



EHS Fact Sheet

Battery Disposal Quick Guide

Used batteries can be considered hazardous waste. Toxic heavy metals and corrosive properties make them unsuitable in the general trash. Used batteries generated on campus are collected by EHS for recycling or disposal as hazardous waste.

Batteries are used to power all sorts of devices such as cell phones, cameras, flashlights, power tools, research equipment, monitoring devices, health monitors, emergency lights, heavy equipment and much more.

Types of batteries

- Alkaline
- Lithium
- Nickel/Metal Hydride (Ni-MH)
- Mercury and Silver Oxide
- Nickel-Cadmium (Ni-Cad)
- Lithium-Ion
- Lead Sulfuric Acid

How to properly dispose of/recycle batteries at OSU

1. Tape each battery terminal with non-conductive tape, or place each battery in a sealed clear bag. Take care not to cover the battery type since each battery will be segregated by the type prior to recycling.
2. Store in a plastic container or cardboard box, to prevent sparking and label the container "Used Batteries for Recycling."
3. Submit a [Chemical and Material Removal Request](#) to ehs@okstate.edu for us to collect the labeled containers.

NOTE: To prevent short-circuits and potential fire hazard during storage and transport, the battery terminal must be taped over prior to placing the battery in the receptacle. Always contact EHS to handle any leaking or unsafe batteries.

See the second page of this fact sheet for details on the different types of batteries and their common uses.



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Alkaline batteries are long-loved dry cell with an alkaline electrolyte of potassium hydroxide, which deters corrosion. These Single-use batteries contain a number of materials that are recyclable and should NOT be thrown in the trash. During the recycling process chemicals are removed while salvageable metal and plastic are recycled.



Lithium batteries are typically non-rechargeable and contain lithium, a water reactive alkali metal. They are commonly known as “button cell” batteries due to their small size. They are commonly found in watches, laser pointers, computer motherboards, and other electronic devices that require a power source of small size.



Nickel/metal hydride (Ni-MH) batteries contain a NiOOH positive electrode and a water reactive, metal alloy forming the negative electrode. Batteries of this type are rechargeable and available in sizes similar to alkaline batteries (size AAA, AA, C, and D). They can be identified by the markings “RECHARGEABLE” or “Ni-MH.”



Mercury and silver oxide batteries are non-rechargeable batteries similar in appearance to the lithium button cell batteries mentioned above. Mercury and silver are toxic metal regulated as hazardous waste that should never be disposed in the trash. Although this type of battery is becoming increasing rare, it may still be found in older equipment.



Nickel-cadmium (Ni-Cad) batteries are a very common rechargeable battery found in many devices most commonly in cordless power tools. The presence of cadmium, a toxic metal, requires this battery to be recycled. Ni-Cad batteries are available in a host of sizes from large rectangular devices to smaller sizes akin to alkaline batteries.



Lithium-ion batteries are most commonly found in devices that drain a significant amount of power quickly such as cameras, cordless power tools and most commonly, laptop computers. They come in sizes similar to that of Ni-Cad batteries.



Lead sulforic acid batteries are commonly known as car batteries. They contain both a toxic heavy metal (lead) and corrosive liquid (sulfuric acid), both of which are hazardous materials. Smaller versions of this battery are often found in uninterruptable power supplies (UPS) and emergency lighting systems. They are rechargeable but have a lifespan of 3-5 years.