



Compliance Bulletin Hazardous Waste Management of Waste Aerosol Cans

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Which aerosol cans are regulated as hazardous waste?

Aerosol cans sometimes need to be discarded before they are completely empty. This occurs for a variety of reasons, including when the spray mechanism no longer operates as designed, the propellant is spent, or the product is no longer used. In these cases it must be determined whether the contents remaining in the can are hazardous waste, either by exhibiting a *characteristic* of hazardous waste (such as ignitability (D001)) or because they are a *listed* waste (such as trichloroethylene (U228)) [Colorado Hazardous Waste Regulations 6 CCR 1007-3 Part 261]. It is important to remember that the contents remaining in an aerosol can would not be considered spent and therefore could not carry the F-codes for spent solvents. An aerosol can may, however, carry a P- or U-code for unused chemical products.

While residential consumers are exempt from the Colorado Hazardous Waste Regulations, businesses, schools and government facilities that generate hazardous wastes must follow these requirements regarding proper management and disposal of hazardous wastes applicable for their generator category. Generators of waste aerosol cans are responsible for determining if their wastes are hazardous. If the contents of the aerosol cans are hazardous, they must be managed in compliance with the Colorado Hazardous Waste Regulations [6 CCR 1007-3].

Which aerosol cans are not regulated as hazardous waste?

Aerosol cans that are still in use or that contain useable product are not yet considered wastes. Aerosol cans that are empty or that contain materials that are not considered hazardous wastes may be managed as solid waste.

How should aerosol cans determined to contain hazardous waste be managed?

In the past, if an aerosol can contained a hazardous waste, it needed to be managed in full compliance with the hazardous waste regulations, including labeling, training and manifesting requirements, as well as

restrictive time limits. The Colorado Hazardous Waste Commission has adopted reduced management practices for aerosol cans containing hazardous waste under the Universal Waste Rule. Therefore, someone who generates aerosol cans containing hazardous waste may choose to manage these cans in full compliance with Parts 260 through 268, Parts 99 and 100 of the Colorado Hazardous Waste Regulations, or with the reduced requirements of Part 273, Universal Waste Rule.

What are Universal Wastes?

The Universal Waste Rule [6 CCR 1007-3 Part 273] includes certain hazardous wastes that are commonly generated by very small to very large non-residential sources such as businesses, government agencies, and schools. Universal wastes are subject to wide-spread use, which makes disposal of these hazardous wastes difficult to control.

Universal Wastes include many:

- batteries
- pesticides
- mercury-containing devices
- mercury-containing lighting wastes
- aerosol cans
- electronic devices and components

Materials included as universal wastes are regulated under the Resource Conservation and Recovery Act (RCRA) and have been required to be handled as hazardous wastes since the early 1980s. In the past, if these wastes were determined to be a hazardous waste, small and large quantity generators of hazardous waste needed to manage them in full compliance with the hazardous waste regulations, including labeling, employee training, manifest requirements, and restrictive time limits. [6 CCR 1007-3 Parts 260 - 268, 99, 100]

Why manage waste aerosol cans as universal waste?

Managing aerosol cans containing hazardous waste as universal wastes is most beneficial to small and large quantity generators of hazardous waste, or conditionally exempt small quantity generators that would otherwise be small quantity generators if they did not manage some of their wastes as universal

wastes. The primary benefits of choosing the reduced management standards of the universal waste rule are that the waste does not count toward the monthly total of hazardous waste in determining generator category; the waste can be shipped in Colorado without a hazardous waste manifest; the waste can be shipped by common carrier instead of a hazardous waste transporter; there are reduced notification and record-keeping requirements, and the storage time limits are less restrictive.

Since universal waste does not require a hazardous waste manifest for shipment in Colorado, it is not considered hazardous waste under US Department of Transportation regulations. Other states may have more stringent requirements for these wastes, however, and may require use of the hazardous waste manifest.

State requirements for universal waste transporters are included in 6 CCR 1007-3 Part 273 Subpart D.

What are the requirements for universal waste management?

Categories of Universal Waste Handlers

Under the Universal Waste Rule, persons who generate or accumulate aerosol cans containing hazardous waste are considered “handlers” of universal waste. [6 CCR 1007-3 Section 273.9] [Note: this definition is different from that of a **generator** of hazardous waste].

