universal waste in Section R315-260-10 and Section R315-273-9 shal 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 Rule R315-273;

(b) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments, including, for example, households, retail and commercial businesses, office complexes, very small quantity generators, small businesses, government organizations, as well as large industrial facilities;

(c) The waste or category of waste is generated by a large number of generators, e.g., more than 1,000 nationally, and is frequently generated in relatively small quantities by each generator;

(d) Systems to be used for collecting the waste or category of waste, including packaging, marking, and labeling practices, would ensure close stewardship of the waste;

(e) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner, e.g., waste management requirements appropriate to be added to Sections R315-273-13, 33, and 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 Rule R315-273 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 Title 19 Chapter 6.

(g) Regulation of the waste or category of waste under Rule R315-273 will improve implementation of and compliance with the hazardous waste regulatory program; and/or

(h) Such other factors as may be appropriate.

KEY: hazardous waste, universal waste
Date of Last Change: December 9, 2021
Notice of Continuation: January 14, 2021
Authorizing, and Implemented or Interpreted Law: 19-6-105; 19-6-106