Clayton State University-Universal Waste Management

### Introduction

In 1995, The Georgia Department of Natural Resources Environmental Protection Division (EPD) and the United States Environmental Protection Agency (EPA) developed and streamlined hazardous waste management requirements for collecting and managing certain widely generated hazardous waste by creating a "Universal Waste" category.

This rule is designed to:

- reduce the amount of hazardous waste items in the municipal solid waste stream
- encourage recycling and proper disposal
- reduce regulatory burdens on entities that generate these wastes

All employees who handle or have responsibility for managing universal waste must be informed and **trained** as to the proper handling and emergency procedures appropriate to the type(s) of universal waste.

# **Types of Universal Waste**

- Fluorescent lamps (white fluorescent tubes)
- High intensity discharge (HID) lamps with mercury

High pressure sodium lamps

Metal halide lamps

Neon lamps

Ultra-violet lamps

- Spent lead-acid, nickel/cadmium, mercury batteries (not alkaline)
- Certain and unused pesticides (suspended and/or recalled under Section 6 of the Federal Insecticide, fungicide and Rodenticide Act (FIFRA)
- Ballasts (with PCBs)
- Mercury-containing Thermostats

#### **General Definitions**

*Generator*- any person, or site, whose act or processes produce hazardous waste as identified or listed in 40 CRF part 261 that will create a hazardous waste to become subject to regulation.

Handler- anyone who is responsible for managing universal waste. (i.e. removing/replacing lamps)

### **Handling and Safety Procedures**

All universal waste handlers should wear appropriate gloves and eye protection.

#### Lamps:

- handle lamps in a manner that will prevent releases (breakage).
- properly store lamps in a box or case to prevent breakage, preferably in the original box and in good shape with a secured lid
- do not leave individual lamps leaning in corners of rooms or hallways, lying unprotected on top of equipment or on the floor.
- label all lamp containers
- do not allow box/container to get wet
- do not tape bulbs together
- package bulbs tightly without separators or other packing.
- do not mix different lengths or types of bulbs in a box
- boxes must be full to avoid the possibility of breakage
- immediately contain any releases and manage released material as a universal hazardous waste.

# If a lamp breaks:

- you must wear leather gloves
- eye protection
- avoid breathing the vapors
- do not dispose in the normal trash.
- package broken bulbs in puncture resistant closable container (heavy cardboard box, trash container with lid, commercial broken glass container)

### If you do not have appropriate protective equipment:

contact Facilities Management or Public Safety for assistance

### **Ballasts containing PCBs:**

- handle ballasts in a manner that will prevent any leakage
- clip/remove wires from the ballast
- store all PCB containing ballasts in an appropriate metal container with secured lid
- wear disposable gloves when packing ballasts and place the used gloves in a separate container
- label container as ballasts containing PCB

#### **Batteries:**

- handle spent batteries in a manner that will prevent an acid spill
- properly store them in a closed structurally sound container with a secured lid
- discharge batteries to remove the electric charge
- sort batteries by type
- do not leave lying unprotected on top of equipment
- label all battery containers
- ilmmediately contain any spills by using appropriate protective equipment

### **Pesticides:**

handle pesticides in a manner that will prevent spillage

- properly store them in a closed structurally sound container with a secured lid
- properly store them in a container that is compatible with the pesticide
- label all pesticide containers
- immediately contain any spills by using the appropriate protective equipment

# **Mercury containing Thermostats:**

- removed ampules in a manner designed to prevent breakage and remove only over or in a contained device
- the removal of the ampule area must be well-ventilated and monitored to ensure compliance and safety
- ampules must be stored in a structurally sound container with a secured lid
- label all thermostat containers
- immediately contain any mercury spills by using appropriate protective equipment

### **Labeling Procedures:**

- all labels must clearly show the type of universal waste
- all labels must have the start date of accumulation
- all labels must have the container full date

### Delivery:

- deliver full boxes to Facilities Management or transfer partial boxes to the appropriate container on-site
- place any containers on a secondary containment pallet
- containers must remain closed at all times except when adding waste

### Universal Waste Storage Areas:

- all storage containers must be stored indoors
- the area must be clearly marked with a sign reading "Universal Hazardous Waste Storage"
- area must be kept secured/locked
- the area must be inspected weekly and documented accordingly
- waste may not be stored for more than 1 year

### Facilities Management:

- responsible for all record keeping, shipping procedures, and verification of reclamation facilities
- responsible for inspecting the accumulation area weekly and ensure all containers are properly labeled, packaged and sealed according to regulations.

Universal Waste Management Training is available on Environmental Health and Safety web page: <a href="http://adminservices.clayton.edu/ehs/universalwastemgt.htm">http://adminservices.clayton.edu/ehs/universalwastemgt.htm</a>

A copy of the training is also available on a CD at Facilities Management.