

**THE GEORGE  
WASHINGTON  
UNIVERSITY**  
WASHINGTON, DC

**Responsible Univesrity Official:** Associate Vice  
President for Safety & Security

**Responsible Office:** Division of Safety & Security

**Last Revised Date:** December 11, 2019

THE GEORGE WASHINGTON UNIVERSITY  
UNIVERSAL WASTE PLAN

December 11, 2019

Health & Safety  
Division of Safety & Security

## I. Universal Waste Plan

### **Introduction**

George Washington University (GW) is a Large Quantity Universal Waste Generator. This Universal Waste Plan has been compiled following 40 CFR §273 which establishes requirements for managing universal waste by the Environmental Protection Agency. GW is required to maintain compliance with this standard when storing, handling, and shipping universal waste. Suggestion and/or comments to improve this document are welcome and encouraged. Comments or questions can be sent to the Health & Safety, Phillips Hall Suite B-148, 801 22<sup>nd</sup> St. NW, Washington, DC 20052 (202) 994-4347 or [safety@gwu.edu](mailto:safety@gwu.edu).

1. PURPOSE

- 1.1. This Plan provides a written description of the Universal Waste management procedures and disposal methods at George Washington University (GW).
- 1.2. The District of Columbia has not defined additional universal waste; bulb crushing is prohibited.

2. SCOPE

This EPA Universal Waste Procedure applies to all faculty, staff, students, and contractors.

3. UNIVERSAL WASTE RULE

- 3.1. The Universal Waste Rule provides a set of streamlined regulations to reduce the regulatory burden by allowing longer time for the storage of certain types of wastes, reduced record-keeping requirements and allows the consolidation off-site of the materials without a permit.

3.2. Regulated materials:

Fluorescent Lamps, Bulbs	Includes all mercury containing lamps, such as mercury vapor, sodium vapor and high-pressure sodium bulbs. Broken bulbs may not be managed as universal waste.
Mercury Containing Devices	Must be unbroken
Unused Pesticides	Not regulated otherwise by EPA
Batteries	Rechargeable batteries and some non-rechargeable that contain hazardous components including lead, nickel, silver, lithium, mercury and other metals. Lead acid batteries also may be managed under these regulations

4. UNIVERSAL WASTE LABELING AND STORAGE

- 4.1. All waste must be placed in a container that is
  - 4.1.1. Structurally sound
  - 4.1.2. Closed using packing tape or container-included closing mechanism
  - 4.1.3. Designed to prevent leakage or release of hazardous materials
  - 4.1.4. Compatible with the universal waste it contains
- 4.2. All universal waste must be separated by type (batteries, pesticides, mercury-containing equipment, or lamps) and subtype (e.g. UV lamps, 2 ft. lamps)
- 4.3. Containers of universal waste must have a label or written marking stating:
  - 4.3.1. Accumulation Date
  - 4.3.2. The phrase "Universal Waste"
  - 4.3.3. The container contents (e.g. UV Lamps)

