



# Waste Aerosol Cans

Reviewed/ revised January 2020

This guidance document provides assistance to facilities that generate hazardous waste aerosol cans on how to manage this waste in compliance with the Colorado Hazardous Waste Regulations, 6 CCR 1007-3 (the regulations). This guidance document is not applicable to hazardous waste aerosol cans generated by households because household hazardous waste is exempt from the regulations.

[6 CCR 1007-3 Section 261.4(b)(1)]

## Aerosol cans as hazardous waste

Aerosol cans sometimes need to be discarded before all of the contents have been used. Common reasons for discarding partially full aerosol cans include the spray mechanism is no longer operating as designed, the propellant being spent, or the product no longer being used by the facility. However, before discarding a partially full aerosol can into the trash, facilities must determine whether the contents remaining in the can is a hazardous waste, either because the waste exhibits a hazardous waste characteristic (such as ignitability (D001) or toxicity (D004 through D043)) or because the waste is listed as a hazardous waste (such as trichloroethylene, U228). It is important to remember that the contents remaining in an aerosol can are not considered spent and therefore, cannot carry any of the F-codes for spent solvents. An aerosol can may, however, carry a P- or U-code for acutely hazardous unused commercial chemical products. Fortunately, acutely hazardous products in aerosol cans are very rare and are limited to a few pharmaceuticals and pesticides.

[6 CCR 1007-3 Part 261]

Aerosol cans that are still in use or that contain useable product are not considered to be wastes. An aerosol can becomes a waste on the date it is discarded or is no longer useable. Aerosol cans that are "RCRA-empty" or contain materials that are not hazardous waste, may be managed as solid waste. A container is considered "RCRA-empty" if all waste that can be removed has been removed using the practices commonly employed to remove material from that type of container (e.g. pouring, pumping, aspirating, puncturing), and no more than 2.5 centimeters (one inch) of residue remain on the bottom of the container, or no more than 3 percent by weight of the total capacity of the container remains in the container.

[6 CCR 1007-3 Sections 273.2(d)]

## How to manage hazardous waste aerosol cans

Aerosol cans containing hazardous waste can either be managed in compliance with the traditional hazardous waste requirements found in Parts 260-268, 99 and 100 of the regulations, or in compliance with Part 273 of the regulations, an alternate and less onerous set of requirements specific to universal wastes. Universal wastes are certain hazardous wastes commonly generated by businesses, government agencies and schools through the use of popular everyday products such as aerosol cans. For more information regarding universal wastes in Colorado, refer to the guidance document titled Universal Waste Overview available on the Division's website.

If a generator elects to manage their hazardous waste aerosol cans as universal waste under Part 273 of the regulations, the waste does not lose its hazardous waste classification. This means that generators who fail to comply with Part 273 of the regulations, may be subject to enforcement under the full hazardous waste requirements.

## Benefits of managing hazardous waste aerosol cans as universal waste

The main benefits of managing hazardous waste aerosol cans as universal waste are:

- The waste does not count toward the monthly total of hazardous waste generated for purposes of determining generator category.
- The waste can be shipped in Colorado without a hazardous waste manifest.
- The waste can be shipped in Colorado by common carrier instead of a hazardous waste transporter.
- There are reduced notification and recordkeeping requirements.
- The accumulation time limits are less restrictive.

Since very small quantity generators (VSQGs) of hazardous waste already have reduced hazardous waste management requirements, the benefits of managing waste aerosol cans as universal waste may only be realized if the VSQG would otherwise be a small quantity generator.

## The requirements for universal waste management

Under the universal waste regulations, persons who generate or accumulate universal wastes in compliance with Part 273 of the regulations are called universal waste handlers. Classification as a universal waste handler is independent of a person's hazardous waste generator status. There are two universal waste handler categories:

- Small quantity handler - Accumulates less than 5,000 kilograms total of universal waste at any time.
- Large quantity handler - Accumulates 5,000 kilograms or more of universal waste at any time.

If the quantities for a small quantity handler of universal waste are exceeded at any time during a calendar year, the handler becomes a large quantity handler until the next calendar year when handler status can be re-evaluated.

