Introduction

The Environmental Protection Agency (EPA) regulates the disposal of used lamps due to their hazardous nature. The majority of lamps rely on the light emittance properties of elemental mercury, which can be toxic to humans if vaporized.

At OSU, used bulbs are considered universal waste, and are disposed of by Environmental Health and Safety personnel in accordance to EPA regulations. The EPA forbids the disposal of used bulbs into the regular, household trash.

Hazards Associated with Used Lamps

Heavy metals, particularly mercury, are used in lamps to emit various wavelengths of light. When in use, these metals are innocuous. However, when a lamp is broken, it could emit vapors and dust, which can cause a variety of chronic and acute health effects including:

- Sore throats
- Fever/chills
- Headache
- Vomiting
- Diarrhea
- Dehydration
- Loss of balance and coordination
- Hypertension
- Seizures
- Blindness
- Fetal toxicity

www.lamprecycle.org
www.almr.org

Protecting Workers

- Workers should be made aware of hazards associated with used lamps and what to do if a lamp is broken.
- Store used lamps in packing boxes. Boxes should be labeled “used bulbs.” Phrases such as “bad bulbs” or “old lamps” are not allowed by the EPA.
- Boxes of used lamps can be stored up to a year before disposal is required by the EPA and state agency.
- Before cleanup, have all people and pets leave the room, and open windows/doors to the outdoor environments for 15 minutes.
- Carefully sift through fragments with stiff paper or broom and dustpan. Do not use a vacuum—it could disperse mercury vapors over a wider area. Be sure to wear gloves that are protective against mercury and broken glass. Always wash hands after!
- Be thorough when collecting fragments. Place contaminated materials in a sealable container and contact EHS for disposal.