## DHHS POLICIES AND PROCEDURES

Section V:	Human Resources
Title:	Safety and Benefits
Chapter:	Universal Waste Plan
Current Effective Date:	3/1/16
<b>Revision History:</b>	N/A
<b>Original Effective Date:</b>	N/A

# Purpose

The purpose of this policy is to establish safe procedures for employees handling universal waste as mandated by Subtitle C of the Resource Conservation and Recovery Act (RCRA).

# Policy

It is the policy of DHHS to protect employees, patients, clients, residents, and any other individuals from hazards associated with universal waste. This policy establishes guidelines for the handling and storage of universal waste to ensure compliance with the state and federal regulations. As mandated by Subtitle C of the Resource Conservation and Recovery Act (RCRA), EPA promulgated regulations governing the safe management of hazardous waste from the point of generation until the point of final deposition. Within these regulations, EPA developed a streamlined management program for certain hazardous wastes, known as universal wastes. The universal waste program provides an alternative set of regulations that reduce the regulatory burden by allowing longer storage of these wastes and reduced record keeping.

# Definitions

**Battery** - A device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy.

Lamp - A bulb or tube portion of an electric lighting device.

**Mercury-containing equipment** - A device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to its function

**Pesticide** - a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant.

**Small Quantity Handler of Universal Waste -** A universal waste handler who does not accumulate 5,000 kilograms or more of universal waste, calculated collectively, at any time.

Section V:	Human Resources	Page 1 of 7
Title:	Safety and Benefits	
Chapter:	Universal Waste Plan	
Current Effective Date:	3/1/16	

**Thermostat** - A temperature control device that contains metallic mercury in an ampoule attached to a bimetal sensing element, and mercury-containing ampoules that have been removed from these temperature control devices.

**Universal Waste -** Any of the following hazardous wastes that are subject to the universal waste requirements.

## **Roles and Responsibilities**

#### Safety Programs Manager

The Safety Programs Manager (SPM) ensures that a written plan is in place to establish a universal waste policy. The SPM reviews the policy periodically.

#### **Safety Officer**

The Safety Officer is responsible for monitoring compliance with this policy, providing training, and conducting periodic inspections of universal waste storage sites.

#### Manager/Supervisor

The manager/supervisor is responsible for ensuring staff comply with this policy. The manager/supervisor ensures affected staff complete training as required.

#### **DHHS Staff**

Staff are responsible for complying with this policy. Affected staff complete training as required.

## Implementation

#### **Program Scope**

DHHS Facilities will not dilute, treat, or dispose of universal waste. The universal wastes affected by this policy are:

- *Batteries* This policy covers batteries listed under 40 CFR part 273. This policy does not cover spent lead-acid batteries, batteries not considered waste, or batteries not considered hazardous waste.
- *Pesticides* This policy covers pesticides listed under 40 CFR part 273.
- *Mercury-Containing Equipment* This policy covers mercury-containing equipment listed under 40 CFR part 273. This policy does not cover mercury-containing equipment that is not a hazardous waste or equipment and devices from which the mercury-containing components have been removed.
- *Lamps* This policy covers lamps listed under 40 CFR part 273. This policy does not cover lamps that are not yet wastes and lamps that are not considered hazardous waste.

#### **General Procedures for Batteries**

The universal waste regulations define a battery as a device consisting of one or more electrically connected electrochemical cells that are designed to receive, store, and deliver

Section V:	Human Resources	Page 2 of 7
Title:	Safety and Benefits	
Chapter:	Universal Waste Plan	
<b>Current Effective Date:</b>	3/1/16	

electrical energy (~273.6). Also included in this definition are unbroken batteries from which the electrolyte has been removed. Hazardous waste batteries meeting this definition are subject to the universal waste regulations. However, lead-acid batteries being recycled may be managed either as universal waste or by Part 266, Subpart G, which contains special provisions for lead-acid batteries. The following procedures apply to batteries meeting the universal waste requirements.

