

waste under less stringent regulations known as the <u>Universal Waste Rule</u>. The regulations for the universal waste program were developed by the U.S. Environmental Protection Agency (EPA) in 1995 and adopted by Kentucky in 1997. Therefore, the same rules at the federal level apply at the state level. The purpose of the program is to encourage recycling and proper disposal of certain common hazardous wastes by removing burdensome regulations.

What Are the Universal Waste Categories?

Batteries

This category includes batteries found in common items such as cell phones, electronics, computers, power tools, and emergency backup lighting. Examples include nickel-cadmium (Ni-Cd) rechargeable batteries, small sealed lead-acid batteries, and lithium-ion batteries.

Spent Lamps

Fluorescent light bulbs are the most common item in this category of universal waste. Other examples include incandescent, high pressure sodium, mercury vapor, metal halide, high intensity discharge (HID), and neon bulbs or tubes. Note: For retail stores, this includes items used by the store as well as damaged products and customer returns.

Pesticides

This category includes agricultural pesticides that have been recalled, banned, damaged, or are obsolete, or no longer used. Note: The Kentucky Department of Agriculture regulates the registration, sale, distribution, proper use, and product storage of pesticides. For more information, please visit: https://www.kyagr.com/consumer/product-registration.html.

Mercury-Containing Equipment

Mercury-containing equipment includes devices such as thermostats and thermometers, which can contain as much as 3 grams of liquid mercury. These items are found in almost any commercial, industrial, agricultural, or community building, as well as households.

Aerosol Cans Containing Hazardous Waste

Aerosol cans were recently added as a category recognized under the Universal Waste Rule. Aerosol cans include non-opening, non-refillable containers that hold a substance under pressure and that can release as a spray, gel, or foam by means of a propellant gas.

MANAGING UNIVERSAL WASTE FROM CRADLE-TO-GRAVE

Cradle-to-grave is a term meaning from start to finish. It is used to describe how hazardous waste is managed from the point of generation through final disposal. All generators are responsible for their waste material from start to finish. In the cradle-to-grave process, universal wastes can be stored, collected, and transported under less burdensome rules. In the final link of the process, however, universal wastes must be treated, recycled, or disposed under full hazardous waste requirements.

Key Elements for Complying with Universal Waste Regulations:

- 1) Knowledge of waste types and applicable laws.
- 2) Oversight for handling, storing, and shipping.
- Training on emergency procedures and proper handling for all employees.

Who Is Affected by the Universal Waste Rule?

Businesses (Generators)

Universal wastes are generated by small and large businesses. As a generator of waste, businesses are responsible for complying with waste management regulations and laws. In addition, businesses are responsible for making sure that employees comply. Liability begins when the waste is generated and continues through collection, transport, treatment or processing, and final disposal.

Tip: If a business receives products with warning labels indicating that the substances are flammable, toxic, reactive, or corrosive, then a waste determination should be conducted.

Waste Haulers (Transporters)

All waste haulers, or transporters, must comply with the <u>Kentucky Transportation Cabinet</u>. Although a transporter of universal wastes is not required to register as a hazardous waste hauler, they are required to take the waste to a universal waste handler or facility. For this reason, transporters should keep records of shipments for at least three years.

Waste Facilities (Transfer Sites, Recycling Destination Facilities)

All generators must send their universal waste to one of the following: another location for consolidation and shipment (transfer sites); or a hazardous waste recycling facility (destination facility). Universal waste destination facilities are permitted hazardous waste treatment, storage and disposal facilities (TSDFs).

Households and Communities

Universal wastes are frequently generated at home. Households, however, are not subject to hazardous waste rules. Although households can dispose of these wastes with their trash, solid waste landfills are designed for only small amounts of universal hazardous waste. Therefore, residents are encouraged to take their universal wastes to local collection centers for recycling or disposal.

Benefits of the Universal Waste Rule

Knowing how to identify universal waste has the potential to reduce management and disposal costs for retail businesses, companies, and other entities that generate these wastes. Here are some benefits:

- ♦ The weight of the waste is not included when determining the monthly hazardous waste generator status.
- The waste can be stored for up to one year from the start of accumulation, instead of the 90 or 180 days designated under the hazardous waste generator accumulations regulations.
- The waste can be diverted from landfills by offering collection and recycling programs as an additional service to customers (e.g. batteries and lightbulbs).
- The waste can be transported using a common carrier, instead of a hazardous waste transporter.
- The waste can be transported without the requirement to prepare a manifest tracking form.



