INTRODUCTION

The purpose of this guidance is to define the procedures for proper handling, storage and disposal of universal waste as outlined in the Universal Waste Rule (WAC 173-303-573). Eastern Washington University (EWU) departments and shops generate universal waste and many of these items can be collected and recycled. EWU is a small quantity handler of universal waste. A small quantity handler never has 5,000 Kg (11,000 pounds or 5 ½ tons) of universal waste on hand, at any one time.

Universal waste is described as the following:
- Used fluorescent bulbs,
- High Intensity Discharge (HID) bulbs,
- Light ballasts,
- Mercury switches,
- Thermostats and other equipment,
- Batteries (NiCad and Alkaline),
- Spray paint cans,
- Small propane cylinders,
- Lead, and
- Photographic negatives, etc.

RESPONSIBILITY

Proper storage and disposal of universal wastes generated at EWU is managed by the Environmental Health and Safety (EH&S) Department.

- All employees that are tasked with handling universal waste must be trained.
- Transportation Services is responsible for transportation of refrigerators for processing and disposal and transportation of used batteries for disposal.
- Surplus Sales is responsible for pickup, processing and disposal of E-Waste.

ENVIRONMENTAL CONSIDERATIONS

Reduce potential land and water contamination as well as health hazards by recycling materials.

REQUIRED TRAINING

University employees are offered General Awareness Training. This training is scheduled and conducted by EH&S. The training will include the following:
- Regulations,
- How to handle universal waste,
- Where and how to store universal waste,
- How to package universal waste,
- How to label universal waste,
- How to cleanup spills, breaks and leaks
PROCEDURE

1. Universal waste is defined as the following materials: Used fluorescent bulbs, HID bulbs, incandescent bulbs, mercury switches and thermostats, batteries (NiCad and Alkaline), spray paint cans, light ballasts, small propane cylinders; lead etc. Many of these items can be collected and recycled.

2. If there are any questions about the proper handling storage and disposal of these materials, contact EH&S.

UNIVERSAL WASTE PROCESSING LOCATION

The brown shed, located in front of the Waste Transfer Facility (WTF) will be the drop off location for spent bulbs. Specific labeled containers in the metal cabinet in front of the WTF will be drop off locations for other types of universal waste. EH&S collects universal waste from the shed and cabinet on a daily basis and transport the materials into the WTF for packaging, storage and disposal processing.

FLUORESCENT LIGHTS, HID AND INCANDESCENT BULBS

Used fluorescent light bulbs, HID and incandescent bulbs shall be taken to the brown storage building located in front of the hazardous waste storage building. Closable bins, with pictures indicating the type of light to be place in each bin, are found in the brown shed. The closable bins should be closed when you have finished placing the lights in the bins. Place all lights in their proper storage bins and locations.

Light tubes that are 3 foot and longer will be placed in the building in the cardboard boxes or laid on the hooks provided. Additional cardboard boxes are in the shed for light technicians to use for tube replacement and for transport from the separate change out locations. Changed out bulbs will be transported to the brown shed at the end of each day for disposal. Technicians will not hold on to tubes beyond their shift. This will help eliminate broken lights. All boxes used to transport or store used bulbs or bulb waste will be labeled Universal Waste (See Label 1).

Broken bulbs that occur at the brown shed shall be swept up immediately and placed in a separate closed container (i.e., yellow garbage can in the brown shed labeled broken glass). Broken bulbs that are broken in other locations must be placed in a separate box, bag or bucket and transported to the brown shed for processing. All debris generated from the broken lights must be HEPA vacuumed. The vacuum used can only be used for fluorescent light cleanup. When it becomes time to change the filter or dump out the light debris, arrange the change out with EH&S and they will do the work. Light tubes whose ends break will be taped closed and placed with the other light tubes and placed in the brown shed for processing by EH&S.

MERCURY SWITCHES

Intact mercury switches, thermostats, thermometers and other mercury containing equipment should be place in a labeled box or bucket (see label 2) and placed in the cabinet in front of the WTF. For broken or leaking mercury containing devices, contact EH&S immediately for cleanup and disposal.
Used Batteries
Used batteries (NiCad and Alkaline) shall be taken to and placed in the metal cabinet in the battery disposal bucket in front of the WTF for disposal. When the used battery containers are full, please contact EH&S. EH&S will arrange for pickup and disposal. All battery collection containers must have tight fitting lids for storage and must be labeled (see label 3).

Auto batteries are to be taken to and placed in the bin in front of the Auto shop for disposal. If this bin is full, place them in the Auto shop for proper handling and disposal. Auto batteries are exchanged for new, from battery vendors. Do not place batteries on the ground or leave exposed to the weather. All battery containers must be closed when not being filled.

Spray Paint and Gas Cylinders
Spray paint and gas cylinders will be placed in the shops or departments’ used spray paint disposal bins. Contact EH&S for pickup. Any small cylinders or spray-paint cans should be placed in the metal cabinet in front of the WTF for processing.

Light Ballasts
Light ballasts shall be collected and transported to the WTF and place in the metal cabinet in front of the building. EH&S will segregate the ballasts based on labeling. Ballasts that are non-PCB will be placed in boxes and transported to surplus for recycling as E-waste. Old ballasts containing PCBs will be disposed of as hazardous waste by EH&S. Newer ballasts may contain a chemical called DEHP. This chemical is a probable human carcinogen and may designate as a Washington State toxic dangerous waste (WT02). Care must be taken when handling leaking ballasts. Use nitrile or vinyl gloves when handling leaking ballasts. Place leaking ballasts in a zip lock bag and place with the rest of the ballasts. Place all gloves and cleanup materials in the bag for disposal. Use rags not paper towels for the cleanup. EH&S will determine proper ballast disposal.

Ballasts that are not labeled or do not indicate non PCB will be handled as PCB waste and disposed as a WPCB waste.

TVs, Monitors, Computers and Refrigerators
Departments wishing to dispose of computers, monitors or TVs are to contact Surplus for pickup. For disposal of any refrigerators or other appliances, contact Transportation Services.

Labels