Take my personal computer--please
Throwing out a PC isn't as simple as you think

By William J. Holstein; Mary Symeon

As the home to such personal-computer pioneers as Wang and Digital Equipment, New England was one of the first places in the nation to embrace the PC more than two decades ago. Now it's grappling with an increasingly messy issue that will soon hit the entire nation--what to do with tens of millions of outdated computers that nobody wants anymore. "People are walking in with their PCs and saying, 'We can't use this anymore,' " says Tom Speckert, who runs the Goodwill Industries branch in Pittsfield, Mass.

The problem is that PCs are environmentally un-PC, as in not politically correct. In fact, they're downright toxic. Cathode-ray tubes that display information have high levels of lead in their glass. The lead can seep into water tables if the machines are dumped into landfills. And circuit boards contain chromium, cadmium, and mercury, which are considered dangerous, particularly when incinerated.

In April, Massachusetts became the first state to ban dumping or incinerating PC monitors. At least four other states--Connecticut, Florida, Minnesota, and Wisconsin--are considering similar bills. The Environmental Protection Agency is also trying to tackle the issue, but slowly. Regulations encouraging the recycling of PC screens were supposed to be issued in July but probably will not appear until October.

PC heaven. The problem is about to get worse. An estimated 33 million boxes will become obsolete this year, and that number is expected to swell in coming years, according to Stanford Resources, a research group. More than 60 percent of the machines are likely to end up in warehouses or backrooms because no one knows what to do with them.

One solution--donating old boxes to schools or charities--is becoming more difficult. Reports are cropping up of charities charging money to accept obsolete machines with Intel 386 and 486 chips and even early Pentiums. "Yesterday's Pentium I is today's trash," says Scott Wilson, president of a new recycling outfit called Subtractions, near Baltimore.

PC recyclers are popping up across the country. Nonprofits such as Goodwill and the Salvation Army pass on some 80 percent of the PCs they receive to recyclers like Vermont Retroworks, based in Middlebury, Vt. At the moment, Retroworks has roughly 18 tons of computers on its hands. It breaks the machines down and tries to find buyers for components. It sends certain

kinds of monitors, for example, all the way to Romania for repair and resale.

Clive Smith, a cofounder of America Online who runs a software start-up called NewDeal, has a different fix in mind. Instead of scrapping or warehousing them, Clark believes that old machines should be equipped with his company's software and sold cheaply to the roughly half of American households that don't own a PC. With NewDeal software, Goodwill Industries could sell a fully functional PC for $50 or $60 in its thrift shops, for example.

Robin Ingenthron, the founder of Vermont Retroworks, also hopes that old PCs will be turned into "green PCs" by equipping them with NewDeal software. The sophisticated software can offer functions like Internet browsing on less powerful machines because it includes far fewer lines of code than Microsoft's offerings.

Computer makers, too, have an interest in creating channels for recycling their old machines. Gateway Computer's Your:)Ware program, introduced in 1998 to protect buyers against obsolescence, is just beginning to get trade-ins from customers who want hotter machines. Dell Computer, a specialist in leasing PCs to companies, is gearing up its "asset recovery" efforts to take back old machines. Both makers need ways to dispose of them cheaply and properly.

What PC makers hope to avoid is a European-style solution. There, governments are beginning to require that every maker of a computer take it back when it dies, a practice known as a "mandatory take-back." "If it means that manufacturers have to dispose of hazardous materials, that would be an issue," says Michael Watt, president of Dell Financial Services, the arm of Dell in charge of corporate leasing. But any way you cut it, the business of "preowned" PCs is suddenly a growth industry.