NEW HAMPSHIRE DEPARTMENT OF Environmental Services

BMPs

Best Management Practices for N.H. Solid Waste Facilities

Batteries

Batteries come in a variety of types, shapes and sizes. Therefore, proper management of waste batteries can be confusing. The BMPs listed below will help you recognize general use battery types.

Some batteries with hazardous properties or hazardous characteristics can be managed as a Universal Waste as long as they are managed in a way that protects the environment. Some batteries can be discarded in the trash.

Best Management Practices for Batteries by Type

The list below includes general use battery types. Contact NHDES if you are unsure what to do with a specific type of battery.

- **Button cell batteries** are the small batteries mostly used in hearing aids, calculators and watches. They may contain mercury, a toxic heavy metal, making it illegal to dispose of them in the trash. Handle them as a universal waste, and keep them separate from non-mercury batteries. Cover the battery contacts with tape, or place batteries in plastic bags, individually.
- **Rechargeable batteries** are nickel-cadmium (Ni-Cd), lithium ion (Li-ion), nickel metal hydride (Ni-MH) and small, sealed lead-acid (Pb) batteries used to power electronic devices like phones, computers and cameras. These batteries cannot be disposed of as solid waste because they contain cadmium, lithium and lead, which are toxic metals. If lithium ion batteries are not fully discharged, improper storage can result in intense fires. If not fully discharged, cover the rechargeable battery's electrodes with electrical or other plastic tape or place it in a plastic bag, individually. Rechargeable batteries can be recycled for free through the Rechargeable Battery Recycling Corporation (RBRC), a non-profit public service organization dedicated to recycling used rechargeable batteries and old cell phones. RBRC collects the Ni-Cd, Ni-MH, Li-ion, and sealed Pb rechargeable batteries through their national program Call2Recycle™, with the help of retail and community partners. To find the collection site nearest you, call the RBRC toll free helpline 1-877-273-2925 or use the online locator http://www.rbrc.org/call2recycle/index.html.
- **Alkaline batteries (including zinc carbon and zinc chloride batteries)** are the standard AA, C and D cells, and 9-volts used to power products like flashlights, remote controls and small electronic devices. Prior to 1996, popular alkaline batteries, such as Duracell™ and Energizer™, typically contained mercury and other heavy metals. Alkaline batteries on the market now are not hazardous and can be disposed of as solid waste. Place pre-1996 batteries that may contain mercury with button batteries and other mercury-added devices that are recycled.
- **Lead-acid batteries** include those used in vehicles, motorcycles, boats and emergency lighting.

Did You Know?

- New Hampshire law bans the disposal of mercury containing batteries at incinerators and in landfills, so the only options are recycling or proper disposal.
- All batteries can be cheaply recycled or disposed of — some for free. Identify the kind of battery to determine if it can be recycled.
- Cracked or broken lead-acid batteries can leak acid and lead into the environment.

Although intact lead-acid batteries can be managed as Universal Waste, cracked or leaking batteries pose a serious health and environmental risk. Intact vehicle and other lead-acid batteries are recyclable commodities with scrap metal value. Recycle them at authorized scrap metal dealers or at a battery recycler.

- **Lead-acid batteries** should be:
  - > Stacked neatly upright (preferably on a pallet) on an impervious surface.
  - > Stacked no more than five layers high, with rigid, non-conducting material such as cardboard or thick plastic between layers to prevent damage and to keep the electrodes from arcing.
  - > Stored inside, or outside under cover to protect them from the weather.
  - > Stored, if cracked or leaking, in a leak-proof container on top of a layer of baking soda or lime. Do NOT add the baking soda or lime directly to the battery case because the acid in the cracked battery may react and splash.
- **All Batteries**:
  - > Store batteries in an intact, plastic container or on an impervious surface and under cover to protect from the weather.
  - > Do not store leaking batteries with non-leaking ones; acids from the leaking batteries can corrode the other batteries.
  - > Keep the seal loose on the storage containers to avoid the buildup of explosive hydrogen gas.
  - > Store batteries away from sources of sparks or flames.

NO!

YES!

Good signage, protected from weather and contained.

Battery with taped terminals, placed in plastic bag and then placed in rigid, properly labeled container.

For additional information, contact:
Solid Waste Management Bureau
N.H. Department of Environmental Services
29 Hazen Drive, PO Box 95 Concord, NH 03302-0095
(603) 271-2925 fax: (603) 271-2456
solidwasteinfo@des.nh.gov

NEW HAMPSHIRE DEPARTMENT OF Environmental Services