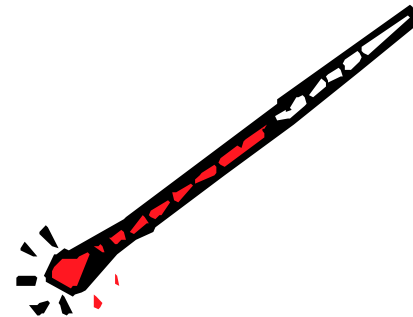
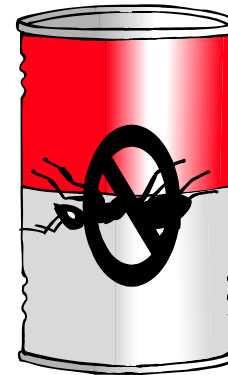
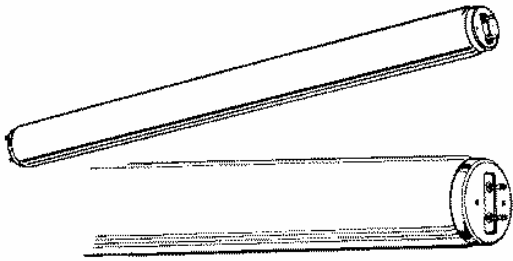


Universal Wastes



Overview



- ⌘ **Characteristics of Universal Wastes**
- ⌘ **Goals of Universal Waste Rule**
- ⌘ **What is considered Universal Wastes?**
- ⌘ **Who generates Universal Wastes?**
- ⌘ **Transporter of Universal Waste**
- ⌘ **Destination Facilities**
- ⌘ **Universal Wastes and the States**
- ⌘ **Special Issues**

Characteristics of UW



- ⌘ **Generated in a wide variety of settings other than industrial settings usually associated with hazardous wastes**
- ⌘ **Generated by a vast community of various sizes which pose implementation difficulties**
- ⌘ **May be present in volumes of non-hazardous waste**

Goals



- ⌘ **Final Rule published in May 1995**
- ⌘ **Details located at 40 CFR Part 273**
- ⌘ **Defines streamlined management regulations for "widely generated wastes"**
- ⌘ **Targeted Goals of Rule are:**
 - ⌘ **Encourage environmentally sound collection and recycling or treatment of universal waste**
 - ⌘ **Improve implementation of the hazardous waste system**
 - ⌘ **Ease regulatory burden**
 - ⌘ **Reduce the hazardous wastes going to municipal landfills or municipal combustors**

What are Considered Universal Wastes?



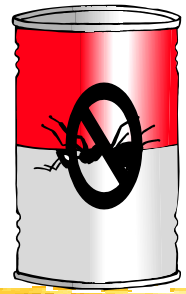
- ⌘ **Universal waste categories must be hazardous waste before they can be designated as universal wastes**
- ⌘ **Four types of Federal universal wastes:**
 - ☑ **Batteries (e.g., nickel cadmium)**
 - ☑ **Certain pesticides that are either recalled or collected in waste pesticides collection programs**
 - ☑ **Mercury-containing thermostats**
 - ☑ **Lamps (e.g., fluorescent bulbs)**



Batteries

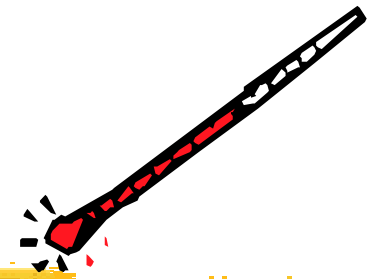
- ⌘ **Device consisting of electrically connected electrochemical cells designed to receive, store, and deliver energy**
- ⌘ **Unbroken batteries where the electrolyte has been removed**
- ⌘ **Lead batteries - universal waste or Part 266 Subpart G**
- ⌘ **Waste determination made by generator**

Pesticides



- ⌘ **Unused pesticides banned from use**
- ⌘ **Damaged by temperature extremes**
- ⌘ **Recalled pesticides become a UW**
when:
 - ☑ **Generator participates in recall**
 - ☑ **Generator decides to discard or burn for energy**

Thermostats



- ⌘ **Temperature control devices containing metallic mercury in an ampoule and ampoules that have been removed from these devices**
- ⌘ **UWR does not cover mercury containing equipment such as gauges, manometers, relays, and circuit boards**

