

**Giving PCs the boot -- responsibly**  
**While industry has boosted recycling, most computers are simply tossed**

**By Chris Gaither, Globe Staff, 4/22/2003**

ROSEVILLE, Calif. -- This is where the world's second-largest computer maker sends its electronics to die.

Less than four minutes ago, the quarter-sized shards of plastic, steel, gold, and other metals cascading into bins were computers, printers, and monitors, most made by Hewlett-Packard Co. Now, after running through five powerful shredders and sorters, the scraps are among the 1.7 million tons of broken-down and unwanted electronics that meet their end each month in the recycling center that HP operates with its partner, Noranda Inc.

Yet the plant here, in the flat farmlands near Sacramento, recycles less than 1 percent of the computer hardware made by HP, which trails only Dell Computer Corp. in PC shipments. Industrywide, only about 11 percent of the 315 million computers rendered obsolete by next year will have been recycled, the National Safety Council estimates.

HP and its peers are trying to improve that rate through a host of promotions aimed at consumers and small businesses, including several to be announced today to coincide with Earth Day.

With regulators growing impatient with industry-sponsored recycling efforts, the campaign is part a strategy to stave off more stringent rules from lawmakers and environmental groups. They want the computer industry to take more responsibility for ensuring a safe end to the products they make. The semiconductors, circuit boards, and other components in PCs contain toxic chemicals and gases that can seep into the ground and contaminate soil and water. The National Safety Council estimates as much as 40 percent of lead found in landfills comes from electronics. Most dumps now refuse to take electronics or have separate disposal bins for them.

Meantime, states are passing their own laws, often different from place to place. California and Massachusetts banned the dumping of cathode-ray-tube, or CRT, monitors in landfills, and lawmakers in both states have tried to enact laws requiring computer makers to take back the hardware for recycling.

"The prospect of 50 different state requirements is perhaps the biggest fear in industry's mind," said David Wood, organizing director of the Computer TakeBack Campaign, an environmental group based in Madison, Wis.

Some industry recycling efforts have come under attack. Dell, the world's largest PC maker, has faced criticism for using prison inmates to break down some of its computers. In a letter to Dell chief executive Michael Dell, the Silicon Valley Toxics Coalition complained that it visited some of these prisons to find inmates "using hammers and crude hand-tools to smash" computers and monitors containing hazardous materials, putting prisoners' health at risk.

Jennifer Jones, a Dell spokeswoman, said the subcontractors it uses for recycling, including the work done in prisons, follow standards set up by the Environmental Protection Agency and the Occupational Safety and Health Administration.

Pressured by complaints about how they disposed of their products, including shipping old machines to be broken down in Asian countries with less strict environmental laws to protect workers, computer makers joined with the EPA, environmental groups, and a Lowell, Mass., nonprofit called Product Stewardship Institute that is working with governments and PC manufacturers to develop recycling guidelines. With a goal of increasing recycling rates by creating a more structured, industrywide program, these groups in 2000 created the National Electronics Product Stewardship Initiative.

But their negotiations to create a nationwide recycling standard were supposed to take a year. Instead, they've dragged on for 2 1/2 years. Electronics makers are squabbling over how to pay for the recycling programs, and lobbying the government to pitch in to help foot the bill. By one estimate, paying for recycling would add \$10 to the cost of each PC.

"We're still trying to develop a system that will financially cover the cost to collect and process this equipment," said Scott Cassel, director of Product Stewardship Institute.

With no system in place, computer makers have launched vigorous public relations campaign. Dell, based in Round Rock, Texas, charges \$15 for its mail-in recycling plan and recently launched a five-city recycling tour. In Portland, Ore., last week, the company collected 70 tons of old computers for recycling. Tomorrow the company plans to announce that it will expand the tour to another 10 cities, though it has not yet decided which cities it will visit.

Today at a Starbucks support center in Seattle, and on Saturday and Sunday in New York's Grand Central Terminal, HP will accept computer hardware, made by any manufacturer, and recycle it for no charge. HP also has boosted the incentive for consumers and small businesses to hire HP to recycle old PCs and monitors through its recycle-by-mail program, which costs \$15 to \$46 depending on the size of the equipment.

Through the end of April, HP will give a \$100 coupon to buy HP products on its website to anyone who pays for the recycling service.

In Roseville, the HP recycling plant's head manager, Renee St. Denis, said the incentives have increased by 10 times the number of recycling orders HP has taken from consumers since the beginning of February, when a \$50 coupon was introduced. But the orders still numbers in the single-digit thousands, she said.

Nearly 85 percent of the equipment shredded in the plant comes from within HP, such as defective printers and old computers no one needs anymore. The plant and another like it in Nashville can handle much more equipment from consumers, she said, but first the computer industry must keep trying to find ways to get people to pay money to get rid of their unusable equipment.

"I know there are hundreds of millions of PCs in the US not being used," she said. "How do I get them" out of consumers' hands?"

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