



## Treating Aerosol Cans as Universal Waste

Universal wastes (UW) are hazardous wastes that are commonly created by households and many types of industries. According to the [Universal Waste Rule](#), federal and state regulations allow for universal waste to be managed under reduced requirements in order to ease the regulatory burden and reduce costs. Waste materials that are categorized as universal waste include: batteries, pesticides, mercury-containing equipment, lamps, and most recently, aerosol cans.

Aerosol cans are widely used for dispensing a broad range of products. Aerosol cans also account for up to 40% of the hazardous waste generated by large retail facilities. Therefore, the addition of aerosol cans as a universal waste category will serve business and industry well. The addition will not only help to reduce costs, it will promote collection and recycling and encourage programs to reduce the amount of aerosol cans going to landfills and combustors. The new Rule (referenced as the [Final Rule](#)) is expected to generate an annual cost savings of up to 3 million a year for the retail sector.



### What qualifies under the final rule?

Under the Final Rule, “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.” Aerosol cans that are damaged or leaking may be characterized as universal waste as long as they are packaged in a separate closed container, filled with absorbents, or immediately punctured and drained in accordance with drainage requirements (see [40 CFR 273.13\(e\)\(2\)](#) and [40 CFR 273.33\(e\)\(2\)](#)).

Aerosol cans that are not subject to hazardous waste requirements because they are either not being discarded, not solid waste, not hazardous waste, or they meet the definition of an empty container are not subject to the Final Rule. An aerosol can is considered empty when the pressure inside the can nears atmospheric pressure. However, for ease of operations, handlers may choose to manage aerosol cans that are not subject to the hazardous waste rules as universal waste.

### Can aerosol cans still be handled as hazardous waste?

Aerosol cans can still be handled as hazardous waste. Any person other than a household that is disposing of an aerosol can must make a hazardous waste determination for both the can itself, the liquid product contained in the can and the gaseous propellant, in accordance with [KRS Chapter 224](#) and [401 KAR Chapter 39](#).

A scrap metal recycling exemption is contained in Kentucky’s hazardous waste rules and may be applicable to a hazardous waste determination for aerosol cans. Therefore, in order to properly manage aerosol cans and comply with the Division of Waste Management’s regulations, it is important to understand how to properly identify and manage wastes. This fact sheet is not a substitute for reading and understanding Kentucky Department for Environmental Protection regulations and just provides a general overview.

### The Final Rule

The U.S. Environmental Protection Agency (EPA), issued the updated Universal Waste Rule, referred as the Final Rule, in 2019. The Final Rule re-classified aerosol cans as “universal waste” under the Resource Conservation and Recovery Act. Along with other universal wastes, aerosol cans are regulated under Title 40 of the Code of Federal Regulations (CFR), Part 273. For more information, visit: <https://www.epa.gov/hw/universal-waste>.

# Aerosol Can Management

## How do you manage aerosol cans as universal waste?

Although managing aerosol cans as universal waste rather than as hazardous waste offers easier and more affordable options, the handler must still comply with specific requirements. These requirements include waste management standards such as labeling and marking, container requirements, accumulation time limits, employee training, responses to releases, requirements related to off-site shipments, and export requirements. The standards for managing aerosol cans as universal waste are summarized below:

- Containers must be sound and compatible with the contents of the can;
- Containers cannot show any signs of leakage, spillage or damage;
- Employees must be trained to properly sort and process waste aerosol cans;
- Containers must be kept closed except when waste is being added or removed and covered at the end of each workday;
- Containers must be placed on a surface that is free of cracks/gaps and is designed to contain leaks;
- Cans must be sorted by type and compatibility of contents with intact cans stored in one container;
- Containers must be labelled as either; “Universal Waste Aerosol Cans”, “Waste Aerosol Cans”, or “Used Aerosol Cans”;
- Actuators must be removed to prevent risk of accidental release; and
- Containers must be processed in a well-ventilated area and shall not be kept on site for more than one year.



## How can you tell if the aerosol can contained hazardous waste?

In many aerosol cans, the propellant, if not the product itself, exhibits hazardous characteristics (toxicity, reactivity, ignitability and/or corrosivity). Any liquid or contained gases can be determined a hazardous waste if they are listed in [401 KAR 39:060](#), or if they show one or more characteristics of hazardous waste as described in [401 KAR 39:060](#). A hazardous waste determination can be made by reviewing the product’s safety data sheet (SDS) or characteristic tests. If the contents of the can are not a listed hazardous waste or show a characteristic of hazardous waste, then the can may be disposed of as solid waste or recycled.

### Waste Determination

Hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment.

