Universal Waste
Safety Congress 2017
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Overview
- In this session, attendees will be able to:
  - Determine what wastes can be classified as Universal
  - Store, handle, dispose and document Universal Waste correctly
  - Understand pending changes to Universal Waste requirements
  - Develop a compliant Universal Waste program for their facility

Introduction
- Note that this course is Ohio specific

Who Regulates Universal Waste?
- Ohio Environmental Protection Agency (OEPA)
- United States Environmental Protection Agency (USEPA)
- Occupational Safety and Health Administration (OSHA)
- U.S. Department of Transportation (DOT)

Resource Conservation and Recovery Act (RCRA)
- Promote and protect human health and the environment- conserve energy and resources
- Reduce or eliminate the generation of hazardous wastes as expeditiously as possible
- When hazardous waste is generated, hold the generator responsible through “cradle-to-grave” system
“Cradle-to-Grave”

The Players
- Handlers
- Transporters
- Destination Facilities

Universal Waste
- Subset of hazardous waste that is less regulated... Why?
  - Less regulatory burden on businesses
  - Promotes proper recycling or disposal of hazardous waste batteries, pesticides, fluorescent bulbs, and mercury-containing thermostats
  - Provides for collection opportunities
- States may adopt all or part of the rule

Universal Wastes
- Types of waste (in Ohio):
  - Lamps
  - Pesticides
  - Mercury-containing equipment
  - Batteries
- These 4 and only these 4 (for now)!

Handler Categories
- Types of handlers:
  - **Large Quantity** Handler of Universal Waste (LQHUW)
    - \(\geq 5,000\) kg total at any time
  - **Small Quantity** Handler of Universal Waste (SQHUW)
    - \(< 5,000\) kg total at any time
Handler Categories

- A 4ft fluorescent lamp weighs 0.5 lb\(^1\)
- 22,064 4ft lamps (with no other universal waste on-site) make you a LQHUW
- 5 gallon pail of mixed batteries weighs 40 lbs\(^1\)
- 275 pails (with no other universal waste on-site) make you a LQHUW

1. Massachusetts DEP

O EPA Notification

- SQHUW- Notification not required
- LQHUW- One time OEPA notification, Obtain EPA ID number

Labeling

- Labeling
  - "Universal Waste + type" (see specifics)
  - Month/day/year the waste became a waste (by container, storage area, or inventory)

UNIVERSAL WASTE

<table>
<thead>
<tr>
<th>DATE</th>
<th>TYPE</th>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/2022</td>
<td>Battery</td>
<td></td>
</tr>
</tbody>
</table>

Time Limits

- Storage time limit = one year

Universal Waste Containers

- The container for each type of UW must meet the following criteria:
  - the container remains closed
  - the container is structurally sound
  - the container is compatible with the UW
  - the container lacks evidence of leaks, spillage, or damage that could cause leakage

Universal Waste Training

- A small quantity handler of universal waste shall inform all employees who handle or have responsibility for managing universal waste.
- The information shall describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.
Universal Waste Release
- Small quantity handlers must "immediately contain all releases"

Universal Waste Shipment
- Generators can send universal waste to:
  - Another Generator
  - Destination Facility
- Self transport is allowed if conditions met/DOT compliant
- Hazardous waste manifest is not required
- Records not required
- Export requirements apply

Specific Waste Types

Universal Waste Batteries
- Might need to separate by type, depending on your vendor
- Tape terminal ends for safe transport and storage
- Any batteries that show evidence of leakage, spillage, or damage that could cause leakage must be in a container

Universal Waste Lamps
- Label: "Universal Waste Lamp(s)", "Waste Lamp(s)" or "Used Lamp(s)"
  - Examples: incandescent, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps
  - If you crush them (intentional or not), they become hazardous waste
Universal Waste Lamps

- Hazardous due to mercury, lead and cadmium
- If you determine your lamps are not hazardous, you can manage them as solid waste. However, all lamps contain some level of mercury

Universal Waste Pesticides

- Suspended or recalled under Federal Insecticide Fungicide Rodenticide Act (FIFRA) or collected in pesticide collection program
- Label: "Universal Waste Pesticides" or "Waste Pesticides"
- Overpack if leaking

Universal Waste Mercury Containing Equipment

- A device or part of a device (excluding batteries and lamps) that contains elemental mercury integral to its function.
  - Thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches (such as light switches in automobiles)
- Not included: Mercury waste that is generated as a by-product (through the process of manufacturing or treatment, or equipment that has been contaminated by mercury)

Universal Waste Mercury Containing Equipment

- Label
  - "Universal Waste-Mercury Containing Equipment"
  - "Universal Waste- Mercury Thermostat(s),"
  - "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."

Mercury Containing Equipment

- Handlers may remove ampoules from mercury-containing equipment if certain conditions are met

What is Changing?
**Additional Universal Wastes in Future?**

- Non-empty aerosol cans
- Hazardous paint and paint-related wastes
- Hazardous antifreeze

**Draft Changes to UW Rules**

- Training required on Ohio-specific Universal Wastes
- Aerosol cans
  - May be collected in a satellite accumulation area
  - Puncturing is allowable with certain conditions and proper disposal of liquid and filters
- Antifreeze
  - Procedure required to prevent commingling/contamination
  - Dedicated containers
- Paint and Paint-Related Wastes
  - Puncturing is allowable with certain conditions (liquid is universal waste)

**Future Changes**

- Public comment period closed 12/21/16
- Expected to be finalized shortly

**Tips for a Compliant Program**

**Reference Document**

**Routine Inspections**
Failure to comply with the RCRA regulations can result in serious injury and fines as high as $37,500 per day per violation.

OAC 3745-173
OEPA Website, Division of Materials and Waste Management
http://www.epa.state.oh.us/dmwm/Home.aspx
Universal Waste Guidance Document
Questions?

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