Hazardous Waste Lamps



- ⌘ **Lamps are defined as the bulb or tube portion of an electric lighting device**
- ⌘ **Fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide**
- ⌘ **Exhibit toxicity characteristics for mercury or lead**

Universal Waste Handlers (SQHUW)



- ⌘ **Small Quantity Handlers of Universal Wastes - less than 5,000 kilograms (2,270 lb) of all universal waste categories**
- ⌘ **Regs for SQHUW found in Part 273 Subpart G**

Universal Wastes Handlers (LQHUU)



- ⌘ **Large Quantity Handlers of Universal Wastes - 5,000 or more kilograms of all universal waste categories**
- ⌘ **Regs for LQHUU found in Part 273 Subpart C**
- ⌘ **Once a handler triggers the LQHUU status, they remain for the rest of the calendar year**

Benefits of Handling Universal Wastes



- ⌘ Lessens regulatory burden on collection programs**
- ⌘ Eliminates concern for retailers that wastes may have been generated by RCRA-regulated generator**
- ⌘ Ensures that waste goes to proper treatment, recycling, or disposal facility**
- ⌘ Has labeling and storage requirements, but less stringent than for hazardous waste**

Transporters



- ⌘ **Persons who move UW shipments from a handler to another handler, a destination facility, or a foreign destination**
- ⌘ **UW transporter regulations apply for any amount of UW**

Transporters con't



⌘ Seven UW Requirements

- ⊗ **Applicability (40 CFR 273.50) - to whom the regulations apply**
- ⊗ **Prohibitions (40 CFR 273.51) - prohibits disposing, diluting, or treating UW**
- ⊗ **Waste Management (40 CFR 273.52) - comply with DOT regulations if UW fall under DOT hazardous waste definition**
- ⊗ **Accumulation Time Limits (40 CFR 273.53) - UW can be stored for up to 10 days**

Transporters con't



- ✘ **Response to Release (40 CFR 273.54) - immediately contain UW releases and handle residues appropriately**
- ✘ **Off-Site Shipments (40 CFR 273.55) - prohibits transporting UW to any place other than a UW handler, destination facility, or foreign destination**
- ✘ **Exports (40 CFR 273.56) - follow rules for exporting hazardous wastes**

Destination Facilities



- ⌘ **Treats, disposes of, or recycles UW**
- ⌘ **Same general requirements as traditional hazardous waste TSDF**
- ⌘ **Subject to permitting and unit specific requirements**

Universal Waste and the States



- ⌘ **The rule is optional for states because it is less stringent than existing regulations, but is in effect in all of Region 2 (NJ, NY, PR & VI)**
- ⌘ **Before shipping across state lines, note:**
 - ☑ **Universal Waste Rule may be used only if adopted by receiving state**
 - ☑ **Hazardous waste requirements apply if not adopted in receiving state**

Special Issues



- ⌘ **Mercury-Containing and Rechargeable Battery Management Act signed on May 13, 1996 effective in all 50 States**
 - ☒ **Goals - 1. Decrease mercury content in batteries**
2. Increase voluntary recycling of batteries
- ⌘ **Collection, storage, transportation of used rechargeable batteries, lead-acid batteries, banned mercury-containing batteries, used consumer products containing batteries that can't be removed**

Review



- ⌘ **Defines streamlined management regulations for "widely generated wastes"**
- ⌘ **hazardous waste batteries**
- ⌘ **hazardous waste pesticides that are recalled or sent to a collection program**
- ⌘ **mercury-containing thermostats**
- ⌘ **spent fluorescent lamps and other hazardous lamps (with mercury, and some lead)**

Review



- ⌘ **Lessens regulatory burden on collection programs**
- ⌘ **Eliminates concern for retailers that wastes may have been generated by RCRA-regulated generator**
- ⌘ **Ensures that waste goes to proper treatment, recycling, or disposal facility**
- ⌘ **Has labeling and storage requirements, but less stringent than for hazardous waste**

Review



- ⌘ **Small Quantity Handler of Universal Waste**
- ⌘ **accumulates less than 5,000kg (2,270 lb)**
- ⌘ **Large Quantity Handler of Universal Waste**
- ⌘ **accumulates less than 5,000kg (2,270 lb)**
- ⌘ **Notify EPA, if no haz. waste ID already obtained**
- ⌘ **Universal Waste Transporter**
- ⌘ **Must meet DOT requirements**
- ⌘ **Destination Facility - must meet all requirements that would otherwise apply**
- ⌘ **Mercury-Containing & Rechargeable Battery Act**