



Procedure for Handling and Disposal of Light Bulbs

Due to minute amounts of heavy metals the following bulbs are considered hazardous waste:

1. Fluorescent bulbs (straight and U-tubes, PLs, 18 watt Panasonic bulbs, etc.) - Mercury
2. HID bulbs:
 - Metal halide - mercury and lead
 - High pressure sodium - mercury and lead
 - Low pressure sodium - lead
 - Mercury vapor - mercury and lead

The campus chooses to recycle, rather than dispose of these wastes. Recycling bulbs makes them “Universal Wastes” rather than “Hazardous Waste”. The following procedures will ensure the bulbs can be recycled.

Handle all light bulbs carefully. Try not to break the bulbs. Non-slip gloves and protective eyewear are to be worn by employees handling light bulbs. **No more than one or two bulbs** should be out of the shipping containers at any one time (this applies to both new and used bulbs).

Used light bulbs are to be placed back into their original shipping boxes. Place one of the labels below on the box. Write in the date the box is first used to store used bulbs. The boxes should remain closed other than when bulbs are being placed into them. The containers should then be stored in an area where they will not be broken until they are ready to be moved to the storage building. Custodians will be notified of the dates bulbs will need to be moved to **the indoor pick-up areas**. Once in the storage building the moving crew should place the bulbs on pallets and shrink-wrap them. **At no time are bulbs or containers of bulbs to be stored outside.**

EHS is to be notified of the number and type (and length of fluorescent straight bulbs) by the moving crew when they relocate bulbs to the storage building. Arrangements for transportation of the bulbs to the recycling facility are to be made by EHS at that time to minimize the length of time the bulbs must remain in storage.

If bulbs break, the glass should be cleaned with a broom and dustpan. Bare hands should never touch broken glass. HEPA vacuums should be used as a final clean up. Broken bulbs should be boxed for disposal. Custodial supervisors must bring these boxes to Central Stores.

Summary of Health-Related Information

The major hazard posed by these lights is the possibility of a cut should a bulb break. There is only a very tiny amount of Mercury present in a bulb (a 4 foot tube contains less than 5% of the amount of Mercury in an oral thermometer). The Mercury in the lights forms the white coating on the glass with a calcium-based phosphor (a substance similar to chalk). The white coating may produce a small amount of powder if a bulb is broken. According to PESH, no Mercury was detected when air samples were collected during the breaking of several hundreds of fluorescent tubes for recycling. (Please note that breaking bulbs is not allowed)

