



UNIVERSITY OF  
**NORTHERN COLORADO**

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## **Universal Waste Management Plan**

April 2024

## Universal Waste Management Plan

I.

# Universal Waste Management Plan

## **I. Introduction**

The University of Northern Colorado collects and disposes of Universal Waste in

### **III. UNC Universal Waste Handler Status**

The University of Northern Colorado is a large quantity handler of universal waste. Large quantity handlers are those that accumulate a volume of 5,000 kilograms (11,023 pounds) or more of universal waste items annually. Elemental mercury shall not exceed a volume of 35 kilograms (77 pounds) at one time.

### **IV. Universal Waste Accumulation Area**

Universal wastes must be stored in a designated waste storage area with sufficient space to accumulate and store the quantity of Universal Wastes generated. UNC's Universal Waste Accumulation Area is located at Cogen Building. The accumulation and storage of universal wastes must be managed in a manner that prevents the release of waste or waste constituents. All waste should be immediately containerized into the appropriate designated vessel when placed in the Universal Waste Accumulation Area. Materials that do not have a designated vessel/storage location should never be left in this area, contact EHS for proper disposal.

### **V. Universal Waste Types**

Universal waste that is handled at UNC Cogen Building includes: batteries, mercury containing devices, lamps, pesticides, aerosol cans, and

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### **C. Lamps/Bulbs**

Lamps, bulbs, or tube portions of electrical lighting devices, may contain small amounts of mercury. There may also be small amounts of cadmium in some types of lamps. Lamps considered to be universal waste can be fluorescent, metal halide, or mercury vapor. Small compact, U-tube, straight, and standard light bulb shapes are all very commonly found in universal waste.

Non-mercury containing lamps that are utilized by the University campus can be disposed of in the solid waste dumpster. Always verify that the bulb is a non-mercury or low-level mercury bulb before disposal. See Appendix E for a pictorial reference guide of the low-level mercury containing bulbs that may be found on campus. Low-level mercury bulbs that could be used on campus may include the following:

- General Electric Bulbs
  - Ecolux
  - Ecolux Starcoat
  - Ecolux UltraMax
  - Ecolux Biax
  - Ecolux Lucalox
  - Ecolux Mod-U-line
- Sylvania Bulbs
  - Ecologic
  - OCTRON Ecologic
  - PENTRON Ecologic
  - Lumalux (Plus) Ecologic
  - ICETRON Ecologic
  - Powerball CRI Ecologic
- Phillips Bulbs
  - ALTO
  - Ceramalux ALTO
  - Universals ALTO
  - U Bent ALTO
  - PL-C Cluster ALTO
  - PL-S Short ALTO
  - PL-T Triple ALTO
  - MasterColor CDM ALTO
  - Dim Alto

In the case of a Universal Waste spill, see Section XIII, Emergency Procedures.

### **D. Light Emitting Diode**

Light Emitting Diode (LED) is recognized and categorized as e-waste (Colorado Hazardous Waste Regulation Part 273.2) and are considered Universal Waste.



Containers in the central Universal Waste Storage Area should each have a purple, universal waste label stuck on in a visible location, the label shall display the accumulation start date for each specific container. Appendix B shows the universal waste label and describes how it is to be filled out.

## **VIII. Inspections**

## **XII. Training**

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## **Appendix A**

## **Hazardous Material / Waste Tag**

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**Appendix B Universal Waste Label Information**

**Parsons Hall - Universal Waste Storage Area**

- Waste Label Information -



**For Any Questions Contact:**  
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Parsons Hall, Room 2020  
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**Email:** mary.nguyen@unco.edu

