University of Missouri Environmental Health and Safety

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Fluorescent Lamp Handling Procedures

Examples of mercury-containing lamps:

Linear Lamps Tube, frosted glass (includes the "Alto" green-tipped lamps).	Compact Lamps Frosted, thick glass, single unit base (plug or screw) that have a porcelain or plastic end.	U-Tube Frosted, thick glass, single plug base unit that is made of non- porcelain or plastic.	Shatter-Shields Lamps covered with a plastic coating to protect from breakage	<u>HIDs</u> Not frosted.
			Any type	
1-4-foot tubes: 4-foot box or fiberdrum	Collect in cardboard box	Collect in cardboard box	Collect in separate cardboard boxes	Collect in cardboard box.
5-8-foot tubes: 8-foot	Round and circular			Flood lamps, sodium lamps and UV lamps may
box	lamps can be stored with compact lamps.			be stored with HID lamps.

Packaging Preparation

- 1. Wear appropriate gloves (e.g. leather) and approved eye protection when handling used lamps.
- 2. Empty boxes: Use the boxes the new lamps are shipped in as long as the flaps can be folded shut and the packing material (e.g. "egg crate") has been removed. Additional empty boxes and/or fiber drums are located at the Resource Recovery Center (RRC).

Packaging Lamps

- 1. Sort the lamps by the different types. Incandescent bulbs are mercury-free and should be placed in the trash.
- 2. Do not tape bulbs together, or they will be rejected.
- 3. The box containing used lamps must be folded or taped shut except when bulbs are being added to it.
- 4. Affix a "Universal Waste" label on the box/ fiber drum before you put your first lamp in it (see separate "Instructions For Lamps"). This label must be readily visible (e.g. to inspectors) without moving the box/drum.
- 5. Suggestions for filling:
 - Place the empty/filling lamp box at a 30-45 degree angle this allows the maximum number of bulbs to be layered in the box.
 - Use a safety chain or other restraint so boxes don't fall.
- 6. Store boxes in a dry, secured area.
- 7. When the lamp container is full, inventory the contents and write this information on the "Universal Waste" label.

Packaging Broken Lamps

- 1. Broken lamps are not Universal Wastes and require alternate labeling and packaging. EHS will provide a metal drum with a plastic liner for broken lamps.
- 2. Put a Hazardous Materials Label (HML) on the drum before you put your first broken lamp in (see "MU EHS Hazardous Material Label Instructions For Broken Fluorescent Lamps").
- 3. This drum must be kept closed and latched except when broken lamps are being added to it.
- 4. When full, or after 6 months have elapsed since the container start date (as shown on the HML), submit your properly completed Pick Up Request Form (PURF) to EHS by fax, mail, or email (see "<u>Pick Up Request Form</u> (PURF) Instructions-Used and Unknown Materials Only").

Delivering Universal Waste

- 1. Universal Waste must be delivered to EHS within six months of the accumulation start date on the label.
- 2. Filled boxes may be delivered to the RRC (<u>map</u>) on <u>Thursdays</u>, 8:00 a.m. Noon and 1:00 p.m. 4:00 p.m. If delivery is not possible, please telephone 882-3736 for additional options.