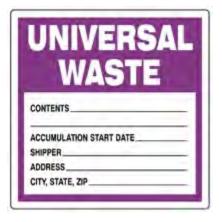


# Universal Waste Rules are Alternative Management Practices for Specific Hazardous Wastes

Regulations: R315-273

Not Counted in Total Monthly Hazardous Waste Generation Container Must Be Closed and Labeled Cannot Be Accumulated Onsite for over One Year





## Six Categories of Universal Waste in Utah

- 1) Batteries
- 2) Pesticides
- 3) Mercury-Containing Equipment
- 4) Lamps
- 5) Antifreeze
- 6) Aerosol Cans



## **Battery Basics**

- Provides Definition of Battery
- Spent Lead Acid Batteries
- Does Not Apply to Batteries Not Yet a Hazardous Waste
- Managed to Prevent Releases





# Regulations Allow Specific Treatments for Batteries

- Removal of Electrolyte
- Sorting by Type and Mixing in Containers
- Removing Electrical Charge (Discharging)
- Regenerating
- Disassembling
- Removing from Consumer Products

# Battery Labeling Requirements

- Individual Batteries or Containers of Batteries Must be Labeled
  - Universal Waste Battery(ies)
  - Waste Battery(ies)
  - Used Battery(ies)







# Lamps and Lamp Crushers Basics

- Defines Lamps
- Defines Drum-top Lamp Crusher
- Does Not Apply to Lamps Not a Waste or Hazardous Waste
- Managed to Prevent Releases
- Crushed Lamps Managed as Universal Waste



# Drum Top Lamp Crushing is Generally Not Recommended

- Utah Specific Requirement
- Registration Required
  - Application Form
    - Multiple Regulated Operating Conditions
    - Additional Employee Training
    - Additional Record Keeping
    - Must Establish A Closure Plan
    - Must Establish Financial Assurance





## Lamp Labeling

- Individual Lamps or Containers of Lamps
   Must be Labeled
  - Universal Waste-Lamp(s)
  - Waste Lamp(s)
  - Used Lamp(s)





### **Aerosol Cans Basics**

- Previously Utah Specific Rule
- Defines Aerosol Can
- Does Not Apply to Aerosol Cans Not a Waste or Hazardous Waste
- Managed to Prevent Releases





## Puncturing Aerosol Cans

- Aerosol Cans may be Punctured
  - Manner Designed to Prevent Release
  - Written Procedures
  - Spill Kit Available
  - Can Contents Transferred to Proper Container
  - Area Well Ventilated
  - Employees Trained
- Manage Generated Waste Properly





## Aerosol Can Labeling

- Individual Cans or Containers of Cans Must be Labeled
  - Universal Waste-Aerosol Can(s)
  - Waste Aerosol Can(s)



## Documenting Compliance

# Label Closed Containers with Accumulation Start Date



### Waste Electronics

- No regulations specifically for the management of electronic waste, but...
- Always required to make an accurate waste determination per R315-261



### Refresher on Waste Determination

- First determine if material is a Solid Waste, then
- Determine if Solid Waste is Hazardous Waste

- Speculative Accumulation (R315-261-1(c)(8))
  - Material is Viably Recyclable
  - 75% of Material is Recycled within Calendar Year



# Scrap Metal Exclusion R315-261-4(a)(13)

- Scrap metal: Scrap metal is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal (R315-261-1(c)(6))
- Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled is not a solid waste



# Scrap Metal Exemption R315-261-6(a)(3)(ii)

Scrap metal that is not already excluded from the definition of solid waste is exempt from hazardous waste regulations if sent for recycling/reclamation



#### Solid Waste Table (R315-261-2(c))

	Use constituting disposal (261-2(c)(1))	Energy Recovery/fuel (261-2(c)(2))	Reclamation (261- 2(c)(3)) except as provided in 261- 4(a)(17), 261-4(a)(23), 261-4(a)(24) or 261- 4(a)(27)	Speculative accumulation (R315- 261-2(c)(4))
Spent materials	SOLID WASTE	SOLID WASTE	SOLID WASTE	SOLID WASTE
Sludges (listed in R315- 261-31 or 261-32)	SOLID WASTE	SOLID WASTE	SOLID WASTE	SOLID WASTE
Sludges exhibiting a characteristic of hazardous waste	SOLID WASTE	SOLID WASTE	NOT SOLID WASTE	SOLID WASTE
By-products (listed on 261- 31 & 261-32)	SOLID WASTE	SOLID WASTE	SOLID WASTE	SOLID WASTE
By-products exhibiting a characteristic of hazardous waste	SOLID WASTE	SOLID WASTE	NOT SOLID WASTE	SOLID WASTE
Commercial chemical products listed in 261-33	SOLID WASTE	SOLID WASTE	NOT SOLID WASTE	NOT SOLID WASTE
Scrap metal that is not excluded under 261-4(a)(13)	SOLID WASTE	SOLID WASTE	SOLID WASTE	SOLID WASTE

### Circuit Boards

- Whole, unused circuit boards are off-specification commercial products and not solid waste if sent for recycling/reclamation (see Solid Waste table)
- Whole, used circuit boards meet the definition of scrap metal and are exempt from RCRA hazardous waste rules if recycled
  - Used circuit boards and equipment containing used circuit boards are solid waste but are not hazardous waste if they are recycled.



**WASTE MANAGEMENT** & RADIATION CONTROL

## Shredded Circuit Boards R315-261-4(a)(14)

Shredded circuit boards being recycled are not solid waste provided that they are:

- Stored in containers sufficient to prevent a release to the environment prior to recovery; and
- Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.



# Used Cathode Ray Tubes (CRTs) R315-261-4(a)(22)

- Used, intact CRTs that are not disposed of or speculatively accumulated are not solid waste
- Used, intact CRTs that are exported for recycling are not solid waste provided they meet requirements at R315-261-40;
- Used, broken CRTs and glass removed from CRTs are not solid waste provided that they meet certain storage, segregation, labeling and other requirements at R315-261-39



## Summary

- Electronic waste containing circuit boards, if recycled and not shredded by the generator are not hazardous waste
- Intact CRTs that are sent for recycling are not solid waste and no requirements apply to the generator unless the generator exports the CRTs
- Broken CRTs are subject to storage and labeling requirements



# For More Information on CRTs go to:

https://www.epa.gov/hw/cat hode-ray-tubes-crts-0