The first step in determining if a waste is categorized as a hazardous waste is to conduct a waste determination. To view the steps for identifying hazardous waste, visit: <https://www.epa.gov/hw/learn-basics-hazardous-waste#hwid>.

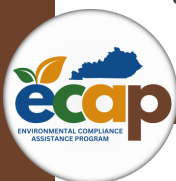
For purposes of inspection and compliance, it is important to:

***Keep Records of All Waste Determinations on File and Available for Review***

## How can you tell if the can is empty in accordance with [401 KAR 39:005, Section 1?](#)

Some material always remains in an aerosol can no matter how ‘empty’ it seems. In order to be considered empty, aerosol cans typically require puncturing. Special devices are available to puncture and capture the contents of an aerosol can. To be considered empty, in accordance with [40 CFR 261.7](#):

- A container or inner liner is considered empty if all wastes that can be removed using common practices (e.g., pouring, pumping, aspirating) have been removed, and no more than 1 inch of residue or more than 3 percent by weight of the total capacity of the container remain on the bottom of the container or inner liner.
- Containers that have held hazardous waste in the form of compressed gas are considered empty when the pressure in the container approaches atmospheric.
- Containers that have held acute hazardous are considered empty if they have been triple rinsed using a solvent capable of removing the chemical, cleaned by an equivalent method, or have had the inner liner removed.



## What are the disposal options for Universal Waste Aerosol Cans?

Managing aerosol cans as universal waste (UW) allows them to be collected, stored, and managed safely in a manner that encourages recycling and helps prevent releases to the environment. Management options include are below:

- **Puncture and Recycle the Empty Cans as Universal Waste:** If the can meets the definition of scrap metal, then it may be punctured onsite, drained and recycled. All residual liquids from draining must be managed appropriately.
- **Collect and Send the Intact Cans Offsite as Universal Waste:** If the facility chooses not to puncture and drain the cans, then the non-empty cans can be sent offsite to a universal waste handler.
- **Dispose as Hazardous Waste:** If the can contains hazardous wastes and is not punctured and drained appropriately, then it must be treated and managed as hazardous waste.
- **Recycle as Hazardous Waste:** There is no regulation prohibiting recycling aerosol cans that are not punctured. These cans would not meet the scrap metal exemption and would be fully regulated for storage and transport.
- **Puncture and Dispose of Cans as Solid Waste:** Puncturing and disposing of the cans as solid waste is considered treatment-on-site, which requires a permit from the KY Division of Waste Management.

*Note: Containers for all un-punctured aerosol cans and drained hazardous materials from puncturing must meet requirements listed in [401 KAR 39:080](#). As with other hazardous waste requirements, containers should be closed and labeled appropriately by following correct labeling procedures.*

## What about shipping?

Although shipments of UW offsite do not require Uniform Hazardous Waste Manifests, they must meet Department of Transportation requirements, including placarding if wastes are hazardous.

The waste can only be shipped to a facility that has agreed to receive the shipment for management, and the handler must be notified whether the shipment has been accepted or rejected.

Large Quantity Generators (LQGs) must keep records of shipments, while small quantity generators (SMGs) and very small quantity generators (VSQGs) are considered exempt.

## Hazardous Waste Generator Status and Universal Waste

The regulated participants in the universal waste system include small quantity handlers of universal waste (accumulates less than 5,000 kg of universal waste), large quantity handlers of universal waste (accumulates 5,000 kg or more of universal waste), universal waste transporters, and universal waste destination facilities. Universal waste regulations have the following effects on hazardous waste generators:

- VSQGs can place scrap metal in solid waste;
- SQG and LQG facilities must recycle scrap metal;
- All generators have a one year accumulation time limit;
- UW generated in an episodic event will not be added to the facility hazardous waste total for reporting month or year;
- UW will not change generator status;
- UW will not change the requirements for registration (limit 11,000 lbs).

## Where can you look for more information?

- ◆ Environmental Protection Agency — Webpage for Aerosol Cans as Universal Waste

<https://www.epa.gov/hw/increasing-recycling-adding-aerosol-cans-universal-waste-regulations>

- ◆ Kentucky Division of Waste Management — Webpage for Hazardous Waste Forms

<https://eec.ky.gov/Environmental-Protection/Waste/hazardous-waste/Pages/hazardous-waste-forms.aspx>

The information in this document is offered only as general guidance. It is not a substitute for reading and understanding Kentucky's statutes and regulations governing the applicability and issuance of environmental permits. Specific requirements may vary with location. ECAP is not authorized to relieve any person from any requirement of federal regulations or Kentucky law through this document.