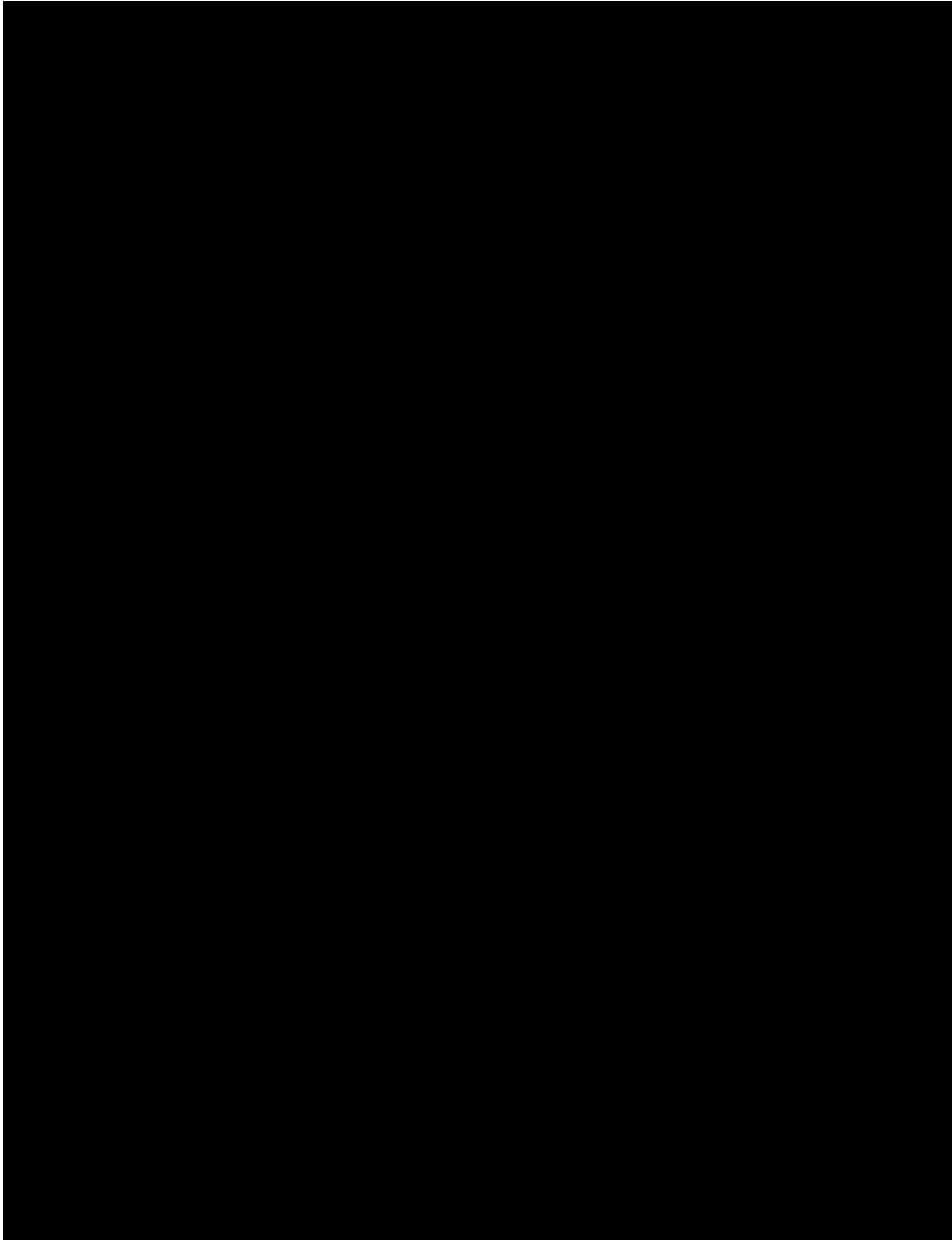
**Appendix C**

**Picture Guide - Cogen Universal Waste Storage Area**



**Appendix D**

**Low-level Mercury Bulb Picture Reference Guide**



## **Appendix E          Low-level Mercury Bulb Picture Reference Guide**

### **General Electric Bulbs**

Ecolux

Ecolux Starcoat

Ecolux Ultramax

Ecolux Biax

Ecolux Lucalox

Ecolux Mod-U-line

### **Sylvania Bulbs**

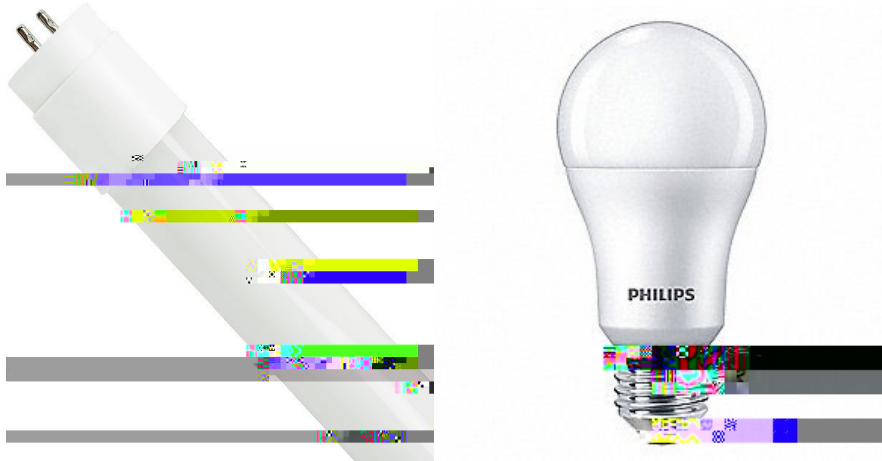
Ecologic/OCTRON Ecologic

PENTRON Ecologic

Lumalux (Plus) Ecologic



LED BULBS



Philips LED lamps

**Appendix F**

**Universal Waste Area Monthly Inspection Sheet**

**Universal Waste Area Monthly Inspection Form**

**Instructions:** Inspect waste containers holding universal waste once a month for leaks, signs of corrosion, swelling, and proper labeling. If a container is found to be leaking, immediately transfer the waste to a new container. Containers must be closed at all times except when adding wastes. Incompatible wastes must not be stored next to each other unless they have a separate secondary containment.

Date of Inspection												
Inspector Initial												
All containers closed?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N