

## **Universal Waste Lamps**

The United States Environmental Protection Agency (EPA) in an effort to ease management of common wastes developed the Universal Waste Rules. These rules cover batteries, recalled pesticides, thermostats, and as of January 2000, hazardous waste lamps (lamps). Lamps may be hazardous due to high levels of mercury, other heavy metals, and leaded glass which may contaminate landfills. **Small and large quantity generators must manage hazardous waste lamps either as a hazardous waste, or under the universal waste rules.** The universal waste rules are designed to be business friendly, and easily implemented. Universal wastes are not manifested, do not count toward generator status and the storage and record keeping requirements are more relaxed.

There are two levels of regulation regarding universal waste:

**Small Quantity Handler of Universal Waste (SQHUW)** is defined as any business (handler) which *does not* accumulate more than 5,000 kilograms (11,000 pounds) at anytime.

**Large Quantity Handler of Universal Waste (LQHUW)** is defined as any business (handler) which accumulates *more than* 5,000 kilograms (11,000 pounds) at anytime.

This fact sheet addresses the requirements for SQHUW. Requirements are different for large LQHUW. If you feel your business may be a LQHUW, please contact the Business Environmental Program (BEP) for additional guidance (800) 882-3233 or (702) 866-5927.

**Conditionally Exempt Small Quantity Generators** are facilities which accumulate less than 100 kilograms (220 pounds) of all hazardous wastes in any month. These facilities have the options of managing waste lamps under this rule or under the CESQG exemption in 40 CFR 261.5. NDEP and BEP encourage these generators to participate voluntarily in collection and recycling programs to ship these waste lamps to collection centers for recycling or proper treatment and disposal.

### **Can I use a Bulb Crusher for my Fluorescent Lamps?**

Bulb crushing is considered treatment under RCRA and is not a management option for handlers of Universal Waste. Crushed tubes or lamps may not be managed as a Universal Waste. A business that uses a bulb crusher must follow applicable hazardous waste generator rules found in 40 CFR 262, and 268 and Nevada Administrative Code 444.8671. Because the Land Disposal Restrictions (40CFR 268) impose the restriction requirements to the waste at the point of generation, these regulations are determined by the hazardous characteristics of the fluorescent tubes before they enter the bulb crusher unit. This means that you cannot make a waste determination by conducting an analysis of the crushed bulbs in the unit, you must determine whether the bulbs you intend to put into the crusher are hazardous waste. This requires a special testing protocol that is typically conducted by the manufacturer of the fluorescent tubes and documented in the MSDS. Unless a facility is able to document that each bulb or tube placed in the bulb crusher is not hazardous for Mercury or other metals, the crushed bulbs are required to be managed as hazardous waste. The crushed bulbs would then be counted in the generator's monthly quantity determination to determine the business' generator status. A generator of hazardous waste is obligated to minimize the release of the mercury found in the lamps and the bulb crusher must be a closed container, so a control device is required on all crushers to prevent emissions.

**BEP Toll-Free Assistance Line (800) 882-3233 (In Nevada) or (775) 689-6688  
BEP Las Vegas (702) 866-5962**

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## How do I Manage the “Green” Fluorescent Lamps?

Newer “green” lamps that do not fail the hazardous waste toxicity test for mercury are available from several manufacturers. But, the bottom line is that all fluorescent lamps contain some type of mercury. Please check the manufacturer’s literature and with your disposal facility to ensure that these lamps may be safely managed as non-hazardous solid waste. Although these lamps may pass the hazardous waste test, they nevertheless contain mercury, so remember to manage these lamps properly. Like hazardous and universal waste lamps, these lamps may also be sent off to lamp processor/recyclers.

## Can household owners dispose of fluorescent lamps in the trash?

Mercury-containing waste lamps are also generated by households, **which are not regulated under RCRA.** Households are allowed to dispose of lamps in the trash. However, NDEP highly encourages residents to take these lamps to collection centers, if available.