There are two categories of handlers, Small Quantity Handlers of Universal Waste and Large Quantity Handlers of Universal Waste. A small quantity handler of universal waste is one who does not accumulate more than 5,000 kilograms of universal at any one time. A large quantity handler of universal waste is a handler of universal waste who accumulates 5,000 kilograms or more of universal waste. [6 CCR 1007-3 Section 273.9] The designation of small quantity or large quantity handler of universal waste has no relationship to a facility’s hazardous waste **generator** status. Thus a small quantity generator of hazardous waste may be a large quantity handler of universal waste, and a facility that is a large quantity generator of hazardous waste may be a small quantity handler of universal waste.

If, at any time during the calendar year, a facility exceeds the quantities for a small quantity handler of universal waste, they would be considered a large quantity handler until the next calendar year when they can reevaluate their status. [6 CCR 1007-3 Section 273.9]

Notification

Small quantity handlers of universal waste are not required to notify the Hazardous Materials and Waste Management Division (the Division) of their universal waste management activities. [6 CCR 1007-3 Section 273.12] Large quantity handlers of universal waste are required to notify the Division of their universal waste management activities and obtain an EPA identification number using EPA Form 8700-12. [6 CCR 1007-3 Section 273.32] This must be done even if the facility has previously given notification and received an EPA identification number for its hazardous waste activities. The EPA identification number will remain the same.

Accumulation of Waste

The Universal Waste Rule was designed to streamline the regulatory process and encourage recycling. Therefore, a handler of universal waste cannot dispose of the waste without a permit and treatment is not allowed except under certain specified conditions in Part 273 of the Colorado hazardous waste regulations [6 CCR 1007-3]. All handlers of universal waste are required to manage their waste in a manner that prevents releases of the waste or waste constituents. There is a one year accumulation time limit, and handlers must be able to demonstrate that universal waste on site has not been accumulated for more than one year. Although it is not required to be marked with the accumulation start date, this would be the easiest way to document that the waste is in compliance with the one year accumulation limit.

Labeling

When a universal waste aerosol can is generated, it must either be labeled as “Waste Aerosol Can” or “Universal Waste Aerosol Can,” or be put into an accumulation container labeled as “Waste Aerosol Cans” or “Universal Waste Aerosol Cans.” If the aerosol can is placed into an accumulation container, only the accumulation container needs to be labeled as containing waste aerosol cans, not the individual cans within it. If the individual aerosol can is not in good condition and is leaking or shows signs that it could leak, it must be individually over packed in a container that is labeled. If the accumulation container is not in good condition, it must be over packed or the cans must be removed and put into a container that is in good condition.

Shipment of Waste

A universal waste handler cannot dispose of universal waste on site without a permit, and treatment by the handler is not allowed except under limited conditions (see the section on handler treatment). Universal waste can only be shipped to another universal waste handler, a destination facility or a foreign destination. Shipment to another universal waste handler is allowed to aid in consolidation of wastes. A destination facility is a facility that is permitted to treat, dispose, or recycle the waste. [6 CCR 1007-3 Section 273.9]

Shipment of universal waste in Colorado does not require the use of the hazardous waste manifest system. Therefore, universal waste is not considered hazardous waste under US DOT regulations. Some universal wastes are regulated by the US DOT as hazardous materials because they meet criteria for one or more hazard classes, but the word "waste" may not be used in the shipping name. [6 CCR 1007-3 Section 273.52]

Other states may have different requirements for wastes that are managed as universal waste in Colorado. The handler should always confirm the regulatory status of universal wastes in the destination state and all intervening states the waste will travel through.

Employee Training

Small quantity handlers of universal waste are required to inform all employees who manage universal waste about the proper handling and emergency procedures appropriate to the types of universal waste at the facility. [6 CCR 1007-3 Section 273.16] Large quantity handlers of universal waste are required to ensure that personnel are thoroughly familiar with the requirements for universal waste management and emergency response relative to their level of responsibilities in dealing with the waste. [6 CCR 1007-3 Section 273.36]

Handlers of waste aerosol cans who puncture aerosol cans are required to ensure that personnel thoroughly understand how to safely operate the puncturing device, as well as how to safely manage the waste generated from the puncturing operation.

Spills

All handlers of universal waste are required to immediately containerize and appropriately manage any spills or residues from releases of universal wastes. [6 CCR 1007-3 Sections 273.17(a), 273.37(a)] The waste generated from a release of universal waste

would be considered newly generated waste, and a hazardous waste determination would need to be made. If it is determined that any or all of the released material or residue is hazardous, it must be managed in accordance with the hazardous waste regulations and not the universal waste requirements. [6 CCR 1007-3 Sections 273.17(b), 273.37(b)] The handler of the universal waste at the time of the release would be the generator of the newly generated hazardous waste and must adhere to all applicable requirements of the Colorado hazardous waste regulations.