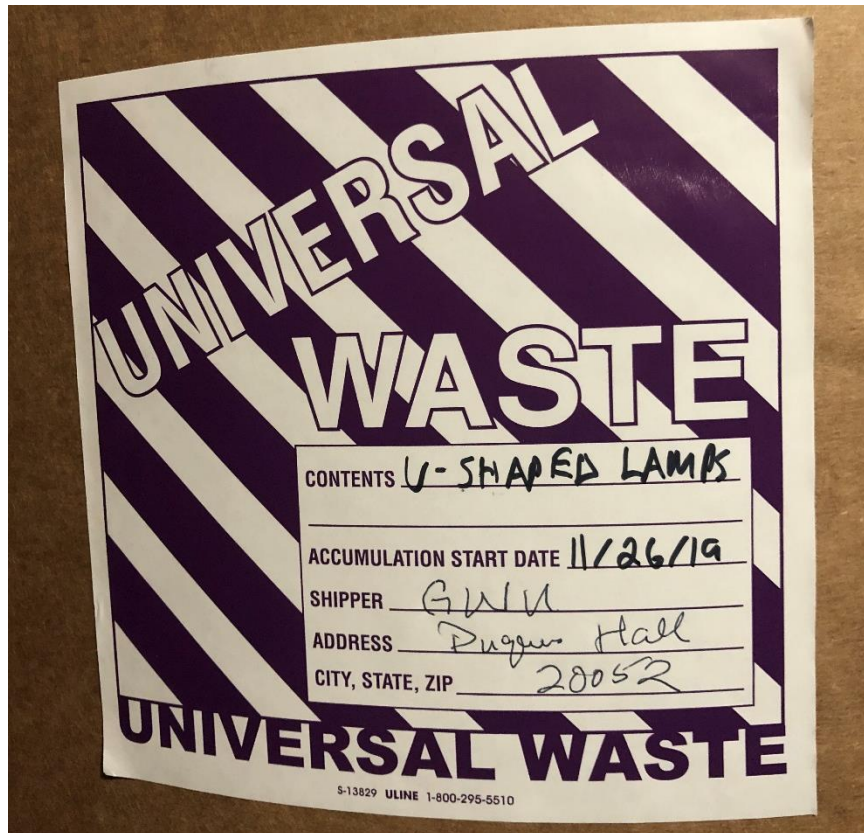


Fig. 1: Reference Universal Waste Label

4.4. Broken universal waste is hazardous waste and falls under the *Hazardous Waste Management Plan*. If universal waste breaks or leaks, please contact Health & Safety at (202) 994-4347.

4.5. Universal Waste rooms are located in:

- 4.5.1. Foggy Bottom: Duqués Hall parking garage
- 4.5.2. Mt. Vernon: Facilities office in parking garage
- 4.5.3. Virginia Science and Technology Campus (VSTC): Enterprise Hall

4.6. Accumulation Time

Universal Waste may not be accumulated for more than one year from the date that it became waste.

## 5. WASTE HANDLING, BATTERIES

### 5.1. Alkaline Batteries

- 5.1.1. Alkaline Batteries >9V: must be insulated from each other and their terminals protected with non-conductive tape.
- 5.1.2. Alkaline Batteries ≤9V: no insulating/taping requirement
- 5.1.3. Place all alkaline batteries in 5-gallon screw-top bucket and follow Universal Waste Labeling and Storage procedures (Section 4, above)

### 5.2. Lead Acid Batteries

- 5.2.1. All lead acid batteries must be taped with non-conductive tape at the terminals to prevent short-circuiting.

- 5.2.2. Place all lead acid batteries in polyurethane open-head drum and follow Universal Waste Labeling and Storage procedures (Section 4, above).
- 5.2.3. Lithium Ion Batteries
  - 5.2.3.1. All lithium ion batteries must be taped with non-conductive tape at the terminals to prevent short-circuiting.
  - 5.2.3.2. Place all lithium ion batteries in a 5-gallon screw-top bucket and follow Universal Waste Labeling and Storage procedures (Section 4, above).
- 5.2.4. Nickel Cadmium Batteries
  - 5.2.4.1. All nickel cadmium (NiCad) batteries must be taped with non-conductive tape at the terminals to prevent short-circuiting.
  - 5.2.4.2. Place all nickel cadmium batteries in a 5 gallon screw-top bucket and follow Universal Waste Labeling and Storage procedures (Section 4, above).

6. WASTE HANDLING, PESTICIDES AND MERCURY-CONTAINING EQUIPMENT

- 6.1. Pesticides and mercury-containing equipment such as thermometers deemed as waste are stored in Central Accumulation Areas (locations listed in Hazardous Waste Management Plan). Please call Health & Safety at (202) 994-4347 or email [safety@gwu.edu](mailto:safety@gwu.edu) to arrange for a pick-up. Follow Universal Waste Labeling and Storage procedures (Section 4, above).

7. WASTE HANDLING, LAMPS

- 7.1. All lamps must be stored by type and length and placed in appropriate containers for each type. Refer to Universal Waste Labeling and Storage procedures (Section 4, above) for labeling and container compliance.

Type	Container
Tube lamps	Tube lamp cylinders
U-Shaped Lamps	55 gallon cardboard boxes/30 gallon cardboard cylinders
Circular Lamps	55 gallon cardboard boxes/30 gallon cardboard cylinders
Compact Fluorescent Lamps	Open-head 55 gallon polyurethane drum
Non-PCB Light Ballasts	Open-head 55 gallon steel drum

8. CAMPUS SPILL REPORTING AND NOTIFICATION

In the event of a Universal Waste spill, Contact Health & Safety, (202) 994-4347. Callers should be prepared to provide the location, product spilled, and approximate volume. Other steps to be taken in the event of a spill are as follows:

- Remove people including the caller from the immediate spill area;
- Assure that others are aware of the spill and do not access the spill area; and
- Do not vacuum up spill or attempt to clean-up on your own.

9. TRAINING

All affected staff will receive annual training on this plan.