

CHEMICAL WASTE RECYCLING PROGRAM

BATTERIES

All types of batteries are collected by Chemical Waste Services (CWS) for recycling. These include alkaline, lithium, rechargeable, coin batteries, lead-acid and all other types. Uninterruptible Power Source (UPS) batteries must be removed from the UPS casing prior to pick-up. For battery removal service call Division of Scientific Equipment and Instrumentation Services (DSEIS) at 301-496-4131.



Lead-acid and gel-batteries are collected and placed on wooden pallets for accumulation during storage. Their terminals are concealed with electrical or duct tape to avoid electrical discharge on contact with other terminals which can result to sparks that can start a fire. The full pallets are shrink wrapped and secured with bands to keep them intact during transportation to a permitted recycling facility



Beneficial Reuse

Lead Acid batteries are broken apart in the recycling process and the lead, plastic and acid are separated. The **lead** is melted, poured into ingots and delivered to battery plants to be used in new batteries, bullets and lead bricks for radioactive material shielding. The **plastic** is melted and made into new battery cases, toys and other parts, while the acid is reuse or neutralized and discharged.

Alkaline batteries are collected in translucent plastic containers which are available from the CWS. The full containers are collected by the CWS upon request for service. Batteries are consolidated into bigger drums that are shipped for recycling.



Beneficial Reuse

Alkaline batteries are fully recycled and used to produce various types of products. This includes new alkaline batteries, carbon wire, jewelry, shotgun casings, plastic bottles, and numerous consumer items.

Rechargeable batteries like nickel-cadmium (ni-cads), nickel metal hydride, lithium, etc. They are individually bagged and placed in a DOT shipping container for recycle processing at an approve facility.



Nickel Cadmium batteries are processed in a metal recovery furnace. The reclaimed **cadmium** is used in the production of new nickel cadmium batteries for cell phones, drills, computers, cameras, PDAs, toys and games. It is also used as a corrosion resistant coating. The reclaimed **nickel** is use in the manufacture of stainless steel products like sink parts, faucets, furniture, switch plates, and wires.