



MANAGEMENT OF USED FLUORESCENT LAMPS

FACT SHEET

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Fluorescent bulbs provide energy efficient lighting, resulting in a reduction in energy consumption and the reliance on non-renewable resources. Many fluorescent and high intensity discharge lamps contain mercury and sometimes lead. When the lamps are broken or disposed of in a landfill or incinerator, the mercury and lead can contaminate the environment. Policies for management of used lamps are meant to limit the amount of mercury and lead that escape into the environment for the protection of public health and the environment.

Management Options for Used Lamps

Used lamps may be managed in one of the following ways:

1. As a non-hazardous waste:
According to 40 Code of Federal Regulations (CFR) 262.11, a generator is required to determine if any of its solid wastes are hazardous wastes. If the lamp tests below the regulatory limit of 0.2 mg/L of mercury or 5.0 mg/L of lead using the Toxicity Characteristic Leaching Procedure, then the lamps can be handled as a non-hazardous waste. Used lamps cannot be thrown in the trash unless it has been determined by testing that they do not contain levels of mercury or lead that would classify them as a hazardous waste. If they are non-hazardous, they can be packaged and sent to a permitted solid waste landfill.

2. As a hazardous waste:
The generator can assume that the used lamps are a hazardous waste without testing them. The used lamps may be handled as:
 - A. Hazardous waste, following applicable standards such as manifesting, record keeping, labeling, etc, and sent to a permitted treatment, storage, recycling, or disposal facility. Standards for hazardous waste management are located in 40 CFR Parts 261-268.
 - B. Universal waste, following alternative, less restrictive standards for transporting and storing hazardous waste. The generator must ensure delivery of used lamps to a permitted treatment, storage, recycling, or disposal facility.

The Universal Waste Rule

Hazardous waste lamps have been added to the federal list of universal wastes, regulated under the Resource Conservation and Recovery Act. Before the Universal Waste Rule, many used lamps had to be disposed of as hazardous waste because they frequently contain mercury, and sometimes lead. Handlers of universal wastes are subject to less stringent standards for storing, transporting, and collecting these wastes than hazardous wastes. For example, the rule extends the amount of time that businesses can accumulate these materials on site and allows companies to transport them using a common carrier without a manifest instead of with a hazardous waste transporter. The federal requirements for handling hazardous waste lamps as a universal waste are located in the July 6, 1999 Federal Register pages 36465-36490. Standards for Universal Waste Management are found in 40 CFR Part 273. The State of Oklahoma Hazardous Waste Management Rules has incorporated the federal register by reference effective June 14, 2000.

Universal Waste Handling Requirements

Handlers of used lamps as universal waste are subject to the following requirements:

- Store the lamps intact for up to one year, minimizing breakage.
- Label the lamps as "Universal Waste Lamps" or "Waste Lamps" or "Used Lamps".
- Be able to demonstrate the length of time the used lamps have been accumulated by either putting the date the used lamp became a waste or through another inventory method.
- Immediately contain all spills/releases
- Train employees on universal waste handling requirements
- May be shipped without a manifest, but records must be kept showing how many used lamps were shipped to a location.
- Ensure delivery of used lamps to a permitted treatment, storage, recycling, or disposal facility.

If more than 5,000 kg of universal waste are accumulated in one calendar year, the business is a "Large Quantity Handler" and must notify the Oklahoma Department of Environmental Quality to receive an EPA Identification Number. Tracking records of shipments of used lamps must be kept for three years.