What are the Steps to Complying with the Universal Waste Rule?

Step 1) Make a waste determination and identify hazardous wastes.

Waste determinations are the first step in safe management of hazardous waste. To make a waste determination, a generator can use a laboratory analysis or their own knowledge. For laboratory analysis, a sample must be tested using a method such as the Toxicity Characteristic Leaching Procedure (TCLP). For knowledge-based determinations, it is acceptable to use Safety Data Sheets or familiarity with the waste. It is important to keep all documentation on any waste determinations available upon request.

Step 2) Determine your waste handler status.

A universal waste handler can be either a generator of universal waste or a facility that collects universal waste from other handlers before shipping it to an approved facility. Any business or company that generates and/or handles universal waste must determine their status. This is accomplished by counting the weight of universal waste produced each month. Different regulations apply depending on the handler status. The two categories of handler status are:

Large-Quantity Handlers, which accumulate 11,000 lbs. or more each month; and **Small-Quantity Handlers,** which accumulate less than 11,000 lbs. at any time.

Step 3) Manage universal waste properly and comply with rules.

All universal waste must be managed in a way that prevents its release to the environment. Generally, the requirements include proper handling, labeling, storing, containing, and promptly cleaning spills or leaks. A leaking container must be taken out of service immediately and any released material must be contained and cleaned up. Finally, all employees handling universal wastes must be trained in order to ensure compliance.

Best Management Practices for Universal Waste

- Keep universal waste in a designated accumulation area.
- Use separate containers for each type of universal waste.
- ◆ Label containers with the type of universal waste.
- ♦ Label containers with the start date of accumulation.
- Practice safe handling to ensure waste does not become physically damaged.
- Store items upright in a sturdy container and routinely check for leaks and spills.
- Manage physically damaged wastes and clean up materials as hazardous wastes.
- Keep cleanup supplies in storage area (bags, disposable wipes, absorbent pads, etc.).
- Maintain cool and well-ventilated accumulation areas; avoid extreme temperatures.
- Do not stockpile or exceed the one-year accumulation time frame.
- ♦ Train employees on proper handling and emergency procedures.
- Do not dilute, treat, recycle, or dispose on site.
- Transport only to an authorized transfer site or a permitted destination facility.











Summary of Universal Waste Requirements For Small-Quantity and Large-Quantity Handlers

Federal regulations for universal waste can be found under EPA's 40 CFR Part 273. State requirements for universal waste can be viewed in detail at 401 KAR 30:080.

Note: Kentucky's regulation incorporates the federal Universal Waste Rule.

UNIVERSAL WASTE REQUIREMENT	SMALL QUANTITY HANDLER	LARGE QUANTITY HANDLER
QUANTITY HANDLED	Less than 11,000 lbs. on site at any one time	More than 11,000 lbs. on site at any one time
EPA IDENTIFICATION (must obtain EPA Id #)	Not Required	Required
DWM REGISTRATION (must submit DEP 7037 A Form and EPA Form 8700)	Not Required	Required
ACCUMMULATION LIMIT (on site)	Less than 11,000 lbs. (on site at any one time)	No quantity limit
STORAGE TIME LIMIT	One Year *unless for proper recovery, treatment or disposal	One Year *unless for proper recovery, treatment or disposal
MANIFEST (hazardous waste tracking form)	Manifest not required, but must keep basic shipment records.	Manifest not required, but must keep basic shipment records.

Useful Links and Resources

- For an overview of hazardous waste regulations and requirements for hazardous waste generators, please link to: https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/DCA%20Resource%
 20Document%20Library/HazardousWasteGeneratorsHandbook.pdf.
- ◆ To access KY DEP Forms and Instructions for hazardous waste generators and activities, go to: https://eec.ky.gov/Environmental-Protection/Waste/hazardous-waste/Pages/hazardous-waste-forms.aspx.
- For an overview of the Universal Waste Rule, please link to the Environmental Protection Agency's webpage at: https://www.epa.gov/hw/universal-waste.
- For answers to common questions, see: https://www.epa.gov/hw/frequent-questions-about-universal-waste.
- ◆ To find this fact sheet and other resources from the Environmental Compliance Assistance Program (ECAP): https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/Pages/DCA_Library.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.

