
Universal Waste

Craig Jorgensen May 2023



UTAH DEPARTMENT *of*
ENVIRONMENTAL QUALITY
**WASTE MANAGEMENT
& RADIATION CONTROL**



R315-273

Universal Waste Rules

Universal Waste Rules are Alternative Management Practices for Specific Hazardous Wastes

- Not counted in total monthly hazardous waste generation
- Container must be closed and labeled
- Cannot be accumulated onsite for over one year; accumulation start date

R315-273-1

Universal Waste Categories

01 Batteries

02 Pesticides

03 Antifreeze

04 Lamps

05 Mercury-
Containing
Equipment

06 Aerosol Cans

Universal Waste- Batteries



UW Batteries

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



Labeling

Individual Batteries or Containers of Batteries Must be Labeled:

- Universal Waste-Battery(ies)
- Waste Battery(ies)
- Used Battery(ies)

Universal Waste- Batteries



Activities Allowed Under the Rule

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

Universal Waste- Batteries



Universal Waste- Lamps



UW Lamps

- 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



Labeling

Individual Lamps or Containers or Packages of Lamps Must be Labeled:

- Universal Waste-Lamp(s)
- Waste Lamp(s)
- Used Lamp(s)

Universal Waste- Lamp Crushers



Utah-Specific Requirement

- Lamp Crushing is generally discouraged
- Registration Required
 - Application Form
 - Multiple regulated operating conditions
 - Additional Employee Training
 - Additional record keeping
 - Must establish a closure plan
 - Must establish financial assurance R315-261-143(a) through (e)

Universal Waste- Lamps



Universal Waste- Aerosol Cans



UW Aerosol Cans

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



Labeling

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

Universal Waste- Aerosol Cans



Disposal Procedures



- 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

Universal Waste- Aerosol Cans



Universal Waste- Mercury-Containing Equipment



UW- Mercury-Containing Equipment

- Defines Mercury-Containing Equipment
- Defines Thermostat
- Does Not Apply to Mercury-Containing Equipment Not a Waste or Hazardous Waste
- Does Not Apply to Devices Where Mercury-Containing Components Have Been Removed

Universal Waste- Mercury-Containing Equipment



Labeling

- Each Device or Containers of Devices Must be Labeled
 - Universal Waste-Mercury Containing Equipment
 - Waste Mercury-Containing Equipment
 - Used Mercury-Containing Equipment
- Each Thermostat or Containers of Only Thermostats Must be Labeled
 - Universal Waste-Mercury Thermostat(s)
 - Waste Mercury Thermostat(s)
 - Used Mercury Thermostat(s)



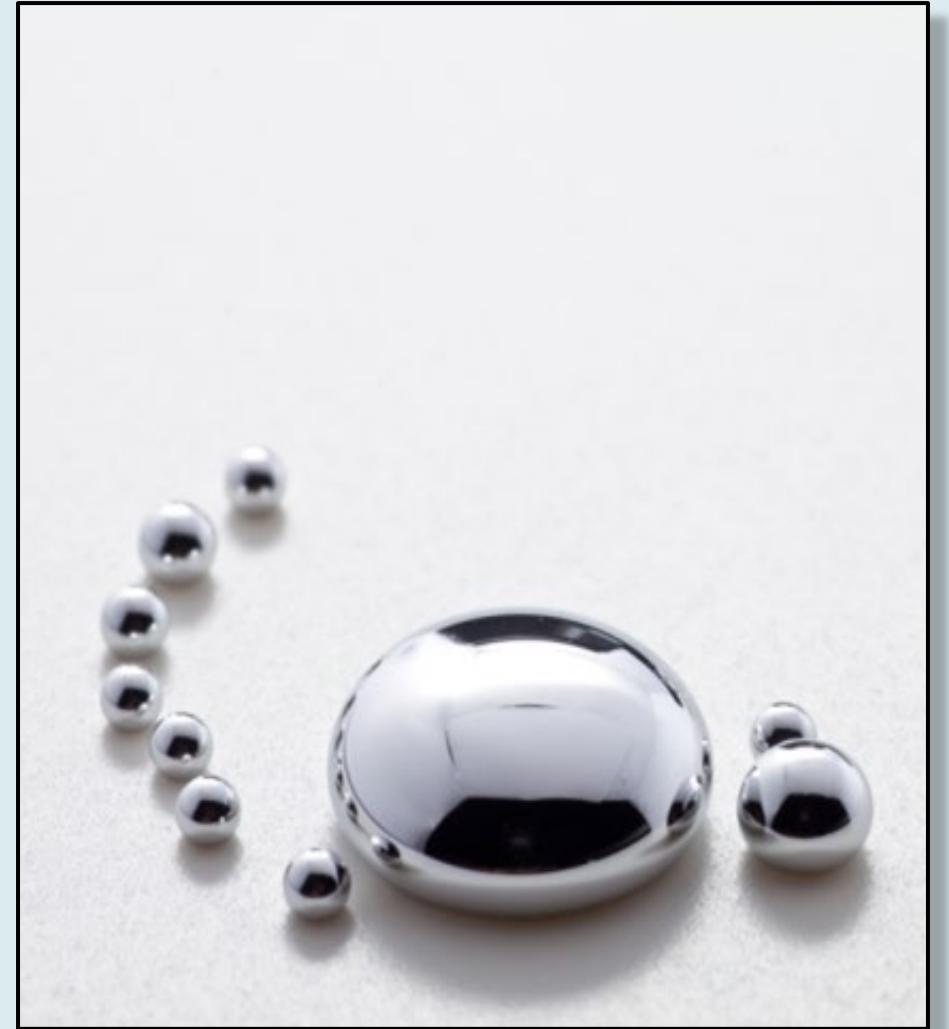
Universal Waste- Mercury-Containing Equipment



