

Environmental Health and Safety

Used Lamp Disposal Policy

The Environmental Compliance Division (ECD) of Environmental Health & Safety (EH&S) manages regulated waste including used lamps (light bulbs) for all Washington University (WU) in St. Louis campuses. This policy covers disposal of used lamps in all lighting fixtures owned by WU. There are many types of lamps including but not limited to:

- Incandescent- Primarily used for residential lighting. These are the standard bulbs most people are familiar with. These can be disposed of in “Landfill” containers.
- Fluorescent – These are traditionally used in retail, commercial and educational buildings. These can come in many sizes shapes for example tubular, U-shaped, circular and compact fluorescent lights (CFL) which tend to be smaller units that may screw into fixtures or include fixtures many different shapes but all,
- High Intensity Discharge (HID) - These bulbs can be found in gymnasiums, large public areas, outdoor activity areas, roadways and parking lots. Types of these include high pressure sodium, metal halide.
- Low- Pressure Sodium Lamps-Used for outdoor lighting.
- Light- Emitting Diode (LED) - Used in electronic devices, digital clocks, aviation lighting and traffic signals and are now being used more widespread. These items are currently considered *electronic waste* and should follow the requirements of our EH&S *Equipment Disposal Policy*.

Light bulbs can contain materials that are regulated by the Environmental Protection Agency (EPA). This policy identifies the procedures to follow to ensure that materials are managed and collected according to the regulations mandated by EPA and other government agencies.

Packaging

Bulbs should be placed in cardboard containers with the same kind and size of bulbs. The recommended container is the reuse of manufacturer packaging. Remove any dividers in the containers prior to placing the spent bulbs inside to avoid bulbs from extending beyond the end of the container. Best management and packaging for light bulbs is to keep similar sizes together to prevent breakage.

- You may use any box available for bulbs as long as it is the appropriate size for the type of bulb you are packaging.
- Boxes should be closed and taped shut when not in use.
- Do not cut off box tops, they are needed for closure.
- Larger containers for bulb packaging are available from ECD. These cylinder drums with the lid placed on the container properly are acceptable closure.

For large projects prearrangements must be made with ECD before project starts to discuss regulatory requirements and provide labels as necessary. If the contractor is to remove light bulbs from campus, ECD must approve of the disposal site before any bulbs are shipped. ECD will require copies of all paperwork associated with these shipments.

Labeling and Disposal

All containers of spent bulbs must be labeled with the Universal Waste Label. These labels are available from EH&S ECD.

- The label must be filled out completely and include the correct campus for the generator location.
- Start date must be completed with the date the first bulb was placed in the container.
- Containers must be taped closed or lids secured for disposal.
- Bulbs must be sent for final disposal in no more than one year after the start date.

Lamps must be removed from storage areas and picked up by EH&S within 12 months or 1 year. For disposal, use the online pickup request form found on the EH&S website (ehs.wustl.edu) under the Hazardous Material Management link.

Requirements also apply to all WU contractors, Facilities must coordinate all project that require used bulb disposal through EH&S.

Laboratories

Laboratories generating occasional used light bulbs should carefully wrap the bulb for protection from breakage and utilize a blue “Unwanted Material” label. The label must be completely filled out, including a start date. Complete the online pickup request form found on the EH&S website (ehs.wustl.edu) under the Hazardous Material Management link for disposal.