

Batteries (dry-cell, rechargeable, automotive, button, lead-acid)

Battery technology is becoming increasingly important with the rise of portable computing, remote data monitoring and electric vehicle research. Unfortunately, batteries contain heavy metals, acids and other compounds that can be harmful to the environment. Here's how to recycle the most common battery types:

Alkaline & Carbon-Zinc/Silver-Oxide ("Heavy Duty") batteries, Disposal

In Germany it seems that every supermarket has a collection bin for batteries. In the USA there are fewer options. The experts recommend individuals place these with normal household trash, unless your trash is incinerated or you are restricted by local regulations. Some communities collect batteries as part of a recycling program, and several reclamation companies are now recycling these batteries, but the batteries generally end up in a landfill.

Rechargeable batteries provide the only alternative. Ni-Cd batteries may be recharged many times, but have much less capacity than alkalines. Rayovac sells a line of reusable alkaline batteries called "Renewal", which have a large fraction of the capacity of a regular alkaline, but only last for 25 or so charges. Do not send any type of alkaline battery to facilities designed to recycle rechargeables.

Nickel-Cadmium (NiCad), Nickel-Metal Hydride (NiMH), Lithium Ion (Li-Ion) and small Lead Acid Gel (Pb-Gel) Recycling.

Rechargeable batteries contain metals like Cadmium, Nickel and Lithium and therefore should be recycled to reuse the metals contained in the battery. Recycling your old rechargeable batteries and used cell phones is easy and free. Call2Recycle offers consumers a free and easy way to care for the environment through its nationwide battery and cell phone recycling program. It's easy and free to recycle your old cell phones and rechargeable batteries from your cordless electronic products.

If it's rechargeable, it's recyclable. Look for used rechargeable batteries and old cell phones in your home that are dead or not being used any longer. Rechargeable batteries can be found in cordless electronic products that you plug in to get recharged.

To find the recycling location nearest you and drop off your used rechargeable batteries and old cell phones, click on www.call2recycle.org.

Button Cell Batteries, Recycling / Proper Disposal

1. Most small, round "button cell" type batteries contain mercury, silver, cadmium, lithium or other heavy metals as their main component. These materials leak in landfills, can enter the water table, and are even worse when incinerated. Button Cells are increasingly targeted for recycling because of the value of recoverable materials, the hazard to the environment, and the small size and easy handling relative to other battery types.

Many shops that replace watch and hearing aid batteries will accept your batteries for recycling at no charge. Check with a jeweler, watchmaker, or volume retailer like Pay-less, Radio Shack or K-Mart. If you have your watch batteries replaced, be sure to ask if the battery will be recycled.

Automotive batteries, Recycling

Automotive batteries contain lead and sulfuric acid. Lead is both toxic and valuable while sulfuric acid is a highly corrosive liquid. In the US over 95% of all automotive batteries are recovered and recycled. Virtually any place that sells batteries will take them back, most state laws require it. Unfortunately many batteries are sent to overseas smelters with poor environmental and worker health records ([See "The Myth of Automobile Battery Recycling", by Madeleine Cobbing](#)). Ask where your battery will be sent. Consumers or businesses can call **1-800-289-4627** for recycling options.

Non-automotive lead-based batteries (Gel Cells, SLA, etc), Recycling

Gel cells and sealed lead-acid batteries are commonly used in industrial equipment, emergency lighting, and alarm systems. The same recycling process applies as with automotive batteries, but not all retailers will understand this. An automotive store may accept the batteries or you can try a security dealer like The Battery Council International at (312) 664-6610, or www.batterycouncil.org. You can also contact your local waste agency. Small lead acid gel batteries (less than 2 pounds) can be recycled for free by Call2Recycle. To find the recycling location nearest you and drop off your small used rechargeable lead acid gel batteries, click on www.call2recycle.org.