## What types of lamps are considered universal wastes?

EPA defines "lamp" or "universal waste lamp" as "the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum." Examples of lamps include, but are not limited to, fluorescent tubes, compact fluorescent lamps (CFL), high intensity discharge, neon, mercury vapor, high-pressure sodium, and metal halide lamps.

## Management of universal waste lamps

### Storage and Accumulation Time

Universal waste lamps should be re-packaged in the original container they were received in, or sturdy containers designed to prevent breakage or leakage during foreseeable conditions. **DO NOT CRUSH HAZARDOUS WASTE LAMPS IF YOU INTEND TO HANDLE THEM AS UNIVERSAL WASTES.** Intentionally crushing lamps is considered treatment, and crushed lamps must be handled as hazardous waste. In the event a lamp is unintentionally broken, the debris must be placed into a suitable container. Universal Waste Handlers may or may not take unintentionally broken lamps as a universal waste. If a lamp that has been unintentionally broken requires disposal then it should be managed as a hazardous waste unless the generator has documentation from the manufacturer that the lamp is non-hazardous.

Lamps may not be stored on-site for longer than one year unless the handler (generator) can demonstrate to the EPA that more time is necessary to recycle the waste. Businesses accumulating universal wastes need to be able to demonstrate the length of time the universal waste has accumulated on-site. This can be accomplished by marking the initial date of accumulation on the container, using an inventory system, or placing the universal waste in a segregated storage area.

### Transportation

Universal waste lamps may be shipped under a bill of lading. Manifesting is not required unless the shipment goes through a state where the universal waste is considered a hazardous waste.

Universal waste may be shipped to:

- Another universal waste handler, or
- Destination facility (state approved recycling facility or a licensed Treatment, Storage or Disposal Facility [TSD]).

### Recordkeeping

SQHUV are not required to keep records of universal waste shipments. However, BEP recommends business accumulating and shipping universal waste maintain documents supporting their practices.

## Training

Employees who handle or manage universal waste must be trained regarding the handling and emergency procedures appropriate to the universal waste accumulated on-site.

Note: Conditionally Exempt Small Quantity Generators (CESQG) are not bound by federal law to manage their spent lamps under the universal waste rules. Both NDEP and BEP strongly advocate the proper recycling of these wastes.

### **Companies Accepting Universal Waste Lamps**

#### **Sources of Low Mercury Florescent Tubes**

**Note: These are companies BEP is aware of that accepts universal waste lamps or sells low mercury tubes in Nevada. Other companies may also accept lamps or sell low mercury lighting.**

For more information regarding universal waste, visit <http://www.epa.gov/epaoswer/hazwaste/id/univwast.htm>

#### **Northern Nevada**

Safety-Kleen  
Sparks, NV  
(775) 331-4477

Superior Services Inc  
(800) 556-LAMP

Philip Services  
Fernley, NV  
(775) 575-2760

Universal Environmental  
Sparks, NV  
(775) 331-2455

#### **Southern Nevada**

Safety-Kleen  
N. Las Vegas, NV  
(702) 633-4282

Superior Services Inc  
(800) 556-LAMP

Philip Services  
Fernley, NV  
(775) 575-2760

Pest West Environmental  
Las Vegas NV  
Toll Free 1-866-476-7378  
or 954-410-5869  
Fax Request for Boxes:  
1-866-347-8372

## Web Resources for Universal Waste Lamps

#### **Northern Nevada**

Phillips  
Ray Carvalho  
(702) 838-5466

General Electric  
Mark Laffin  
(916) 922-1903

Sylvania  
Royal Wholesale  
Electric  
Sparks, NV  
Don Atwood  
(775) 359-8330

Grainger  
(775) 331-7504  
(800) 846-7366  
Sparks, NV

#### **Southern Nevada**

Phillips  
Ray Carvalho  
(702) 838-5466

General Electric  
John Spadora  
(702) 396-9090

Sylvania  
Don Ziemski  
Las Vegas, NV  
(800) 795-8264  
x1222

Grainger  
(702) 385-6833  
Las Vegas, NV