

Safe Operating Procedure

(Revised 8/16)

BATTERY DISPOSAL

Many different kinds of batteries are used in the workplace. Determining how to dispose of dead or unwanted batteries can be tricky. Listed below are the common types of batteries used and proper disposal methods for each. If you have unwanted batteries not listed here, please contact Environmental Health and Safety for disposal instructions.

The instructions below also apply to devices and equipment that contain batteries which cannot be easily removed. Often, this type of equipment also contains electronic circuitry that is prohibited from municipal waste landfills. Equipment containing non-alkaline batteries and circuitry must be disposed via EHS.

Prior to disposal, recycling, or collection by EHS, all battery terminals must be securely insulated with a non conductive material to prevent any two batteries from short circuiting and generating heat during storage or transport. Battery terminals may be insulated with electrical tape; or batteries may be individually packaged in a non conductive material (e.g., plastic bag or original packaging).

- Alkaline batteries are commonly referred to as disposable or non-rechargeable batteries. They are often used in toys, flashlights, and some electronic equipment. They commonly come in sizes such as AAA, AA, C, D and 9-volt. Alkaline batteries are non-hazardous and can be thrown in the regular trash.
 Alkaline batteries are the only battery type that can be disposed as regular trash once insulated.
- Lithium batteries and button batteries are commonly used in electronic devices such as cameras, watches, calculators, hearing aids, and other small electronic devices and are often used as an alternative to alkaline batteries. Lithium batteries may be similar in appearance to alkaline batteries, but will be indentified as lithium on the cover. Button batteries are also referred to as mercury/zinc, carbon/zinc, silver oxide, and zinc/air batteries. Lithium and button batteries may not be disposed as regular trash. Insulate terminals of batteries and place in EHS provided 'Universal Waste Batteries' container or tag for collection by EHS. See EHS SOP, Hazardous/Radioactive Material Collection Procedures.
- Rechargeable batteries are usually one of the following varieties: nickel-cadmium (Ni-Cad), nickel metal hydride (Ni-MH), lead-gel, or lithium-ion. These may *not* be disposed as regular trash. Insulate terminals of batteries and place in EHS provided 'Universal Waste Batteries' container or tag for collection by

EHS. See EHS SOP, *Hazardous/Radioactive Material Collection Procedures*.

 Lead-acid batteries include most vehicle type batteries. These batteries contain lead and sulfuric acid and may *not* be disposed as regular trash. Insulate terminals of batteries and trade in the non-working lead acid battery at the time of purchase of a new battery. Lead acid batteries can also be tagged for collection by EHS. See EHS SOP, *Hazardous/Radioactive Material Collection Procedures.*

If any battery is damaged or leaking, insulate the terminals, over pack it in a non-metal container with a tight-fitting lid (i.e., 1-gallon or 5-gallon pail or something similar) and label the outer container as 'Universal Waste – Batteries' and the date the battery was removed from service. Promptly tag it for collection by EHS or call EHS at 402-472-4925 for pick-up.