

Keeping E-Waste Out of Our Landfills

Americans have a love affair with their electronic gadgets. They love them for a little while, anyway, and then they leave them for better versions – faster, smaller, sleeker models with more bells and whistles. More often than not, older, outdated equipment that has been replaced ends up in a heap in the corner of the garage and then eventually makes its way to the landfill, along with millions of other monitors, CPUs, and VCRs.

We are fortunate living near the Eco-Cycle/City of Boulder Center for Hard-to-Recycle Materials (CHaRM - <http://ecocycle.org/charm/index.cfm>), which accepts everything from iPods to big-screen TVs for recycling and reuse. A fee is charged to drop off electronic items, but the price is small compared to what we might pay in taxpayer dollars down the road to clean up toxic “leachate” that can seep through landfill liners and into our soils and precious drinking water.

Here’s the problem: televisions and computer monitors contain somewhere between 3-8 pounds of lead, depending on their size, while circuit boards contain chromium, lead, nickel, and zinc. Many electronic products have batteries that contain nickel, cadmium, and other heavy metals, and older electronics may contain mercury (<http://www.nrc-recycle.org/resources/electronics/managing.htm>). These are substances that pose a serious threat to human health when they end up in the landfill. They are also valuable resources that can be reused again and again in other applications. Recycling rather than throwing away electronic equipment conserves energy and raw materials and reduces pollution in manufacturing by allowing metals and plastics to be reclaimed and used more than once.

It’s vital that we all utilize the CHaRM and support efforts being made by local and national organizations to reduce electronic waste, as the harmful impacts electronics can have on our environment are many. Here in Broomfield, we can give ourselves a pat on the back for making a dent in the problem. This year’s 7th Annual Hard-to-Recycle Roundup at the Eco-Cycle/Broomfield Recycling Center held in April brought over 200 cars of recyclers and salvaged a total of 15,132 lbs of electronic-scrap. Eco-Cycle ensures that these materials (as well as all electronic materials collected at the permanent CHaRM facility in Boulder) are dismantled domestically and that the resulting raw materials (such as metals, plastics, etc.) are shipped for recycling to the greenest, most environmentally-responsible markets available. Newer computers (Pentium III or higher) are separated out for reuse and donated to the Jared Polis Foundation for educational programs.

There’s more being done to tackle the electronic waste (e-waste) problem. State and federal hazardous waste regulations are becoming stricter because of the aforementioned costs associated with landfill clean up in the event of a leak. For example, regulations in the state of Colorado hold businesses, government agencies, and schools liable for improper disposal of electronics and other ‘universal wastes’ (batteries, pesticides, mercury-containing devices, mercury-containing lighting wastes, aerosol cans). (<http://www.cdph.state.co.us/hm/UWRgeneral.pdf>).

There's also the Electronic Industries Alliance, a trade organization comprised of U.S. electronics manufacturers that is working to ensure that electronic products are designed in ways that minimize their overall impact on the environment to the extent that is technologically feasible and consistent with performance and safety requirements. The electronics industry has employed creative, innovative "design for the environment" approaches that eliminate or minimize adverse environmental impacts throughout the product's life cycle (<http://www.eia.org/resources/1998-01-01.11.pdf>).

Locally we are seeing a handful of businesses voluntarily putting together take-back programs for the materials they manufacture, sell or distribute. Electronics retailer CompUSA in Boulder will cover the cost of recycling your old electronic item when you purchase a new one from them. The store is setting a standard for other retailers by taking a proactive approach to the problem of e-waste.

So, the next time your computer is deemed unfixable, instead of kicking it to the curb, think about how you can play an instrumental part in reducing the amount of e-waste by responsibly disposing of it.

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