

Green Today: Greening Your Hazardous Waste Stream



Greening Your Hazardous Waste Stream

Responsible disposal of hazardous waste includes proper recycling of batteries and electronics.

By Guy H. Holt

Do you know if your small business generates hazardous waste? Many business owners don't realize they do. Years of conditioning to convenient yet environmentally irresponsible methods of disposal has allowed tens of thousands of tons of toxic hazardous waste to enter our landfills, our water tables and even our food.

Most businesses generate what is known as universal wastes. These types of wastes are the items commonly thrown into the trash by households and small businesses, including batteries, pesticides, thermostats, fluorescent lightbulbs and electronics. The EPA has established a universal waste rule that encourages communities and businesses to establish collection programs.

Battering the Environment

One major source of toxic waste is batteries. Approximately three billion batteries are sold in the United States annually, and less than one percent of them are recycled. Eventually, toxic metals—cadmium, copper, zinc, lead, manganese, nickel and lithium—leach from batteries deposited in landfills, contaminating soil and water.

More importantly to human health, many of these pollutants "persist" in the environment, meaning that they do not break down or go away. This is called "bioaccumulation." This means that a toxin builds up in the food chain and, in some cases, the toxin can be transported through the food chain to humans. Clearly, recycling batteries is essential. Recycling companies reclaim the metals and sell them to back to industry to be reused and recycled again and again—saving the environment, money and human health.

Eliminating Electronics

Another important source of toxins is electronic waste. E-waste is among the fastest growing portion of our waste stream due to the rapid obsolescence of technology. E-waste constitutes up to 5 percent of the U.S. municipal solid waste stream.

Computers and other consumer electronics are full of toxic materials that are extremely dangerous to humans and harmful to the environment if not properly managed. For example, each computer or television display contains an average of four to eight pounds of lead. Additionally, studies estimate that 315 to 600 million desktop and laptop computers in the United States will soon be obsolete. A pile of these obsolete computers would reach two miles high and cover three acres.

When electronics are improperly disposed of and crushed in landfills, the lead and other toxins are released into the environment, creating a legacy of hazardous waste for future generations.

The benefits of proper disposal and recycling of electronics and other forms of universal waste include conservation of resources, energy savings, increased worker safety and the reduction of environmental and public health threats, including greenhouse gases and other emissions. In the long run, the industry itself will stimulate the development of more green technologies.

When you choose to recycle any type of universal waste, it is important to partner with a responsible vendor. This will help you avoid hefty regulatory fines, lawsuits and negative press that can arise from improper disposal. There are horror stories of e-waste "recycling" in developing countries where toxic components are openly burned, soaked in acid baths, dumped into rivers and smashed by impoverished workers and children without proper personal protective equipment.

Always ask for chain-of-custody documentation. Chain-of-custody refers to the chronological documentation or the paper trail that shows the collection, custody, transfer and final disposition of the waste. It also is important to find out if a potential recycler is licensed or if they possess any type of environmental certifications.

There are numerous organizations both public and private that will accept universal wastes. Most cities have programs in place to help you manage this waste. Call your city for more information and to find the locations of drop-off centers. There are many private recyclers that can be easily found by a quick search of the Internet. In addition, there are several local companies that recycle small electronics and components, such as old cell phones, toner cartridges and ink jet cartridges. They do this responsibly and in some cases a portion of the profits will go to worthwhile charities, creating a win-win opportunity.

So go "green" and identify and manage your small business universal wastes correctly.

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