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“Charged with Battery”

In an increasingly mobile world, batteries seem more a convenience than a crime. They power our cell phones, laptops, cars and portable electronics. Today they are long lasting and miniature, allowing our devices to be so narrow they can slip under doors. That said, improper disposal of batteries might seem like a small environmental offense, but states like California have designated all batteries as hazardous waste and require that they be recycled or taken to a household hazardous waste (HHW) collection facility. That's because most batteries contain heavy metals or mercury, both highly toxic to humans and fish- to name a few. Household hazardous waste collection facilities manage the proper disposal of batteries in order that they do not end up in landfills, where they can remain as harmful groundwater pollutants and combustibles. However, this shouldn't make recycling batteries a mystery

Two programs offer exceptional accessibility to the recycle savvy consumer. Skagit County Household Hazardous Waste Facility will accept all types of batteries free of charge to county residents Monday through Friday and the first Saturday of each month from 10:00 a.m. to 4:00 p.m. The Skagit County HHW collection facility is located at the Skagit County Transfer Station off Ovenell Road in Mount Vernon. The Rechargeable Battery Recycling Corporation (RBRC) is a non-profit, public service organization dedicated to rechargeable battery recycling. Founded by the rechargeable battery industry in 1994, RBRC's mission is to promote the recycling of used rechargeable batteries found in many cordless electronic consumer products. RBRC strives to make battery recycling available to every community through mail in programs, drop-off sites and collection facilities. To find out where you can recycle your battery visit <http://www.rbrc.org/corporate/index.html>

Perhaps the most criminal thing about improper disposal of batteries is that it affects a vast number of living things, including the water we drink. Next time you go to upgrade your cell phone or change the batteries in your flashlight consider these points:

- Rechargeable batteries last considerably longer than single-use batteries, so using them means fewer batteries for disposal. Buy these instead of others.
- All batteries have a finite life span, but there are steps you can take to prolong the life of your batteries.

Battery recycling whittles down to the efforts you're willing to make to stay green. In Skagit County all alkaline batteries made in the United States (Energizer and Duracell) can be thrown in the trash. This is partly due to the Mercury-Containing and Rechargeable Battery Management Act passed in 1996 that phased out the use of mercury in alkaline batteries, making them less of an issue if disposed of in landfills. But this doesn't mean alkalines are not recyclable, and some households may want to

consider mail in battery recycling programs by visiting www.skagitcounty.net/recycle . Recycling alkaline batteries can recover steel and zinc, two valuable metals. And in the case of steel, it can be reprocessed into rebar. If you do decide to throw these batteries in the trash, there are two precautions you can take to prevent any sort of leaking. First, put multiple batteries in the same plastic bag. Second, secure the ends of each battery with masking tape.

Commonly found in cell phones, laptops and now, electronic vehicles are the Lithium-Ion (Li-ion) batteries. Chances are you will be trying to recycle this battery while also trying to get rid of your portable device via an upgrade or electronics sale. In most cases, the company that handles your electronic device will accept the battery as well. Both Skagit County HHW and RBRC cover these batteries so proper disposal should not be a challenge. Most of the time storing batteries until you're ready to make a "recycling run" makes sense, except for the Li-ions. One reason to not store these batteries or put them in a landfill- via your trash can- is that they have the potential to overheat and explode when exposed to hot temperatures. If you're starting a collection of these batteries before you recycle them, it's a good idea to store them in a cool location.

Literally "cute as buttons," silver oxide and other button cell batteries found in hearing aids and wristwatches contain mercury, this makes recycling essential. During the recycling process silver oxide batteries are typically shredded to recover valuable heavy metals. In addition to their small size, button cells are known for a long shelf life and the ability to perform in low temperatures. But due to the fact that they aren't rechargeable, RBRC's program will not accept them, although Skagit County HHW will. Fortunately, you'll have fewer button cells to recycle since they aren't as common and last longer.

Lastly is the mother of mobility, the lead-acid car battery with a charge that changed the world. Lead-acid batteries have a 97 percent recycling rate, the highest of any consumer product in the U.S., which is great news because they're one of the most harmful products in a landfill with a mixture of lead and sulfuric acid. They are recycled by separating the battery into its three main components: plastic, lead and sulfuric acid. Chances are you are probably doing the right thing when disposing of these, so keep up the good work.

And good work means caring for the life of your batteries by prolonging them using these methods:

- **Plug It In:** You may be saving energy by working off batteries, but you're also producing waste when the batteries die. If you have the option, plugging in will use less resources.
- **Replace One at a Time:** don't assume a broken device is from four dead batteries, you may only need to replace one.
- **Beat the Heat:** batteries and heat don't mix, store yours in cool places
- **Wait for Good Reception:** when your cell phone has bad reception it uses more battery power
- **Keep Your Car Battery Cozy:** your car deals with the most intense temperature fluctuations of any other thing in your life, keep it healthy by regulating these extremes with a car battery blanket

- **Crank It Up:** Use hand cranks to charge your portable objects, or even better charge up your device using solar power!