

'E-waste' expected to become even bigger problem

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Is technology making you sick? If it hasn't yet, it just might—given the environmental crisis brought on by electronic waste.

The U.S. Environmental Protection Agency calculates that more than 3.2 million tons of electronic waste is laid to rest in landfills each year. The Cellular Telecommunications and Internet Association estimates that 30 million retired cell phones will contribute to that pile as a result of number portability in 2004 alone.

According to the EPA, the environmental threat of e-waste is serious and global. Television picture tubes and computer monitors contain an average of four pounds of lead. Both cell phones and personal computers contain other potential toxins, such as chromium, cadmium, mercury, beryllium, nickel, zinc and brominated flame retardants— all of which can leak into groundwater and contaminate soil.

Fortunately, over 95% of PC materials are reusable, from the disk drive and memory to gold and silver used in the circuit board wiring; lead can be harvested from solder and computer monitors; copper can be mined from wires and internal circuitry. The options for technology reuse and recycling are many.

One option for getting rid of your old PC is to donate it to family, friends or a local charitable organization. For example, Goodwill Industries typically accepts computers and equipment that are in good working order, and your contribution should be tax-deductible. But if your computer is not usable, find another option.

E-cycling

Most manufacturers, including IBM, Dell, Hewlett Packard, Gateway and Micron, offer some sort of recycling program. With fees ranging from \$15 to \$50, consumers can pay to have their computer shipped and recycled.

Many corporations and larger businesses sign agreements with manufacturers to safely dispose of their old computers when upgrading to new equipment. But smaller businesses and residential PC-users have to find their own safe disposal program.

Hewlett-Packard has its own recycling program and will pick up any computer product of any brand for a fee ranging from \$14 to \$34. The service includes a coupon for future purchases.

Each month, HP's worldwide recycling centers process over 6.5 million pounds of computer-related products that have been returned by customers or generated by HP's own operations.

Locally, companies like Fisher Recycling will also pick up computer and television equipment for a fee. With a \$25 minimum collection fee, prices range from \$10 for a computer monitor to \$62.50 for a full-sized photocopier. Visit www.fisherrecycling.com for complete pricing and drop-off information.

Charleston's own Bees Ferry Landfill is the only state-permitted e-waste facility in South Carolina. "We're not mandated to separate e-waste from the landfill, but we're doing it, because we know the heavy metals should not be included," says Christine DeStefano, marketing specialist for the

Department of Solid Waste and Recycling.

Though you can drop off TVs and PCs for recycling at the Bees Ferry Landfill throughout the year, the Department of Solid Waste and Recycling hosts an "e-waste collection day" at the beginning of every year (this year's was Jan. 3). "The event is to get people to think about the waste they're generating, how they can dispose of and recycle it," she says.

E-waste collection day is held after the holidays, when residents are most likely to be disposing of old TVs and computers. A free service, it generally draws anywhere from 500 to 900 people. The landfill contracts with Waste Management Services, a service that dismantles and refurbishes computers. At the moment, the program is strictly for home computers, but the department does provide a booklet on business recycling.

Ringling endorsements

With the 30 million estimated cell phones to be retired this year as a result of number portability, recycling programs are more important than ever. The cellular industry has been pushing programs such as WirelessFoundation.org, ShelterAlliance.net and WirelessFundraiser.com, which either refurbish or sell the phones and give a portion of the profits to domestic violence shelters or other designated charities.

One such local domestic violence shelter is North Charleston-based Safe Moves Family Violence Resource Center. Director Linda Toporek says that while a few people take advantage of her affiliation with WirelessFundraiser.com, she receives most phone donations through private, local contribution.

"Women can dial 911 from a cell phone even if it's not activated," says Toporek. "Having a cell phone gives battered women a sense of security because they can call for help even if landlines are cut." She estimates 40 to 50 cell phones were donated last year, but adds that Safe Moves can always use more.

Global threat

In recent years, more than half of U.S. electronics collected for recycling have gone to India, Pakistan or other countries where workers taking apart the old machines handle toxic materials that could pose serious health problems.

It's not an "out of sight, out of mind" philosophy on the part of U.S. recyclers that creates overseas dumping. According to international activist organization Basel Action Network, e-waste heads to India, China and Bangladesh because computer "recycling" is a good business, with much money to be made.

In these countries, computer recycling involves employing people to strip down the computers and extract parts that can be used again in machines to be sold as refurbished products. The rest is then burned or dumped, both of which are potentially highly hazardous to the environment.

"Pollution is pollution no matter where you put it," says Greg Sampson, vice president of electronics recovery for Phoenix-based Earth Protection Services. "It is extremely important to find out what happens to the materials you're dropping off to be recycled."

Though most recyclers are responsible, there is no law against shipping waste to other countries and

some aren't even aware of the final destination.

Plugging in

There are currently voluntary efforts underway to curb electronics dumping at home and abroad. The National Electronics Product Stewardship Initiative (NEPSI), supported by the EPA and composed of representatives from federal and state agencies, the electronics industry, and environmental groups, is finalizing a proposed model system for e-waste recycling and disposal. Through this initiative, the groundwork will be laid for development of a national e-waste collection and recycling system. The NEPSI proposal includes support from large companies within the retail sector to act as "drop-off" points for obsolete electronics and a viable financing plan.

In 2003 the EPA launched a program called "Plug-In to e-Cycling" to increase the number of used electronics safely collected and recycled nationwide by educating consumers on why it's important and enhancing the infrastructure available for them to do so across the U.S.

Because donation programs and recycling initiatives are making it easier for technology users to do the right thing, the EPA is hoping to put a brake on uninformed and unchecked electronic dumping. Reuse and recycling of computers and phones can become a new way for business owners to show environmental and community responsibility.

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