

## Used Fluorescent Lamp Handling, Packaging, and Storage Instructions

Lamps of “Universal Waste Lamps” are defined by the EPA as the bulb or tube portion of an electric lighting device designed to produce ultra-violet, visible, or infra-red light. Fluorescent lamps generate both ultraviolet and visible light. A small amount of mercury vapor present within the sealed glass fluorescent lamp absorbs the ultra-violet light and allows visible light to be emitted. Due to the presence of mercury in fluorescent lamps, including energy efficient CFL’s, special handling, packaging, and storage procedures must be followed to prevent injury to broken glass and mercury exposure. Also, it is important to minimize the breakage of lamps due to major expense associated with disposal versus recycling. Lamps that are broken must be disposed as a hazardous waste, whereas intact lamps can be recycled at a much lower cost. The recycling involves the mercury vapor being collected using a carefully controlled distillation process. The metal contacts, powdery phosphor material, and glass can likewise be collected and separated for recycling purposes. Based upon safety and cost reasons, the proper handling, packaging, and storage of used fluorescent lamps should be followed. These include the following safe work practices:

- Handle used lamps in a manner that avoids breakage;
- Place used lamps in containers that are structurally sound, compatible with the contents of the lamps, and capable of containing any leaked material;
- Store used fluorescent lamps in the original or replacement boxes;  
**NOTE:** Specially manufactured boxes are available from EHS for the storage of used lamps.
- Avoid taping or banding used lamps together due to the greater chance for breakage;
- Close the ends of the boxes and seal with tape;  
**NOTE:** Three inch wide polyvinyl chloride (PVC) plastic insulating tape is recommended, but not masking tape.
- Label the boxes or containers with one of the following: Universal Waste Lamps, Waste Lamps, or Used Lamps;
- Store used lamp boxes in a dry place that is protected from the weather, human activity, or other adverse circumstances;
- Store used lamp boxes on pallets to facilitate storage and pickup; and
- Contact EHS to request a pickup. The on-line request method is preferred because it will provide more detailed pickup information, as well as a confirmation or tracking number. One must first register on the EHS Hazardous Waste website at [www.ehe.ohio-state.edu](http://www.ehe.ohio-state.edu). Once registered the person will receive a login that will permit a request for Chemical Waste including Universal Waste or an Infectious Waste pickup or access to surplus chemicals for redistribution at no cost.  
**NOTE:** Used chemicals must be recycled within a year according to federal regulations. However, EHS recommends that frequent pickups be arranged.