[6 CCR 1007-3 Section 273.9]

### Notification

Small quantity handlers of universal waste are not required to notify the division of universal waste management activities. Large quantity handlers are required to notify the division of universal waste activities and obtain an EPA identification number. An EPA identification number can be obtained by completing the RCRA Subtitle C Site Identification Form, also known as EPA Site ID Form 8700-12. This notification is required regardless of whether a facility has previously notified and obtained an EPA identification number for other hazardous waste generator activities. If a facility already has an existing EPA identification number, the existing EPA identification number will apply for both universal waste and hazardous waste activities.

[6 CCR 1007-3 Sections 273.12 and 273.32]

### Labeling

Universal waste aerosol cans (each individual can or a container used only for accumulating waste aerosol cans) must be labeled with one of the following phrases as soon as the waste is generated:

- "Waste Aerosol Can(s)"
- "Universal Waste - Aerosol Can(s)"

If the universal waste aerosol can is put into an accumulation container used only for waste aerosol cans, only the accumulation container needs to be labeled, not each individual can in the container.

[6 CCR 1007-3 Sections 273.14 and 273.34]

### Waste Accumulation

Universal waste aerosol cans must be managed in a manner that prevents releases of the waste or waste constituents to the environment. A universal waste aerosol can that is not in good condition and is leaking, or shows signs it could leak, must be individually over-packed in a closed packing container that is properly labeled and capable of preventing leaks or releases of hazardous constituents to the environment under reasonably foreseeable conditions. If the universal waste aerosol can accumulation

container is not in good condition, the accumulation container must either be over-packed or the waste aerosol cans removed and placed into another container that is in good condition.

[6 CCR 1007-3 Sections 273.13(d) and 273.33(d)]

Universal waste aerosol cans may not be accumulated for more than one year from the date of generation. Generators must be able to demonstrate that this one year accumulation limit is being complied with.

[6 CCR 1007-3 Sections 273.15 and 273.35]

### Employee training

All employees that manage universal waste aerosol cans must be trained how to properly manage the waste relative to their job duties. If the universal waste aerosol cans are treated by puncturing and draining the cans, employees must thoroughly understand how to safely operate the puncturing device and manage the wastes generated from the puncturing operation.

[6 CCR 1007-3 Sections 273.13(d), 273.16, 273.33(d) and 273.36]

### Spills

Spills or releases of universal waste aerosol cans must be immediately containerized and any waste and residues from cleanup appropriately managed. Wastes generated from a release are considered newly generated waste and a hazardous waste determination must be made. Spilled waste and cleanup residues that are hazardous waste are no longer universal waste and must be managed in compliance with Parts 260-268, 99 and 100.

[6 CCR 1007-3 Sections 273.17 and 273.37]

### Recordkeeping

Small quantity handlers of universal waste are not required to maintain records, but the division recommends keeping adequate records to document waste management practices, proper waste disposal, handler status, and accumulation times. A large quantity handler must keep written records for universal waste shipped to and from its facility. These records must be kept for at least three years and include the types and quantities of universal waste shipped or received, the date the waste was shipped or received, and to/from whom the waste was shipped.

[6 CCR 1007-3 Sections 273.19 and 273.39]

### Waste shipments

Universal waste can only be shipped to another universal waste handler, a destination facility or a foreign destination. A destination facility is a facility that is permitted to treat, dispose of or recycle the waste.

In Colorado, universal waste does not need to be shipped with a hazardous waste manifest. Since no hazardous waste manifest is required, universal waste is not considered hazardous waste under U.S. DOT regulations. However, despite not being considered hazardous waste under U.S. DOT regulations, some universal waste may meet the definition of hazardous material under U.S. DOT regulations. A universal waste transporter must comply with all applicable U.S. DOT regulations when transporting universal waste that meets the definition of hazardous material.

[6 CCR 1007-3, sections 273.9, 273.18, 273.38, 273.50-56 and 273.60-62]

When shipping universal wastes to destinations outside Colorado, handlers should confirm whether the intervening states and the destination state also recognize these type(s) of waste as universal waste in their respective regulations. In intervening states and destination states that do not regulate these wastes as universal wastes, compliance with the full hazardous waste regulations is required, including the use of hazardous waste manifests and hazardous waste transporters.

