

## Universal Waste Rules for Handlers of Lamps

---

DHWM Guidance Document

Date: June 2005

### Purpose:

This guidance document is intended to provide handlers with an overview of the universal waste rules (UWR) as they pertain to hazardous waste lamps. Ohio's UWR are found in Ohio Administrative Code (OAC) Chapter [3745-273](#). This document is not intended to be a substitute for reading the universal waste rules.

### Introduction:

Ohio EPA's use of the term "lamp" [see OAC rule [3745-50-10\(A\)](#)] applies generically to hazardous waste lamps including: incandescent, fluorescent, metal halide, neon, high-intensity discharge, high-pressure sodium and mercury-vapor lamps. Fluorescent lamps may contain up to 40 milligrams (mg) of [elemental mercury](#), depending on the brand and manufacturer date. Lamps may also contain lead and cadmium. Because most lamps exhibit the characteristic of toxicity for heavy metals when disposed, they could be a hazardous waste.



A waste must be a hazardous waste before it is defined as a universal waste. If a hazardous waste stream is not managed under the universal waste rules, then it must be managed as a hazardous waste under the applicable regulations if the waste exhibits any hazardous waste characteristic. Non-hazardous lamps also can be managed as universal wastes, although the universal waste compliance standards are not required.

### Background:

Lamps have been added to Ohio's list of universal wastes (UW). The list of UW includes certain suspended and recalled pesticides, mercury-containing thermostats, and discarded batteries. When lamps were added to the list of universal wastes, Ohio revised the classification of hazardous lamps in the hazardous waste program.

## Universal Waste Rules for Handlers of Lamps

---

Previously, **used** lamps that were being recycled were considered characteristic byproducts. This removed them from regulation as wastes and therefore hazardous wastes. Used lamps that were being discarded were to be evaluated to determine whether they were hazardous. Now hazardous lamps are considered “spent materials” and remain hazardous waste even when recycled, unless they are managed as universal wastes (see OAC rule [3745-51-02](#)). Hazardous waste lamp generators have the option of handling their lamps as hazardous waste or as UW. Managing hazardous waste lamps under the UWR eases certain regulations imposed on generators of spent lamps.



**Non-hazardous Lamps:** Ohio EPA recommends recycling lamps that do not exhibit hazardous waste characteristics. While these lamps are not hazardous waste, Ohio EPA encourages recycling rather than disposal. Non-hazardous lamps still contain low amounts of heavy metals such as mercury that could potentially harm the environment.

### Who are UW handlers?

UW handlers include persons who generate, receive and store, but do not treat, dispose of or recycle UW generated elsewhere. Ohio’s hazardous waste rules state that a person who receives and stores hazardous waste is required to have a storage permit. Generators of universal waste who want to take advantage of the UWR instead of the hazardous waste generator requirements, must comply with all UW handler requirements. The UWR allows these persons to accept and store UW from off-site without having to obtain a storage permit. However, UW handlers cannot treat, dispose of or recycle UW.

### What are the UW handler categories?

UW handlers are classified into two categories based on the quantity of UW waste they accumulate at any time:

- [small quantity handlers](#) [accumulate less than 5,000 kilograms (11,023 pounds) of UW (not by type) at any time], or
- [large quantity handlers](#) [accumulate more than 5,000 kilograms (11,023 pounds) of UW (not by type) at any time].

If a small quantity UW handler accumulates more than 5,000 kilograms of UW on-site at any time, they must comply with the large quantity UW [handler requirements](#) for the remainder of the calendar year. All generators have the option of handling their UW under the UWR or under Ohio’s hazardous waste generator requirements found in OAC Chapter [3745-52](#).

## Universal Waste Rules for Handlers of Lamps

---

**Note:** UW should not be counted when making quantity determinations for hazardous waste generator categories (i.e., conditionally exempt small quantity generators (CESQGs), small quantity generators (SQGs) and large quantity generators (LQGs)). Universal waste handlers' status levels should not be confused with hazardous waste generator status levels.

### May I use a lamp crusher to crush the lamps I generate?

The UWR prohibits handlers from crushing lamps. If you are the lamp generator and you want to continue crushing them, you have the option of managing those lamps under the hazardous waste generator requirements in OAC Chapter [3745-52](#). You cannot send crushed hazardous lamps to an unpermitted handler. They must be transported by a registered hazardous waste transporter to a permitted hazardous waste facility accompanied by a hazardous waste manifest. While some commercially available lamp crushers are designed to control mercury emissions when properly maintained, please beware that due to the unique properties of mercury, there is a high potential for exposure to harmful mercury vapors when lamps are crushed.