UW- Mercury-Containing Equipment

- Managed to Prevent Releases
- Ampules may be Removed Under Certain Conditions
- Devices Without Ampules Must be Sealed
- Waste Generated from Removal Activities Must be Managed Appropriately

Universal Waste- Mercury-Containing Equipment



Universal Waste- Antifreeze



UW Antifreeze

- Utah Specific Rule
- Defines Antifreeze
- Does Not Apply to Antifreeze Not a Waste or Hazardous Waste
- Managed to Prevent Releases



Labeling

- Containers Tanks, Transport Vehicles or Vessels Containing Antifreeze Must be Labeled
 - Universal Waste-Antifreeze

Universal Waste- Antifreeze



Universal Waste- Pesticides



UW Pesticides

- Defines Pesticides
- Recalled or Unused Pesticides
- Does not Apply to Pesticides Disposed by Farmers
- Does Not Apply to Pesticides Not a Waste or Hazardous Waste
- Managed to Prevent Releases



Labeling

- Containers or Multiple Container Packages, Tanks, Transport Vehicles or Vessels Containing Pesticides Must be Labeled
 - Label That Was on or Accompanied the Product
 - Universal Waste-Pesticide(s)
 - Waste-Pesticide(s)

Managing Waste Electronics

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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 recycled within Calendar year.

Scrap Metal



R315-261-4(a)(13)

Scrap Metal Exclusion

Excluded scrap metal:
Scrap metal is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.



R315-261-4(a)(13)

Scrap Metal Exclusion

Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled is not a solid waste



R315-261-6(a)(3)(ii)

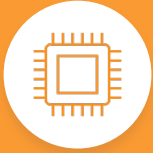
Exempt Scrap Metal

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

	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 261- 2(C) (4)
Spent Materials	Solid Waste	Solid Waste	Solid Waste	Solid Waste
Sludges (listed in 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 A SOLID WASTE	Solid Waste
By-products (listed in 261-31 or 261-32)	Solid Waste	Solid Waste	Solid Waste	Solid Waste
By-products exhibiting a characteristic of hazardous waste	Solid Waste	Solid Waste	NOT A SOLID WASTE	Solid Waste
Commercial chemical products listed in 261-33	Solid Waste	Solid Waste	NOT A SOLID WASTE	NOT A SOLID WASTE
Scrap metal that is not excluded under 261-4(a) (13)	Solid Waste	Solid Waste	Solid Waste	Solid Waste

Solid Waste Table (R315-261-2(C))

Circuit Boards



Whole- Unused

Whole, unused circuit boards are off-specification commercial products and not solid waste if sent for recycling/reclamation (see Solid Waste table)



Whole- Used

Whole, used circuit boards meet the definition of scrap metal and are exempt from RCRA hazardous waste rules under R315-261-6(a) (3) (ii) if recycled.



Used Equipment


Used circuit boards and equipment containing used circuit boards are solid waste but are not hazardous waste if they are recycled.



Shredded

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
- 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 certain requirements; 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 R315-261-39

For More Information on Cathode Ray Tubes, visit:

<https://www.epa.gov/hw/cathode-ray-tubes-crts-0>



| In Summary

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

Questions?



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Additional Questions? Contact Us!