

May 2008

Ohio's Universal Waste Rules: Are You Handling Used Lamps Correctly?

Used light bulbs (or lamps) generated from businesses, schools, hospitals and other facilities may meet Ohio EPA's definition of hazardous waste because of high levels of mercury, lead or cadmium. Ohio EPA's use of the term lamp applies generally to hazardous waste lamps, including:

- fluorescent;
- incandescent;
- metal halide;
- neon;
- high intensity discharge;
- high pressure sodium; and
- mercury vapor lamps.



If your lamps are hazardous, the easiest option is to manage them under Ohio's universal waste rules (UWR). Ohio EPA encourages this option because it promotes recycling and there are fewer requirements for you to follow than under the general hazardous waste rules. If you don't manage your hazardous waste lamps as universal waste, you must send them to a permitted hazardous waste disposal facility and follow additional rules. This second option means more requirements and maybe higher disposal costs.

Compliance Screening Checklist

This checklist will help you determine if you are correctly handling your lamps under the universal waste rules. This checklist should not be your only resource in understanding the regulations. It's a starting point and is not a substitute for reading the rules. See the resource list at the end of this checklist if you need more help.

This checklist is for small quantity universal waste handlers. This means that, at your facility, you never accumulate more than 11,023 pounds (or 5,000 kgs.) of lamps and other universal wastes such as certain suspended and recalled pesticides, mercury-containing thermostats and discarded batteries. If you accumulate more than 11,023 pounds of universal waste, you are a large quantity handler and must comply with additional requirements not covered by this checklist. See the resource list at the end of this checklist for more information.



If you are throwing your lamps in the dumpster, you may be illegally disposing of hazardous waste!

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If the answer you select is in **BOLD**, you have a violation. Take action to correct problems.

WASTE EVALUATION

1. Are you throwing any lamps in your trash dumpster? YES NO
2. If you answered YES to question 1, do you have documentation that your lamps are nonhazardous, such as up-to-date, comprehensive testing data from the manufacturer, or results of other lab testing? YES **NO**

If you answered NO to question 2, you may be illegally disposing of hazardous waste. Stop throwing lamps in the trash immediately until you have determined whether they are hazardous or not. See the resource list at the end of this fact sheet for information on how to evaluate your lamps.

If you answered YES to questions 1 and 2, you do not have to go any further. If you have determined that your lamps are nonhazardous, you can legally throw these in the trash along with other solid waste. However, it is your responsibility as the generator to have documentation on-site to show that your lamps are nonhazardous. You can use analytical (TCLP) data from the manufacturer, as long as the lamps were tested for all relevant hazardous waste characteristics. In addition to mercury, lamps may contain heavy metals such as lead and cadmium, also regulated hazardous waste constituents. If you do not have complete information from the manufacturer, you must have other documentation such as testing results from a lab.

Even if your lamps are not hazardous, they still may contain some mercury and other contaminants that can be released to the environment when put in a solid waste landfill. They also have glass and metal that can be recycled. For these reasons, we recommend you recycle nonhazardous lamps too.

MANAGING YOUR HAZARDOUS WASTE LAMPS AS UNIVERSAL WASTE

If you manage lamps as universal waste, you do not have to evaluate them, count them toward your total hazardous waste generator status or manifest them.

3. Do you put your used lamps in a container that is structurally sound, compatible with the contents of the lamps and designed to prevent breakage? YES **NO**
4. If a lamp breaks inside the container, will the container prevent a leak? YES **NO**

To help prevent breaks and leaks, put your used lamps back in their original packaging before you put them in a container. Wax fiberboard containers are a good option for bulb storage.

5. Are used lamp containers kept closed? YES **NO**

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6. Are containers labeled "used lamps," "universal waste lamps" or "waste lamps?" YES **NO**

7. Have you informed employees who handle used lamps about how to handle them safely and what to do if there is an emergency (for example, a leak or break)? YES **NO**

8. Can you show through container labels or records how long you have been storing used lamps at your facility? YES **NO**

You can do this by marking the container with the date the first lamp is placed in the container, marking the date on each lamp or having an inventory sheet.

9. Are you storing any used lamps on-site for more than one year? **YES** NO

If you store lamps on-site for more than one year, you must be able to demonstrate that this length of time is needed to arrange for off-site recycling, treatment or disposal. Send used lamps off-site within a year to avoid this requirement.

10. Do you have more than 11,023 pounds (5,000 kgs.) of used lamps or other universal wastes at your business? **YES** NO

If you accumulate more than 11,023 pounds of universal waste (this would include lamps and other universal wastes such as certain suspended and recalled pesticides, mercury-containing thermostats and discarded batteries), you are classified as a large quantity handler. Large quantity handlers have several other rules to comply with, including notifying Ohio EPA, obtaining a U.S. EPA identification number and additional record keeping. Stay below 11,023 pounds to reduce your requirements.

11. Do you send used, unbroken lamps to one of the following: YES **NO**

- (a) a universal waste handler (another business that manages universal waste);
- (b) an Ohio facility that has a permit to treat/dispose/recycle lamps; or
- (c) an out-of-state facility that is authorized to treat/dispose/recycle lamps?

If you accidentally break a lamp, it can be managed as a universal waste or under Ohio's hazardous waste rules. If you want to manage it as a universal waste, check first with your universal waste handler or disposal facility to confirm that they will accept a broken lamp.

12. Do you crush any used lamps? **YES** NO

Under the universal waste rules, you cannot crush your hazardous lamps. If you want to crush your own lamps, you must manage them under the hazardous waste rules. Crushed lamps must go to a permitted hazardous waste disposal facility and cannot be managed as a universal waste.

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GLOSSARY OF TERMS

Destination facility: A permitted facility that treats, disposes of, or recycles universal waste.

Small quantity universal waste handler: Accumulates less than 5,000 kilograms (11,023 pounds) of universal waste (not by type) at any time.

Large quantity universal waste handler: Accumulates 5,000 kilograms (11,023 pounds) or more of universal waste (not by type) at any time.

Toxicity Characteristic Leaching Procedure (TCLP): The TCLP is an analytical procedure performed by a lab to determine whether a waste exhibits hazardous waste characteristics for specific toxic contaminants, such as heavy metals, pesticides and other organics. Mercury, lead, chromium and cadmium are some of the heavy metals regulated under the hazardous waste rules.

ADDITIONAL RESOURCES

Universal Waste Rules for Handlers of Lamps (Ohio EPA)

www.epa.state.oh.us/dhwm/pdf/Universal_Waste_Rules_for_Handlers_of_Lamps.pdf

Summary Table of Universal Waste Handling Requirements (Ohio EPA)

www.epa.state.oh.us/dhwm/pdf/UniversalWasteRequirementsTable.pdf

List of Computer, Fluorescent Lamp and Ballast Recyclers (Ohio EPA)

www.epa.state.oh.us/dhwm/pdf/comp.lamp.ballast.list.pdf

Ohio EPA, Division of Hazardous Waste Management

Additional Web Resources on Fluorescent Lamps

www.epa.state.oh.us/dhwm/guidancedocs.html#fluorescent

Ohio EPA, Office of Compliance Assistance and Pollution Prevention

www.epa.state.oh.us/ocapp/ocapp.html

Identifying Your Hazardous Waste (Ohio EPA)

www.epa.state.oh.us/ocapp/sb/publications/identifyingwaste.pdf