

# LAND

## Management of Waste Fluorescent Lamps

Fluorescent lamps provide energy efficient lighting, resulting in a reduction in energy consumption and the reliance on non-renewable resources. However, due to the mercury content of some types of lamps, it is important that they be managed in a manner that minimizes the potential for release to the environment or exposure to the public. Policies for management of used lamps are designed to achieve that goal.

### Management Options for Waste Fluorescent Lamps

#### Low-mercury (green) lamps

Fortunately, fluorescent lamp manufacturers have begun producing low-mercury lamps and DEQ encourages use of these lamps when possible. Low-mercury lamps are safe for disposal with normal office trash.

More information concerning recycling options and local recycling companies can be found at [www.lamprecycle.org](http://www.lamprecycle.org). Also, information about the TCLP limits and manufacturers that agree to produce lamps under the lower limits can be found at [www.nema.org](http://www.nema.org).

#### High-mercury lamps

##### A. Universal waste management

A generator of waste fluorescent lamps who wishes to manage those lamps in accordance with the reduced universal waste requirements must follow some very simple requirements:

- Store unbroken waste lamps in closed, structurally sound packages marked with "Universal Waste Lamps," "Waste Lamps," or "Used Lamps;"
- Maintain documentation, by either marking the date on which waste lamps were first placed into storage or any other method that clearly demonstrates the length of time the lamps have been stored, showing that the waste fluorescent lamps have not been stored for longer than one year;
- Train employees in proper handling and emergency procedures;
- Clean up broken lamps; and
- Ensure lamps are delivered to a facility that can recycle

them, or to another facility authorized to receive the lamps.

If more than 5,000 kg of universal wastes are accumulated in one calendar year, the business must notify the Oklahoma Department of Environmental Quality to receive an EPA Identification Number. Universal wastes include lamps, mercury-containing thermostats, pesticide residues, and batteries.

Tracking records of shipments of waste lamps must be kept for three years.

##### B. Hazardous or non-hazardous waste management

If waste lamps are not managed in accordance with the Universal Waste requirements, then the generator of the lamps must determine if the lamps are hazardous. If the lamps test below the regulatory limit of 0.2 mg/l for mercury and 5.0 mg/l for lead using the Toxicity Characteristic Leaching Procedure, or the generator has other information demonstrating the lamps are non-hazardous (such as an MSDS from the manufacturer), then they can be disposed with normal office trash.

If the lamps are determined to be hazardous (TCLP <sup>3</sup> 0.2 mg/l mercury or 5.0 mg/l lead), then the generator of the lamps is subject to applicable hazardous waste requirements of 40 CFR Parts 261 – 268, such as manifesting, recordkeeping, labeling, packaging, and disposal at a permitted hazardous waste disposal facility, unless the lamps are managed in accordance with the Universal Waste requirements.



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