

Options for e-waste

■ Few rules in place to guide consumers, businesses

■ A lot of big users have contracts with recyclers



EVA RUSSO/TIMES-DISPATCH

Scott Lints (right) of TLC Inc., at an open house Sept. 2, handed his old computer equipment to Francols Ambang of RCS Commercial Moving & Warehousing to load into a bin. The equipment will be refurbished and donated to a person in need.

BY EMILY C. DOOLEY
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At an open house in early September, customers, friends and guests of Ground-Force IT showed up for a party not with drinks or appetizers, but with 3,300 pounds of used computers and other electronics.

Mathew Fisher dropped off an old personal computer that had been taking up space in his Mechanicsville house for two years.

"I've kept it in my garage for a long time because I was waiting for a way to recycle it the right way," said Fisher, a senior vice president and consumer marketing strategy manager at Bank of America. "If I go and drop it off at the dump, it's going into the landfill. All of the junk that's in it — it can't be good."

In 2005, the U.S. generated 2.63 million tons of electronic waste. Of that, 12.5 percent was recycled, and the rest ended up in landfills and incinerators, according to the Electronics Takeback Coalition, a San Francisco agency that promotes green design and responsible recycling.

As computers, televisions, cell phones and other must-have de-

Have some electronics?

Several central Virginia localities are hosting electronics recycling events in October and November. Most items with a plug are free to discard, but televisions will cost \$7. With the exception of the Hanover event, residents of all localities are welcome. The schedule includes:

Oct. 2: Henrico Public Safety Building, 7721 E. Parham Road, hosted by Henrico County, from 10 a.m. to 1 p.m.

Oct. 9: Parker Field Annex, 1710 Robin Hood Road, hosted by city of Richmond, from 9 a.m. to 2 p.m.

Nov. 13: Mechanicsville Solid Waste Convenience Center, 7427 Verdi Lane, hosted by Hanover County, from 9 a.m. to 1 p.m. (for Hanover residents only).

Nov. 13: Eastern Government Center, 3620 Nine Mile Road, hosted by Henrico County, from 9 a.m. to 1 p.m.

SOURCE: Central Virginia Waste Management Authority

vices become more disposable, experts say recycling must take on a larger role.

When it comes to recycling electronic waste, consumers and businesses have several options:

■ Throwing old electronics in the trash, and they end up in a landfill.

■ Donating electronics to a nonprofit, charity or other group that will sell or refurbish them and give them a second life.

■ Recycling your electronics,

which entails stripping pieces down to their component parts and selling them or disposing.

Few regulations are in place to guide consumers and businesses.

The Virginia Department of Environmental Quality and the local Environmental Protection Agency are studying the issue.

"We follow the rules that are established by the Department of Environmental Quality," said Steve Yob, Henrico County's division director of solid waste re-

cycling. "They don't really have any specific rules involving electronics."

Businesses cannot dump anything that may be hazardous or have hazardous components. Homeowners, however, can dump their old electronics and other materials with their regular garbage, which ends up in a landfill.

While the "anything with a plug" waste is not banned from landfills, it isn't necessarily welcomed.

"If a residential customer throws away electronics, I can't make them recycle it," Yob said. "The electronic recycling we do is really strictly voluntary."

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Knowing where e-waste is going or how much is dumped is hard to calculate, according to local, state and federal experts.

No specific accounting is placed upon any locality or business.

"A majority of the material gets thrown away," said Steve E. Chidsey, chief of public works operations in Hanover County.

Hanover uses inmate labor

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from the nearby Pamunkey Regional Jail to sift through trash at the transfer station looking for electronics, metal and cardboard, but they don't count what the workers collect, Chidsey said.

In addition to Hanover, the counties of Charles City, Chesterfield, Goochland, Henrico, New Kent and Powhatan and the cities of Colonial Heights, Hopewell, Petersburg and Richmond offer periodic electronic waste collection days through the Central Virginia Waste Management Authority.

A few, including Goochland, Hanover and New Kent, also offer on-site electronics recycling at convenience centers or transfer stations.

In most cases, residents can dump electronics for free, except for a \$7 fee for a television to cover costs associated with disposing of or recycling cathode-ray tubes, or CRTs, the lead-heavy parts in computer monitors and TVs.

If allowed, businesses have to pay individually for TVs and then a per-ton cost. In Hanover, the fee is \$50 per ton.

Localities typically pay \$400 to the CVWMA to host an electronics recycling event.

Since 2004, 62 such events have been held in the Richmond region, bringing in more than 784,000 pounds of electronics, according to Bernard B. Harris, director of operations for the waste management authority.

Under a July 2009 law, any manufacturer that sells more than 500 computer units in Virginia must offer a recycling or recovery option to consumers. More than 30 companies — Apple Inc., Dell, Hewlett-Packard, Sony Electronics and local firm Velocity Micro — have qualified plans.

Through Feb. 12 of this year, manufacturers have collected more than 3.7 million pounds of computers from Virginia customers, according to the DEQ.

Best Buy and other major retailers also collect items. Between July 1, 2009, and the end of that year, the retailer collected 163,252 pounds of computer equipment. Of that, 105,837 pounds were recycled; the remainder was refurbished or resold.



Many information technology companies will also take old computers from clients and dispose of them when they change models.

