



## Purpose

This procedure establishes requirements for the management of universal waste. Contact Environmental Health & Safety for procedures covering other types of hazardous waste.

## Scope

This procedure applies to the disposal of certain hazardous wastes regulated by the U.S. EPA as universal waste. Universal waste may contain mercury, lead, cadmium, nickel and other hazardous materials. Some examples of universal waste are listed below. The list is not all inclusive. In the State of Iowa, alkaline batteries and incandescent lamps are not considered hazardous or universal waste, and may be thrown away in the regular trash.

### Lamps

Compact fluorescent  
Fluorescent  
HID  
High intensity discharge  
High pressure sodium  
Mercury vapor  
Metal halide  
Neon  
UV lamps

### Batteries

Car/Automotive  
Hearing aid  
Lead-acid  
Lithium ion  
NiCad  
Nickel-cadmium  
Nickel metal hydride  
Rechargeable  
Small sealed lead-acid  
SSLA

### Mercury Containing Equipment

Barometers  
Blood pressure cuffs  
Mercury switches  
Sphygmomanometers  
Thermostats  
Thermometers

## References

In the State of Iowa universal waste is regulated by the U.S. EPA under 40 CFR 273.

## Procedures

### Contacts

Environmental Health & Safety (EHS) (33) 5-8501  
General Stores (38) 4-3905

### Lamps

#### Containers

- Call General Stores to obtain containers.
- General Stores delivers containers.
- Other containers may be used as long as they are structurally sound and rigid, and can be properly closed so that no lamps can fall out.

### Labeling and Marking

- Generator of lamps removes or otherwise defaces all existing container labels attached to empty container.
- Generator of lamps attaches a new University of Iowa “Universal Waste-Lamps” label to the container.
- Mark on the label the date the first lamp is placed in the container.
- Mark on the label the name of the building where the lamps container is stored.
- Prior to disposal mark the label with the final lamp count.
- Contact General Stores to obtain labels.

### Storage

- Lamps must be placed inside containers.
- All containers must be kept closed at all times, except when adding lamps. Use tape to hold box flaps shut to prevent breakage. New lamp boxes should also be taped shut.
- A tally sheet is used to account for the number of lamps in the container.

### Disposal

- Containers of lamps must not be stored for longer than 11 months.
- Contact General Stores for pickup not more than 11 months after the date the first lamp is placed in the container, whether the container is full or not.
- General Stores will pick up containers of lamps for disposal.

### Broken Lamps

- Clean up broken lamps immediately.
- Place broken lamp, and broken lamp parts into a lamp container.

### Contractors

- A contractor maintaining a piece of equipment that uses a universal waste lamp may take the lamp with them for recycling. The University department contracting the work must ensure that the lamp is properly managed by the contractor.
- Contractors performing demolition and construction work are required to follow University of Iowa procedures for containers, labeling, storage and disposal.
- Contractors that remove lamps during building or equipment maintenance and do not intend to recycle the lamps are required to follow University Iowa procedures for containers labeling, storage and disposal.

## Batteries

### Containers

- Any structurally sound, rigid container is acceptable.
- Large batteries need not be placed into a container.

### Labeling and Marking

- Generator of batteries attaches a University of Iowa “Universal Waste-Battery” label to either the container, or directly on large batteries.
- Mark on the label the date the first battery is placed in the container.
- Mark on the label the name of the building where the battery/battery container is stored.
- Contact EHS to obtain labels.

### Storage

- Small batteries must be placed inside containers.
- Containers must be kept closed at all times, except when adding batteries to container.

## Disposal

- Containers of batteries must not be stored for longer than 11 months.
- Contact Environmental Health & Safety for pickup not more than 11 months after the date the first battery is placed in the container, whether the container is full or not.
- For individual batteries, contact EHS for pickup not more than 11 months after the battery is labeled and dated.
- Environmental Health & Safety will pick up batteries/containers of batteries for disposal.

## Broken/Leaking Batteries

- Clean up broken/leaking batteries immediately.
- Place into a separate container from non-broken/non-leaking batteries.
- Parts and residues of broken/leaking batteries become hazardous waste.
- Label containers with hazardous waste labels supplied by Environmental Health & Safety.
- Contact Environmental Health & Safety for disposal.

## Mercury Containing Equipment

### Containers

- Containers are selected based on the type and size of equipment and may vary.
- Small items of mercury containing equipment may be placed in a plastic bag, double bagged, and the bags tied closed.
- Bags must then be placed into a structurally sound, rigid container such as a cardboard box.
- Container must be capable of being closed so that no material can fall out.
- Contact EHS for assistance with selection of containers.

### Labeling and Marking

- Generator of equipment attaches a University of Iowa "Universal Waste-Mercury Containing Equipment" label to the container.
- Mark on the label the date the first piece of equipment is placed in the container.
- Mark on the label the name of the building where the equipment container is stored.
- Contact EHS to obtain labels.

### Storage

- Containers must be kept closed at all times, except when adding pieces of equipment to container.
- When appropriate use secondary containment to prevent spills.

### Disposal

- Containers of equipment must not be stored for longer than 11 months.
- Contact Environmental Health & Safety for pickup not more than 11 months after the date the first piece of equipment is placed in the container, whether the container is full or not.
- Environmental Health & Safety will pick up mercury containing equipment for disposal.

### Mercury Spills/Leaking Equipment

- Clean up mercury spills immediately.
- Contact Environmental Health & Safety for questions on spill clean up.
- Place mercury contaminated material into a separate container from non-broken/non-leaking equipment.
- Spill residues are also hazardous waste.
- Label containers with hazardous waste labels supplied by Environmental Health & Safety.
- Contact Environmental Health & Safety for disposal.