- Each department that generates batteries meeting the universal waste requirement must attempt to exchange the battery with the vendor when new batteries are required. This procedure should be utilized so batteries are not accumulated and subject to storage requirements. It is the responsibility of the department that generates batteries meeting the universal waste requirement to store, dispose, or recycle them in accordance with applicable regulations. The Safety Department can be contacted to locate an appropriate vendor.
- Batteries that are considered "common use batteries will be sent to the recycling center and accumulated at that point. The recycling specialist will develop transfer procedures that meet the security requirements for each institution and storage requirements that comply with this policy.
- All handlers of waste batteries must place in a container any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, and compatible with the contents of the battery and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- A handler may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):
  - Sort batteries by type.
  - Mix battery types in one container.
  - Discharge batteries to remove the electric charge.
  - Regenerate used batteries.
  - Disassemble batteries or battery packs into individual batteries or cells.
  - Remove batteries from consumer products.
  - Remove electrolyte from batteries.

## **General Procedures for Pesticides**

Unused pesticides will often become banned from use, damaged by temperature extremes, or no longer necessary due to crop changes. The universal waste regulations apply to persons managing pesticides that are part of a recall program or unused pesticides that are collected and managed as part of a waste pesticide collection program. A recalled pesticide becomes a waste when two conditions occur: the generator agrees to participate in the recall, and the person conducting the recall decides to discard the pesticide or burn it for energy recovery. An unused pesticide becomes a waste on the date the generator decides to discard it. The following procedures apply to pesticides meeting the universal waste requirements.

Section V:	Human Resources	Page 3 of 7
Title:	Safety and Benefits	
Chapter:	Universal Waste Plan	
<b>Current Effective Date:</b>	3/1/16	

It is the responsibility of the department that uses pesticides meeting the universal waste requirement to store and dispose of it in accordance with applicable regulations. The Safety Department can be contacted to locate an appropriate vendor.

## **General Procedures for Mercury-Containing Equipment (MCE)**

All handlers of universal waste who remove mercury-containing ampoules from MCE must determine whether the following exhibit a characteristic of hazardous waste:

- Mercury or cleanup residues resulting from spills or leaks
- Other solid waste generated as a result of the removal of mercury-containing ampoules
- If the mercury, residues, or other solid wastes are hazardous, they must be managed in compliance with applicable hazardous waste regulations. If the waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state, or local solid waste regulations.
- Universal waste MCE that show evidence of leakage, spillage, or damage must be kept in a container. The container must be closed, structurally sound, and compatible with the contents of the MCE and must lack evidence of leakage, spillage, or damage that could cause leakage. In the event of a spill, do not attempt to clean it up. Refer to the Mercury Spill Policy and Procedure.
- MCE often contain ampoules of mercury. An ampoule is defined as "an airtight vial made of glass, plastic, metal, or any combination of these materials." Only trained staff may remove mercury-containing ampoules from MCE. The following procedures apply to MCE meeting the universal waste requirements.
- It is the responsibility of the department having MCE meeting the universal waste requirement to store and dispose of it in accordance with applicable regulations. The Safety Department can be contacted to locate an appropriate vendor.
- It is the policy of DHHS not to remove the ampoules from MCE.

## **General Procedures for Lamps**

Universal Waste Lamps - All handlers must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The following procedures apply to lamps meeting the universal waste requirements.

- Lamps generated as waste at DHHS Facilities must meet the labeling and storage requirements of this policy until they are turned in for disposal.
- The Facilities Department will coordinate with the Recycling Center for disposal of waste lamps.
- Lamps that have been crushed will be transferred to the Hazardous Waste Storage Site, manifested, and the vendor contacted for disposal.

Section V:	Human Resources	Page 4 of 7
Title:	Safety and Benefits	
Chapter:	Universal Waste Plan	
<b>Current Effective Date:</b>	3/1/16	

• It is the responsibility of the Facilities Department to store and dispose of lamps in accordance with applicable regulations.