GroundForce IT handles the machines two ways: They are either sent to a recycler, or refurbished and donated to a person in need.

Older components are sent to a nonprofit recycler, Computer Recycling of Virginia, which strips down the electronics to their parts and sells, disposes of or reuses the parts, said Ethan Seltzer, president of GroundForce IT.

Computers in better condition are wiped of memory, loaded with Microsoft programs and passed on to TechReach of Central Virginia, a charity that gives computers to underprivileged youth and adults in central Virginia.

Since its founding about three years ago, the organization has distributed between 400 and 500 computers.

"A lot of [the computers] can be reused with a little TLC, and then we can give them to people who will do something good with it," said Bert Hardy, who came up with the idea of TechReach as part of a final project in the Leadership Metro Richmond class of 2007.

Depending on their needs and usage, companies vary in their handling of electronics.

Capital One Financial Corp. has a major focus on electronics recycling.

In April, the firm was designated as an e-Steward Enterprise, meaning it gives preference to e-Steward Recyclers, which are firms certified by



EVA RUSSO/TIMES-DISPATCH

Dale K. Robinson (left) and Francols Ambang put a monitor in a bin at the GroundForce IT open house, which collected 3,300 pounds of used computers and other electronics.

Computer take-back program

As of July 2009, any manufacturer that sells more than 500 computers in Virginia must offer a free recovery/recycling plan to consumers.

Participating companies: Acer America Corp.; Apple Inc.; ASUS Computer International; BenQ American Corp.; Best Buy; Dell; DRS Tactical Systems Inc.; Electronic Manufacturers Recycling Management Co.; Fujitsu; General Displays & Technologies; Hannspree North America Inc.; Hewlett-Packard; Hitachi; International Business Machines (IBM); International Products Sourcing; Lenovo Inc.; Medion AG; Motion Computing Inc.; NEC Display Solutions of America Inc.; NCR Corp.; Nokia; Planar Systems Inc.; Samsung Electronics America; Seneca Data Distributors Inc.; Sony Electronics; Sun Microsystems Inc.; Toshiba; Velocity Micro; ViewSonic Corp.; Vizio; Wacom Technology; Westinghouse Digital Electronics LLC; Wyse

For more information: www.deq.state.va.us/ecycling/computerManufacturersNotifications.html

SOURCE: Virginia Department of Environmental Quality

Online resources

Central Virginia Waste Management Authority: Find locality info, resources and tips at www.cvwma.com.

CVWMA recycling wizard: Plug in your details and find out where to recycle at www.cvwma.com/recycling_wizard.wbp.

Earth911: Enter your location and item to dispose of and this site will provide resale and recycling options at www.earth911.com.

Virginia Department of Environmental Quality: Learn about electronic recycling programs offered by manufacturers at www.deq.virginia.gov/ecycling.

Virginia Freecycle: Details on how to swap recyclable items can be found at www.freecycle.org/group/US/Virginia.

the Basel Action Network, a Seattle-based nonprofit focused on toxic trade and responsible recycling.

When unused electronics are "retired," Capital One refurbishes and donates the items to nonprofits or puts them up for resale. Unusable equipment is recycled.

Since 2001, the McLean-based firm has disposed of nearly 250 million electronic items and donated 1,850 to nonprofits, said David Wright, Capital One's managing vice president for IT.

"As part of our green program, we look for credible standards and certifications to ensure we are taking an environmentally sound and secure approach," Wright said in a written statement.

Companies that go through a lot of computers can also lease them and swap out computers as needed. Genworth Financial is one Fortune 500 company with a small electronics recycling program because equipment is leased and recycling is handled by the vendor, spokesman Al Orendorff said.



Major recycling firms also play a part.

This is the world of both the walk-in customer and the big-time recycler.

Many options are out there, with names like Redemtech, TechTurn, Computer Recycling of Virginia and AERC.

Out of two warehouses in Ashland, AERC runs a collection facility and a destruction facility.

Computers, keyboards, compact discs, printers, monitors find their way to AERC, which markets itself on offering "solutions for secure data management and end-of-life electronics."

In one place, items are cata-

logged, sorted and gathered with other similar products. In another facility, workers rebuild computers for sale on eBay or tear them down to component parts.

Walk-in costs to recycle items at AERC range from \$2 for scanners and printers, \$5 per plasma computer monitor to \$22 for a CRT television larger than 20 inches. Keyboards, speakers, cords and cables are free.

Businesses are charged a different rate based on amount and contracts, said Sheri Johns, AERC's inside sales manager.

AERC and others are zero-landfill facilities, which means nothing goes in the trash, said Arron Messer, who manages an AERC plant in Ashland.

A lot of big users have contracts with these recyclers.

Virginia Commonwealth University recycled more than 33 tons of computers and electronics last year.

Those disposed-of printers, copiers, computers and other components were equal in weight to that of more than 21 Toyota Camrys.

Since 2000, the university has recycled 214 tons of electronics.

"Our biggest goal was to keep them out of the landfill," said Steven R. Heinitz, recycling and reuse coordinator at VCU.

As competition increased and the value of precious metals in computers that can be sold — copper, gold, platinum — soared, recycling costs have gone down, he said.

In 2007, the VCU Department of Environmental Conservation paid \$22,335 to recycle nearly 50,000 pounds; last year, it cost the university \$1,934 to dispose of more than 74,000 pounds.

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