



# UNIVERSITY OF ROCHESTER

## Used Fluorescent Lamp Management

APPROVED BY:

DATE:

PAGE:

### **I. Date of Initiation/Revision**

Initial Draft Policy 11/04

### **II. Policy Classification**

Applicability: University-Wide

Responsible Department: University Facilities and Services

### **III. Policy Summary**

Used Fluorescent lamps contain mercury and require special handling and disposal. These requirements are set forth in 6 NYCRR Part 374-3 as well as Title 21 Section 27-2101 as passed in the NYS Legislature and signed into law July 12, 2004 by the Governor. Note that it is the latter that has caused even the low mercury lamps to become regulated in NYS.

This policy pertains to the collection, storage, labeling, packaging and disposal of used fluorescent lamps from all University-owned facilities. Regulatory authorities include the US Environmental Protection Agency (USEPA), the New York State Department of Environmental Conservation (NYSDEC) and the US Department of Transportation (USDOT). Also included are packaging guidelines from lamp disposal vendors.

This policy establishes the responsibilities of University Facilities and Services staff to ensure that used fluorescent lamps are managed in accordance with applicable state and federal regulations.

Whole used fluorescent lamps will be managed as Universal Waste. Broken lamps must be managed separately as Hazardous Waste and must not be placed in the same containers as the whole lamps. Follow the guidelines in the *Learner's Guide for Responsible Hazardous Waste Management* when managing and disposing of broken fluorescent bulbs.

This policy sets forth the responsibilities of the O&M staff as well as the Hazardous Waste Management Unit (HWMU).

### **IV. Related Policies**

Learner's Guide for Responsible Hazardous Waste Management

### **V. Delegation of Authority**

The Hazardous Waste Management Unit (HWMU) shall be charged with oversight of the disposal of all used fluorescent lamps from University-owned facilities. Each Facilities and Services area manager shall ensure that all used lamps from their buildings are collected and managed in accordance with this policy. Senior management shall be notified by HWMU in the event that their support is deemed necessary to support this policy.

Facilities & Services supervisors are charged to ensure their staff understands and follows the proper procedure for managing used lamps.

Project Managers are expected to ensure used lamps from their projects are managed in accordance with this policy and disposed of through the HWMU. Disposal must not be delegated to contractors unless such an arrangement is pre-approved by HWMU.

## **VI. Policy Statement**

Used fluorescent lamps shall be managed by Facilities and Services staff in accordance with applicable regulations as delegated by the Associate Vice President for University Facilities & Services.

## **VII. Definitions**

**EH&S.** University Environmental Health & Safety.

**Hazardous Waste.** Any waste as defined in 40 CFR 261.3.

**Universal Waste.** Any waste as defined in 6 NYCRR Part 374-3

**Used Fluorescent Lamp.** Any fluorescent light bulb that is no longer wanted and is slated for disposal.

**NYSDEC.** New York State Department of Environmental Conservation

**RCRA.** Resource Conservation and Recovery Act. RCRA contains the Hazardous Waste Regulations.

## **VIII. Responsibilities**

**Hazardous Waste Management Unit (HWMU).** The University department responsible for the oversight of University-wide Hazardous and Universal Waste programs and is charged with keeping current with the state and federal requirements for used lamp management and disposal. HWMU shall work with Purchasing to establish disposal contracts, shall coordinate shipments of used lamps to off-site recycling vendors and shall work with Facilities and Services staff to ensure policies and procedures for managing used lamps are in place, up-to-date and implemented.

**Hazardous Waste Manager.** Oversees the operations of HWMU.

**PPM Project Manager.** Ensure this policy is being followed by contractors during construction and renovation projects.

**Contractors.** Follow all applicable codes and University policies.

**Environmental Health & Safety.** Assists in assessing or correcting any potential occupational health and safety hazards for University employees, as necessary.

**Area Managers.** Understand and implement the procedures for managing used lamps within their areas of responsibility.

**Facilities & Services staff.** Follow the procedures for proper management of used lamps when it is within their scope of work.

## **IX. Procedures**

### **A. Identification of Mercury-Containing Used Lamps.**

1. All fluorescent lamps and some other types of lamps contain added mercury. These include straight tubes of all lengths, U-tubes, O-tubes, compact fluorescent lamps, high intensity discharge lamps, metal halide lamps, sodium vapor lamps, UV lamps. Both low mercury (green tip) and regular fluorescent lamps are included per NYS statute.

**B. Requirements of Universal Waste Rule for Managing Used Lamps.**

1. Used lamps must be managed in a manner that minimizes the chances of breakage.
2. Used lamps must be collected in structurally sound containers. A proper container is typically an empty intact box that similar lamps were received in.
3. Used lamp containers must be managed in a manner that preserves the integrity of the container.
4. When lamps are not being added or removed from the container, it must be kept closed.
5. The collection containers must bear the markings "**Universal Waste--Used Lamps for Recycling Accumulation Start Date**\_\_\_\_\_" when the first used lamp is placed in the container.
6. Be sure to mark the container label with the date that the first used lamp is placed in the collection container.
7. All used lamps must be shipped from University premises within one year of the accumulation start date on the used lamp collection container.

**C. University Requirements and Practical Tips for Packing and Shipping Used Lamps**

1. Before lamps can be shipped they must be packaged per USDOT and vendor requirements.
2. University F&S O&M groups are expected to make their best efforts to pack the lamps in accordance with these requirements the first time so that double handling is minimized.
3. Choose an empty lamp box for the same type of lamp that is being disposed.
4. Only same-type and length lamps may be placed in the same outer container unless special arrangements have been made with HWMU.
5. Do not tape used lamps together. All taped together lamps must be separated from each other prior to being placed in the container or the vendor assesses a surcharge.
6. Ensure that there is no debris in the box and that it is structurally sound and capable of being closed. One does not have to reuse the cardboard dividers that typically come in a case of new lamps. In fact, it is advised to throw these out as they make it difficult to completely fill a lamp box.
7. Do not place broken lamps in the same container as whole lamps. Broken lamps must be packaged in an air-tight container and managed as a Hazardous Waste in accordance with the Hazardous Waste protocols as presented in the Hazardous Waste Management Learners' Guide
8. Completely fill a lamp box with used lamps prior to offering it for disposal whenever possible. Partially filled lamp boxes will collapse when stacked on a shipping pallet and creates needless double handling and potential excess lamp breakage.
9. Tape the lamp box shut, or otherwise close the container in a manner appropriate for that container type.
10. Take the container to the area(s) designated by your facility manager.
11. Keep the storage area in an orderly manner and free of clutter. Remember state and federal inspector review Universal Waste storage areas and processes during regular compliance inspections.
12. HWMU will palletize and ensure all used lamp containers meet USDOT and vendor requirements prior to shipment.

**E. Recordkeeping and Records Management**

Records required by USEPA, NYSDEC and the University shall be retained and filed by HWMU. These records include:

1. Shipping papers for 3 years
2. Copies of invoices 10 years

3. Regulatory inspection reports 3 years or until next inspection (whichever is longer)

**F. Training**

1. Used lamp management is one of the topics included in the annual Hazardous Waste refresher training. All persons managing used lamps must attend at least annually.