# **Rowan University Universal Waste Disposal Guide for Laboratories**

#### What is a Universal Waste?

Universal Wastes are specific hazardous wastes that are commonly generated across virtually all types of industry. Because of this, the EPA has simplified regulatory requirements for generators of these wastes to encourage proper collection and recycling. Provided that the conditions of the regulations are satisfied, these waste types do not need to be managed as Hazardous Waste.

The EPA Universal Waste regulations are found in 40 CFR Part 273.

There are five categories of Universal Waste established by the EPA:

- Batteries
- Pesticides
- Mercury Containing Equipment
- Lamps
- Aerosol Cans

The New Jersey Department of Environmental Protection (NJDEP) adds two additional categories of Universal Waste:

- Consumer Electronics
- Oil-Based Paints/Finishes

### **Universal Waste Batteries**

A battery is defined in 40 CFR part 273.9 as a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy.

**NOTE:** While they meet the above definition, Alkaline and Carbon Zinc batteries are non-regulated waste and can be placed in the trash.

 Battery terminals should be covered with clear packing tape when shorting of terminals is a potential risk during handling and storage. This is particularly important for high discharge batteries.

### **Universal Waste Lamps**

A lamp is defined as the bulb or tube portion of an electric lighting device by 40 CFR part 273.9.

- All light bulbs should be managed as Universal Waste due to the heavy metals used in their construction.
- Lamps must be stored in a manner which prevents accidental breakage.

## **Exceptions to Universal Waste Regulations**

- Under EPA regulations, a Universal Waste automatically becomes a Hazardous Waste when the item is broken or leaking. Common examples:
  - Broken fluorescent lamps releasing mercury.
  - Batteries leaking electrolyte.
  - Broken mercury ampules in devices.
- Oil-Based Paints/Finishes must be in the original packaging with the manufacturer label present to meet NJDEP requirements. If transferred to another container for disposal, Oil-Based Paints/Finishes must be managed following Hazardous Waste regulations.

### **Completing a Universal Waste Label**

The Rowan University Universal Waste Label is available for download from the Laboratory Safety website on the <u>Laboratory Waste</u> page. All Universal Waste being stored or offered for disposal must be identified using this label.

Below is a completed Universal Waste label using waste Lithium Polymer batteries as an example:

#### **UNIVERSAL WASTE Lithium Polymer** Universal Waste – Battery(ies): (Battery Type) □ Universal Waste – Lamp(s) □ Universal Waste – Mercury Containing Equipment □ Universal Waste – Aerosol Can(s) ☐ Universal Waste – Pesticide(s) □ Universal Waste – Consumer Electronics □ Universal Waste – Oil-Based Finish 02/22/2021 Accumulation Start Date: John Chemist Generator Name: Department Name: **Chemical Engineering** Rowan University 201 Mullica Hill Rd . Glassboro, NJ 08028 Environmental Health & Safety • 856.256.5105 • LabSafety@Rowan.edu

- Check off one box representing the type of waste.
  Different Universal Waste must not be comingled in the same container.
- The Accumulation Start Date must be completed the moment an item is identified as a Universal Waste. All Universal Wastes must be sent to a treatment facility within 1 calendar year of the start date.
- Provide your name as well as the name of the department generating the waste.
- Submit a <u>Waste Determination & Pickup Request</u> Google Form to schedule a waste picked up.



For any questions or to arrange for the disposal of Universal Waste, contact the EHS Department by phone at 856.256.5105 or by email at <u>LabSafety@Rowan.edu</u>.