### **Storage and Labeling**

Universal waste may only be accumulated for one year from the date it was generated, or received from another handler in accordance with EPA 235.15, Accumulation Time Limits. Each department that accumulates universal waste will demonstrate the length of time that the waste has been accumulated by doing one of the following:

- Placing the waste in a container and marking or labeling the container with the earliest day the waste was received or became waste;
- Marking or labeling each individual item with the earliest day the waste was received or became waste;
- Maintaining an inventory system on-site that identifies the date each universal waste (or group items or group containers) became waste or was received;
- Placing the waste in a specific accumulation area and identifies the date each universal waste became waste or was received;
- All handlers of universal waste must mark or label the universal waste to identify the type of waste as specified below.
- *Batteries*: Each battery, or a container in which batteries are contained, must be labeled or clearly marked with any one of the following phrases:
  - o "Universal Waste-Battery(ies)"
  - "Waste Battery(ies)"
  - "Used Battery(ies)"
- *Pesticides:* A container or a multiple container package unit, tank, transport vehicle, or vessel containing recalled universal waste pesticides must be labeled clearly with:
  - The label that was on or accompanied the product as sold or distributed
  - The words "Universal Waste-Pesticide(s)" or "Waste Pesticide(s)"
  - *MCE:* For each MCE device or container of MCE:
    - "Universal Waste—Mercury-Containing Equipment," or
    - o "Waste Mercury-Containing Equipment", or
    - "Used Mercury-Containing Equipment"
- Each thermostat or container in which thermostats are contained must be labeled or marked clearly with any one of the following phrases:
  - "Universal Waste-Mercury Thermostat(s)"
  - "Waste Mercury Thermostat(s)"
  - "Used Mercury Thermostat(s)"
- *Lamps*. Each lamp or a container or package in which such lamps are contained must be labeled or clearly marked with any of the following phrases:
  - "Universal Waste-Lamp(s)"
  - "Waste Lamp(s)"

Section V:	Human Resources	Page 5 of 7
Title:	Safety and Benefits	
Chapter:	Universal Waste Plan	
<b>Current Effective Date:</b>	3/1/16	

o "Used Lamp(s)"

## **Response to Releases**

Universal waste releases and residues must be contained immediately. After the containment is accomplished, do the following:

- Mercury or Mercury Containing Equipment
  - Evacuate the area and notify Plant Operations to shut down the airhandling units.
  - Contact the Safety Department.
  - The Safety Department will conduct the spill clean-up.
- Batteries and Pesticides
  - Contact the Safety Department.
  - The Safety Department will conduct the spill clean-up.
- Lamps or Bulbs
  - Put on disposable gloves.
  - Carefully pick up all broken glass and bulb end pieces and put them in a plastic bag.
  - After the material has been put in the bag, take off the gloves and put them in the bag.
  - Place plastic bag in a box and transport to the Universal Waste area.
  - Damp mop the area if possible.

## Training

All departments that handle universal waste will receive training on proper handling, storing, and emergency response procedures. The Safety Department will provide training to staff in the department.

# References

- EPA Universal Waste Guildelines http://www3.epa.gov/epawaste/hazard/wastetypes/universal/
- 40CFR, Part 273, Standards for Universal Waste Management https://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol28/xml/CFR-2012-title40-vol28-part273.xml

Section V:	Human Resources	Page 6 of 7
Title:	Safety and Benefits	
Chapter:	Universal Waste Plan	
<b>Current Effective Date:</b>	3/1/16	



# UNIVERSAL WASTE CHECKLIST

# Small Quantity Generators

Division:	Facility:
Building:	Location/Area:
Inspector:	Date:

Universal waste accumulation sites meet the following requirements:			N/A
An institution-wide survey to identify universal waste streams has been conducted by the Safety Officer with assistance from affected Department Heads.			
Each identified universal waste stream is handled as universal waste. [Exception: Spent lead acid batteries handled under 40 CFR Part 266].			
Each container of universal waste is labeled in accordance with 40 CFR 273, i.e., Universal Waste - lamps, used lamps, waste lamps			
Each container of universal waste is labeled with the accumulation start date.			
Universal waste does not accumulate for more than one year beyond the accumulation start date.			
No more than 11,000 lbs of universal waste is generated in one calendar year.			
If the 11,000 lb generation threshold is exceeded, the institution has sent a notification to the EPA and has received an EPA identification number.			
Staff who collect, store, or arrange shipments of universal waste have received verifiable and appropriate training.			
The HWSSC and the Safety Department maintain a readily available copy of State and Federal universal waste regulations.			
The institution complies with State universal waste requirements that differ from Federal.			

COMMENTS: