

Trinity College Universal Waste Management Program

The State of Connecticut has adopted the U.S. Environmental Protection Agency's rule governing the management of certain hazardous wastes. Although still considered "hazardous," these items are used everywhere, and applying the rigorous EPA hazardous waste rules would not be practical. [This "Universal Waste" rule](#) provides for reduced management and record keeping requirements regarding these common hazardous waste streams.

Connecticut Categories of Universal Waste

1. **Used Electronics** - Computers, monitors, televisions, keyboards, printers, cell phones, calculators, etc. (Anything that has a circuit board or a CRT.) Electronic equipment contains lead, mercury, cadmium, silver and many other hazardous components.
2. **Fluorescent Lamps, Bulbs and Ballasts** - Includes all mercury containing lamps, such as high-pressure sodium, mercury vapor, and metal halide.)
3. **Thermostats** - Contains a mercury switch. For more information regarding disposal of these products please contact the Environmental Health and Safety Office at x4250
4. **Unused Pesticides**- For more information regarding disposal of these products please contact the Environmental Health and Safety office at x4250
5. **Batteries** - Rechargeable batteries, and some non-rechargeable, contain hazardous components, including lead, nickel, silver, lithium or mercury. Lead acid batteries also contain sulfuric acid.

If you need to discard any of these items, ***DO NOT*** throw them into the regular trash! Follow the management and disposal procedures below.



Universal Waste Management Requirements



1. Trinity College cannot accumulate and store on-site more than 10,000 lbs. of Universal Waste.
2. Universal Wastes cannot be stored on-site longer than 365 days.




3. Universal Wastes must be stored in a manner that prevents releases of universal waste component to the environment and protects them from the elements.
4. Labels clearly marked with the words "Universal Waste" must be affixed to the storage container, (Plastic pail, cardboard barrel, Gaylord box, etc.), or to individual batteries or electronic component placed in storage. The date of disposal must be annotated on the label, which starts the 365-day clock. (This label will be affixed at the waste storage area.) The contents of each piece or waste container, package or pallet in which the universal waste is contained must be clearly identified as follows:
 - Used electronics must be labeled or marked clearly with any of the following: "Universal Waste - used electronics" or "Waste Used Electronics, or "Used Electronics".
 - Universal waste lamps must be labeled or marked clearly with any of the following: "Universal Waste - Lamp(s)" or "Waste Lamp(s), or "Used Lamp(s)".
 - Each container in which the thermostats or other mercury-containing equipment are contained, must be labeled or marked clearly with any one of the following: "Universal Waste - Mercury-Containing Equipment" or "Waste Mercury-Containing Equipment", or "Used Mercury-Containing Equipment".
 - A container containing universal waste pesticides must be labeled or marked clearly with:
 - The label that was on or accompanied the product as sold or distributed if or if unused pesticide products, the label that was on the product when purchased, if still legible; or, if not feasible, an appropriate label as required under DOT regulations; and
 - The words "Universal Waste - Pesticide(s)" or "Waste - Pesticide(s)".
 - Universal waste batteries must be labeled or marked clearly with any of the following: "Universal Waste - Battery(ies)" or "Waste Battery(ies), or "Used Battery(ies)".









Management and Disposal Procedure of Universal Waste, and Other Commonly Discarded Items at Trinity College


Lamps	Facilities Management Personnel	Trinity College Community
<p>Fluorescent and UV Tubes</p> 	<p>Return replaced lamps to the Service Building Stockroom and place them in the appropriate labeled fiber drum.</p>	<p>Deliver lamps to the recycling center located at the southwest entrance of Mather Hall or via campus mail to the Office of Community Service and Civic Engagement.</p>
<p>Compact Fluorescent Lamps (CFL'S)</p> 	<p>Return replaced lamps to the Service Building Stockroom and place them in the appropriate labeled fiber drum.</p>	<p>Deliver lamps to the recycling center located at the southwest entrance of Mather Hall or via campus mail to the Office of Community Service and Civic Engagement.</p>

Batteries	Facilities Management Personnel	Trinity College Community
<p>Lead Acid</p> 	<p>After replacement, Facilities Management personnel will label/date, tape the terminals, and then store used batteries on containment in the Hazardous Waste Shed.</p>	<p>Deliver batteries to the recycling center located at the southwest entrance of Mather Hall or via campus mail to the Office of Community Service and Civic Engagement.</p>
<p>Nickel Metal Hydride (Ni-MH) and Nickel Cadmium (Ni-CAD)</p> 	<p>Place each battery in a labeled Ziploc bag or tape the terminals, then place in Universal Waste Shed.</p>	<p>Deliver batteries to the recycling center located at the southwest entrance of Mather Hall or via campus mail to the Office of Community Service and Civic Engagement.</p>
<p>Lithium, Lithium-Ion (Li Ion) & Lithium Polymer (Li Poly)</p>	<p>Place each battery in a labeled Ziploc bag or tape the terminals, then deposit in the Universal Waste Shed.</p>	<p>Deliver batteries to the recycling center located at the southwest entrance of Mather Hall or via campus mail to the Office of Community Service and Civic Engagement.</p>

		
<p>Alkaline and Zinc Carbon (Rechargeable and Non-rechargeable)</p> 	<p>Recycling is optional. Facilities management personnel will take batteries and deposit in proper drum in the Universal Waste Shed.</p>	<p>Deliver batteries to the recycling center located at the southwest entrance of Mather Hall or via campus mail to the Office of Community Service and Civic Engagement <i>May also be discarded into the regular trash.</i></p>
<p>Silver Oxide and Mercuric Oxide Button Batteries</p> 	<p>Place each battery in a labeled Ziploc bag or tape the terminals, then deposit in correct drum in Universal Waste Shed.</p>	<p>Deliver batteries to the recycling center located at the southwest entrance of Mather Hall or via campus mail to the Office of Community Service and Civic Engagement.</p>

Other Commonly Discarded Items	Facilities Management Personnel	Trinity College Community
<p>Used Electronics (E-Waste) Small Items</p> 	<p>Cell phones and other small electronic items should be deposited at recycling center located at the southwest entrance of Mather Hall or sent via campus mail to the Office of Community Service and Civic Engagement.</p>	<p>Cell phones and other small electronic items should be deposited at recycling center located at the southwest entrance of Mather Hall or sent via campus mail to the Office of Community Service and Civic Engagement.</p>
<p>Used Electronics (E-Waste) Large Items</p> 	<p>Facilities should coordinate with IT to facilitate shipments of E-waste.</p>	<p>Faculty and Staff should email or call the IT Help Desk at Ext-2007 to request a pickup of College owned/leased equipment.</p> <p>If students have large electronic devices from their residence halls to dispose of, they should contact the Sustainability office at x5247 for further instructions.</p>
<p>Microwaves</p> 	<p>Microwaves should be brought back to B&G and disposed of properly.</p>	<p>Not a regulated waste. Please contact Joe Barber at Joseph.Barber@trincoll.edu if still in working condition. If not in working condition, please contact Facilities Management ext. 2444 to arrange a pick-up.</p>

<p>Mini-Refrigerators</p> 	<p>Refrigerators should be brought back to B&G and disposed of properly.</p>	<p>Please contact Joe Barber at Joseph.Barber@trincoll.edu if still in working condition. If not in working condition, please contact Facilities Management ext. 2444 to arrange a pick-up.</p>
<p>Inkjet Printer Cartridges</p> 	<p>Not a regulated waste. Please bring used printer cartridges to the Office of Community Service and Civic Engagement in Mather Hall directly or send via campus mail.</p>	<p>Not a regulated waste. Please bring used printer cartridges to the Office of Community Service and Civic Engagement in Mather Hall directly or send via campus mail.</p>
<p>Toner Cartridges and Laserjet Printer Cartridges</p> 	<p>Not a regulated waste. Please bring used printer cartridges to the Office of Community Service and Civic Engagement in Mather Hall directly or send via campus mail.</p>	<p>Not a regulated waste. Please bring used printer cartridges to the Office of Community Service and Civic Engagement in Mather Hall directly or send via campus mail.</p>

<p style="text-align: center;">Aerosol Cans</p> 	<p>Regulated Waste. Facilities will bring aerosol cans and place in the appropriate container within the MAA shed outside of B&G.</p>	<p>Not a "Universal Waste" but is regulated. If you have empty or unused non-food grade aerosol cans, please contact the Environmental Health and Safety department ext. 4250 for disposal.</p>
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Universal Waste Spill Procedures

Spills from Universal Wastes should only be cleaned up by qualified personnel. Qualified personnel means an individual who is comfortable with the procedures below and has the appropriate equipment and personal protective equipment to clean up the spill safely.