Record Keeping Requirements

A small quantity handler of universal waste is not required to maintain records. [6 CCR 1007-3 Section 273.19] However, it is strongly advisable to keep adequate records to document waste management practices and substantiate the facility's universal waste handler status.

A large quantity handler of universal waste must keep written records for universal wastes shipped to and from its facilities. 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 whom the waste was shipped. [6 CCR 1007-3 Section 273.39] There is no requirement to maintain formal training records for either category.

Transporters of universal waste are required to keep records in accordance with US DOT requirements. A destination facility is subject to all applicable requirements of 6 CCR 1007-3 Parts 264-268, 99 & 100. If the destination facility recycles the universal waste without storing it, they need only notify the Department of their activity under 6 CCR 1007-3 Part 99 and keep records of each shipment. If the destination facility is a Treatment Storage and Disposal Facility (TSDF), they are required to keep records in accordance with their hazardous waste permit.

Can a universal waste handler treat its hazardous wastes?

Universal waste handlers can't dispose of universal wastes without a permit and treatment by the handler is not allowed except under limited conditions.

Puncturing waste aerosol cans

Puncturing of waste aerosol cans is allowed by universal waste handlers as long as it is conducted in accordance with the requirements of Part 273.13 or

273.33 of the Colorado Hazardous Waste Regulations. Prior to puncturing waste aerosol cans, the handler must develop and implement a written procedure detailing how to puncture the cans safely. Included in this document must be the type of equipment to be used, operation and maintenance of the equipment and the precautions that need to be taken to protect the worker. In addition, the document must include a review of the wastes that will be generated from the puncturing activities and an outline of how incompatible wastes will be segregated prior to and after puncturing. Special management procedures necessary to manage the waste properly, such as ensuring that flammable wastes are stored away from heat or open flames, also need to be evaluated prior to puncturing. Additionally, this procedure must detail the frequency of filter change out, if applicable. [Note: it may be necessary to file an Air Pollution Emission Notice (APEN) for the puncturing operation and to use control devices to capture air borne contamination.] A spill kit must be readily available in case wastes are spilled during the puncturing activities.

Once the puncturing activity occurs, the contents from the can or the puncturing device must be transferred to a container meeting the requirements of 6 CCR 1007-3 Section 262.34. At the point the material is removed from the can, it is considered a hazardous waste and must be managed in accordance with all hazardous waste regulations. It can no longer be managed as universal waste. The quantity of waste generated from the punctured cans must be included in the determination of generator status. All applicable generator requirements contained in Part 262 apply to this newly generated waste including accumulation time limits.

Once the waste aerosol cans have been emptied, they can be managed as a RCRA empty container and either recycled as scrap metal or disposed of in accordance with all applicable solid waste regulations.

What about Conditionally Exempt Small Quantity Generators (CESQG)?

Conditionally exempt small quantity generators are those that generate less than 100 kilograms (approximately 25 gallons or 250 pounds) of total hazardous waste and no more than one kilogram of acutely hazardous waste per calendar month AND never accumulate more than 1000 kilograms of hazardous waste on site at one time. In Colorado, conditionally exempt generators are not excused from identifying which of their wastes are hazardous wastes and must ensure that their wastes are sent to a facility that is permitted to accept it.

Conditionally exempt small quantity generators may choose to manage their aerosol cans containing hazardous waste as conditionally exempt wastes or as universal wastes. [6 CCR 1007-3 Section 273.8] Because of the reduced management requirements already applicable to conditionally exempt small quantity generators of hazardous waste, it is generally not to their benefit to manage their wastes as universal waste, unless they would otherwise be small quantity generators. Unlike small and large quantity generators of hazardous waste, conditionally exempt generators are not required to notify the State of their regulated waste activity or to get an EPA identification number. There is no time limit on how long they may store their hazardous waste on site as long as they don't exceed the quantity limits for conditionally exempt small quantity generators, and they may transport their hazardous waste without a hazardous waste manifest under a standard bill of lading.

Conditionally exempt generators may not dispose of their hazardous wastes on site or send them to a solid waste landfill in Colorado. These wastes must be sent to a permitted hazardous waste treatment, storage or disposal (TSD) facility, sent to a legitimate recycler of the waste, or sent to an out-of-state solid waste disposal facility that is permitted to accept conditionally exempt small quantity generator hazardous wastes.

For more information:

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This Compliance Bulletin is intended to provide guidance on the appropriate management of wastes based on Colorado solid and hazardous waste statutes and regulations only. The wastes described in this guidance may be regulated under other statutes and regulations.