### Treatment of universal waste aerosol cans

Treatment of universal waste aerosol cans is allowed under limited circumstances. Universal waste aerosol cans may be punctured to remove and collect the contents of the can as long as it is done in

compliance with the requirements of Part 273 of the regulations. Prior to puncturing any cans, a written procedure detailing how to puncture cans safely must be developed and implemented. This procedure must include a description of the type of equipment to be used to puncture the universal waste aerosol cans safely; operation and maintenance of the equipment; a description of how incompatible wastes will be segregated prior to and after puncturing; proper waste management practices such as ensuring that flammable wastes are stored away from heat sources or open flames; and waste characterization. A spill kit must be readily available in case wastes are spilled during the puncturing activities. In addition, generators may need to file an Air Pollution Emission Notice (APEN) for the puncturing operation and use control devices to capture air borne contamination.

Once puncturing activity begins, the contents from the universal waste aerosol cans or the puncturing device must be immediately put into a container that meets U.S. DOT requirements. Material removed from the punctured can is no longer universal waste and must be managed in compliance with Parts 260 through 268, and Parts 99 and 100 of the regulations. The amount of waste produced from the punctured aerosol cans must be included in the monthly total of hazardous waste generated to determine generator category. RCRA-empty cans may be managed by recycling them as scrap metal or disposing of them as solid waste.

Handlers should avoid puncturing aerosol cans that contain acute hazardous waste and instead send them to a hazardous waste treatment and disposal facility intact. Aerosol cans containing acute hazardous waste would need to be triple rinsed to render them RCRA-empty. Such an undertaking is impractical and almost impossible to do. Additionally, the aerosol cans must be managed as an acute hazardous waste and will count towards facility's generator category. Fortunately, acute hazardous products in aerosol cans are very rare and are limited to a few pharmaceuticals and pesticides.

[6 CCR 1007-3 Section 273.13(d) and 273.33(d)]

## Universal Waste Handler Requirements Summary Table

Handler requirement		Handler category	
		Small quantity handler	Large quantity handler
<b>On site disposal and treatment</b>	Prohibited from disposing of on-site and treating except under limited conditions for mercury-containing devices/lamps, aerosol cans and electronic devices	Required 273.11*	Required 273.31
<b>Notification</b>	Notify of UW activities and obtain an EPA ID number (the same EPA ID number is used for both UW and HW activities)	Not Required 273.12	Required 273.32
<b>Waste management</b>	Manage in a manner that prevents releases to the environment; UW or container of UW must be in good condition and not leaking	Required 273.13	Required 273.33
<b>Waste labeling</b>	UW or container of UW must be labeled as Used (material type) <sup>1</sup> , Waste (material type) or Universal Waste (material type)	Required 273.14	Required 273.34
<b>Accumulation time</b>	Demonstrate the one-year accumulation time limit is being complied with	Required 273.15	Required 273.35
<b>Employee training</b>	Ensure workers know proper management and emergency response appropriate for the types of waste they handle and relative to their level of responsibility	Required 273.16	Required 273.36
<b>Spills</b>	Immediately containerize and appropriately manage any spills or residues from releases	Required 273.17	Required 273.37
<b>Offsite shipment</b>	Ship only to another UW handler, to a treatment, storage or recycling facility or to a foreign destination	Required 273.18	Required 273.38
<b>Recordkeeping</b>	Keep written records of UW shipped to/from the facility for at least three years, including types/quantities of UW, date UW shipped/received and to whom waste was shipped	Not required (Recommended) 273.19	Required 273.39
<b>Exporting</b>	Notify EPA of intent to export, have valid written contract, receive an Acknowledgement of Consent from EPA documenting consent of receiving country, comply with manifest requirements, ensure moving document accompanies each shipment, submit Electronic Export Information for each shipment to the International Trade Data System	Required 273.20	Required 273.40

\* Section number in Colorado Hazardous Waste Regulations 6 CCR 1007-3

UW = universal waste

HW = hazardous waste

### For more information

Colorado Department of Public Health and Environment  
Hazardous Materials and Waste Management Division  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

Customer Technical Assistance  
(303) 692-3320  
(888) 569-1831 ext. 3320 toll-free  
Website: [www.colorado.gov/cdphe/hm](http://www.colorado.gov/cdphe/hm)  
E-mail: [comments.hmwmd@state.co.us](mailto:comments.hmwmd@state.co.us)

<sup>1</sup> Does not apply to pesticides or aerosol cans