Please contact Facilities x2444 upon discovery of any spills and for help in cleaning up any spills. Facilities will be responsible for making all appropriate governmental notifications and reports.

Fluorescent Lamps and Compact Fluorescent Lamps (CFL's):

- Don't throw mercury containing lamps, broken or unbroken, into the regular trash.
- Ventilate the area where the breakage occurred. When a fluorescent lamp or tube is broken, most of the mercury vapor is released immediately.
- Wear appropriate PPE. At a minimum wear a pair of latex gloves.

- Carefully pick up the larger glass fragments, then thoroughly and carefully clean the spill with a damp disposable sponge or paper towels, to remove the phosphorus powder and any remaining glass fragments.
- Never vacuum debris from broken fluorescent lamps with a standard vacuum cleaner or sweep with a broom. Use only moist sponges or paper towels when cleaning phosphorus powder from a broken fluorescent lamp.
- Dispose of the broken glass, phosphorus powder, contaminated gloves, paper towels and other clean up materials into a plastic pail with a tight-fitting lid. (Plastic pails are available by contacting Environmental Health and Safety Manager ext. 4250)
- Contact the Environmental Health and Safety Manager upon discovery regarding any appropriate governmental notifications and for clean up and disposal assistance. They will ensure that a properly filled out "Hazardous Waste" label is affixed to the pail before it is placed in storage.

Lead Acid Batteries:

- Don appropriate PPE (At a minimum, heavy duty nitrile gloves and splash goggles).
- Prevent the spread of sulfuric acid by creating a berm around the spill with kitty litter or "Speedi-dri".
- Place the broken battery into a 5-gallon plastic pail with a tight-fitting cover/lid. (Plastic pails are available by contacting the Environmental Health and Safety Manager ext. 4250)
- Neutralize the spilled acid with "Acid Neutralizer", found in chemical spill kits. Facilities management has extra stored in the facilities garage spill equipment cabinet.
- Clean the neutralized spill and place the cleanup materials into the plastic pail with the broken battery.
- Fill out an orange "Hazardous Waste" label and affix it to the pail.
- Contact the Environmental Health and Safety Manager ext. 4250 upon discovery regarding appropriate governmental notifications and to coordinate clean up and transport to the hazardous waste storage facility.

Lithium Batteries

- Place the broken battery into a plastic pail with a tight-fitting lid. (Plastic pails are available by contacting the Environmental Health and Safety Manager ext. 4250)

- Sweep up any residual and place it in the pail. **DO NOT** use water. Lithium reacts violently with water!
- Fill out an orange "Hazardous Waste" label and affix it to the pail.
- Contact the Environmental Health and Safety Manager ext. 4250 upon discovery regarding appropriate governmental notifications and to coordinate transport to the hazardous waste storage facility.

Mercury Containing Devices

- Because of safety and environmental requirements for liquid mercury, the Environmental Health and Safety Manager will respond to all elemental mercury spills.
- The individual discovering or reporting the spill should determine the extent of the spill, evacuate and secure the area so the mercury does not get "tracked" or "kicked" around, and immediately contact the EH&S office at Ext-4250. (After hours call Campus Safety at Ext-2222.)
- The EHS manager will evaluate and clean the spill if it is small (i.e., less than what is contained in a thermometer). Larger mercury spills require emergency response from a HAZMAT spill response contractor.

Broken Computers and Other Electronics

- Wear personal protective attire appropriate to prevent injury when cleaning up broken CRT glass and debris. Recommended attire includes safety glasses, puncture resistant gloves (e.g. leather or other heavy-duty work gloves), protective clothing such as long sleeve shirt and pants.
- Sweep up the broken glass and plastic and dispose of in large heavy-duty plastic bags. Double bag the waste, then place the bag into a cardboard box, and tape it shut. Do not attempt to remove any portion of the CRT from its housing or television cabinet.

Contact the EH&S office at Ext-4250 to coordinate transport to the appropriate storage facility

Information and Training

Facilities crew will receive annual "Universal Waste" training. Pamphlets regarding disposal of universal waste will be provided to the Trinity Community, and the policy will be posted on the EHS webpage.