### What are the packaging requirements for UW lamps?

Lamps must be packaged to minimize breakage and must be designed to contain potential releases due to breakage. Some examples of acceptable packaging include double- or triple-ply cardboard containers with closed lids or packaging in which new lamps are shipped from the manufacturer. Broken, damaged or leaking lamps can be sent to permitted recycling facilities. Acceptable storage for broken lamps includes a closed 55-gallon steel drum or a closed wax fiberboard drum.

**Warning:** Because of its unique properties, [mercury](#) from broken or crushed lamps can become airborne at room temperature and can seep into cracks and porous materials such as cloth, carpet or wood, slowly emitting vapors over a long period. Immediate and proper containment of a mercury release is very important. For information on mercury containment and clean up, contact your local fire department or call [Ohio EPA's spill hotline](#) at (800) 282-9378.

### What are the labeling requirements for UW lamps?

Universal waste lamps or their containers must be clearly marked “Universal Waste Lamp(s),” “Waste Lamp(s)” or “Used Lamp(s).” The containers should never be labeled “Hazardous Waste” unless being managed as such.

UW handlers must be able to demonstrate the accumulation time for all universal wastes. Accumulation begins with the date the lamps became a waste or were received. The handler may make this determination by:

- placing the lamps in a container and marking or labeling the container with the earliest date that any UW in the container became a waste or was received;
- marking or labeling the individual item of UW (i.e., each lamp) with the date it became a waste or was received;
- maintaining an inventory system on-site that identifies the date the lamp(s) being accumulated became a waste or was received;
- maintaining an inventory system on-site that identifies the earliest date that any UW in a group of UW items or a group of containers of UW became a waste or was received;
- placing the UW in a specific accumulation area and identifying the earliest date that any UW in the area became a waste or was received; or
- any other method which clearly demonstrates the length of time that the UW has been accumulated from the date it became a waste or was received.



### Am I required to notify Ohio EPA of my UW activities?

Small quantity UW handlers and transporters are not required to notify Ohio EPA of their activities and are not required to obtain an EPA hazardous waste ID number. Large quantity UW handlers must [notify Ohio EPA](#) in writing and must obtain an [EPA hazardous waste ID number](#) prior to exceeding the 5,000 kg storage limit. Large quantity UW handlers that have previously notified Ohio EPA of their hazardous waste activities and who have received an EPA identification number are not required to renotify. For specifics on the [notification requirements](#), see OAC rule [3745-273-32](#).

### How long may I accumulate UW lamps?

If you are a UW handler, you may accumulate UW fluorescent lamps on-site for up to one year regardless of your status. If greater than a year accumulation is required, you must be able to prove that the accumulation is necessary in order to facilitate proper recovery, treatment or disposal.

## **Universal Waste Rules for Handlers of Lamps**

---

### **Who can I send or take my UW lamps to?**

As a universal waste handler, you can send or take lamps only to another [UW handler](#) or to a [permitted \(if in Ohio\) destination facility](#). If you are sending your UW lamps to a facility outside Ohio, the out-of-state destination facility must be authorized by that state to accept lamps.

### **Am I required to manifest my UW lamps?**

No. UW handlers are not required to manifest their off-site shipments. However, all UW handlers must ensure delivery of their universal waste to another UW handler or to a permitted destination facility as defined in OAC rule [3745-273-09\(B\)](#).

### **Do I need to use a special transporter like I do for my other hazardous waste?**

No. UW handlers are not required to use a certain transporter. Universal waste transporters, however, must comply with DOT [packaging/labeling](#) requirements, transfer facility [storage](#) requirements and must immediately contain all [releases](#) of universal waste in the event of a spill.

### **May I transport my own universal waste lamps?**

Yes. Both small and large quantity universal waste handlers can transport their universal waste lamps to either another universal waste handler or to a universal waste destination facility if they comply with the universal waste [transporter requirements](#) in OAC rules [3745-273-50 through 3745-273-56](#).

### **What are my record-keeping requirements?**

If you are a small quantity UW handler, you are not required to keep off-site shipment records of UW. If you are a large quantity UW handler, you are required to retain shipment records received on-site and shipments sent off-site for at least three years. For specifics, see OAC rule [3745-273-39](#).

For more information on Ohio's UWR, please see our guidance document entitled, "[Universal Waste Rule](#)" and our [universal waste handler requirements summary table](#) available on our [Web page](#). If you have questions regarding information contained in this guidance document, please contact Ohio EPA's Division of Hazardous Waste Management's [Regulatory Services Unit](#) at 614-644-2917 or visit our [Web site](#).