



Computer Technology Asset Disposal Services



Environmental Stewardship initiatives committed to reducing the flow of E-Waste into our country's waste stream.

Computer / I.T. Waste

Each year, millions of computer systems, monitors, fax machines, printers, ATMs and an assortment of other computer related devices become obsolete in the eyes of U.S. consumers and corporations. Rapid advances in emerging technologies and a growing demand for newer, faster and higher-capacity technologies have rapidly accelerated the generation of E-Waste. (E-Waste is an informal name for electronics which are nearing, or have reached the end of their useful lifecycle.)

As corporations upgrade their computer systems, most will store the old computers, which they reason, will serve as a back-up to the newer system. More often than not, these older, obsolete systems will sit in storage well beyond their potential useful lifecycle. At some point, a decision must be made about the disposal of this E-Waste. Continuing to store the older equipment is often not a viable, cost-effective option for several reasons...the cost of the space required to store it, and the diminishing Return-On-Investment relating to the actual cost of storage.

Throwing the obsolete equipment into a dumpster is the least desirable option for several reasons. Obviously, the environmental impact can be costly to future generations who will surely suffer from irresponsible disposal of E-Waste. As a business owner or officer in a corporation, the potential liabilities and disposal fines imposed by state and federal environmental agencies, (for improper disposal,) poses a very real legal risk.

Re-using or selling the obsolete equipment is probably the simplest method of dealing with older equipment assets. The term re-use refers to giving or selling the equipment to some other organization to use or reallocating the equipment within the organization. If a decision is made to try and sell the equipment, organizational management must carefully assess whether the investment of employee time and effort required to attempt to sell the computers on the secondary market is a viable investment on attempting to gain small monetary remuneration for equipment which is antiquated and probably worthless. "The original price," as quoted in an article from The CPA Journal, "should be viewed as a sunk cost, leaving as only relevant consideration the marginal benefit versus the marginal cost."

Recycling obsolete computer equipment can be simple or difficult depending on the city and state in which the equipment is located in. While some of the more 'environmentally progressive' states have well organized recycling programs in place, finding a responsible entity to recycle E-Waste in most states, can be difficult. Reputable recycling companies generally charge a small fee for disposal and recycling and they also provide documentation showing that the computers were appropriately disposed of and not dumped in a land-fill. However, according to the New York State Society of CPAs, "the savings from using a non-reputable recycler are generally not worth the attendant risk if the computers are not properly disposed of."

A Growing Problem

More than 30,000,000 (Thirty-Million) new computers are sold to consumers in the United States annually. A recent study by the National Safety Council relates that in 2005 alone, more than 63,000,000 (Sixty-Three Million) personal computers were retired. These retired systems are stored in back rooms, closets, and warehouses because people are just not sure of how to properly dispose of them. Since new computer technology is advancing every eighteen months, these older, retired systems are practically worthless.

Alarmingly, an increasing number of retired computer systems are finding their way into our nation's waste stream. The Utah Department of Environmental Quality estimates that "314 million computers were thrown away in 2004...containing 1.2 billion pounds of lead, 2 million pounds of cadmium, 1.2 million pounds of hexavalent chromium, and 400,000 pounds of mercury."

State regulations regarding computer equipment disposal vary considerably. Three states have made it illegal to landfill computer monitors, (which are different from most computer equipment because of the high concentration of lead: 27% of the weight of a CRT monitor is due to lead content,) and nine states have proposed legislation to ban landfill disposal of ALL computer equipment. Sadly, very few states have any form of legislation in place to deal with proper computer disposal.

Corporate Risk

Imagine arriving at your office and receiving a call from your CFO and President. Your presence is requested in the conference room...immediately. The EPA has been in contact. Seems the state police found some of your company's old computer monitors in a reservoir and the EPA has named your company in a lawsuit for improper disposal of hazardous waste. As you make your way to what is sure to be an unpleasant meeting, your mind races. Did we donate them – sell them – turn them over to Bubba's Recycling Service? The fact is, it doesn't really matter. You've got a serious problem now and the reputations of your company and you personally are in jeopardy.

Does this scenario sound random? It shouldn't...it's a true story. The original owner of the equipment can be held accountable for improper disposal regardless of how many times the equipment has changed hands.

Common Cents

Besides the cost of storing old computer equipment in empty cubicles and warehouses, end-of-life electronics pose several issues regarding proper disposal, environmental consequences and the additional pollution associated with the need to access virgin materials required to manufacture new technology products.

Recycling is the best option for computers that are extremely old, retired from service or no longer in use. There are approximately six pounds of ABS or polystyrene plastics in a standard desktop/desk-side computer system which includes a CPU, monitor and keyboard and mouse. Each computer system requires 1.5 gallons of crude oil and 300 cubic feet of natural gas to manufacture from raw or virgin materials. If we are consuming 30 million new computers annually, we are using 45 million gallons of crude oil and 9 billion cubic feet of natural gas to manufacture all the latest technology computer systems sold annually. Staggering isn't it?

The process utilized by Harwood International to refurbish or break down obsolete systems to their basic components for recycling is called demanufacturing. By allowing Harwood International to disassemble and dispose of your company's electronic computer equipment, you can help reduce the amount of hazardous materials entering our waste stream, reduce quantities of e-scrap being land-filled, and conserve valuable energy and raw materials used to manufacture new systems by using the recycled components to build and manufacture new systems.

What Harwood International Can Do For You

If your company is like most, you're probably stockpiling or storing excess computer technology that you've outgrown, replaced or acquired during a corporate consolidation. Frankly, it is highly unlikely that the equipment has any remaining market value and storing not only costs you money to warehouse the equipment, it may occupy valuable space which your organization could use for more productive purposes. Most importantly, the laws surrounding e-waste disposal can be confusing and the legal risks should not be taken lightly.

Harwood International Corporation is a computer systems and data storage solutions provider who has supplied technology solutions for over six-thousand clients in 92 countries. As a natural extension of our primary business function since being founded in 1976, we are in a unique position to provide comprehensive electronics recycling and disposal services for businesses, agencies and organizations. We are dedicated to ending or substantially reducing the waste of valuable energy resources, reusable resources and the risk of environmental contamination that currently exists with the wholesale land-filling of E-Waste. Our clients include governmental agencies, manufacturers, financial institutions, retail customers, service companies, non-profit organizations and companies who are genuinely concerned about the impact that irresponsible handling of E-Waste can have on the environment and the economy.

Our most requested Disposal and Recycling Services include:

- *) Obsolete Equipment Trade-In,*
- *) I.T Center Floor Sweep (Corporate Clean-Out & Disposal) Services,*
- *) Capital Computer Equipment Removal & Disposal,*
- *) Secure Data-Destruction Services.*

We are also available for more complex or 'one-off' contract services as well, and we provide written documentation listing all items received for disposal by our organization.

Fees

A very high percentage of the materials received into our facilities are in finished goods form. Complete main-frame systems, rack systems, disk arrays, tape libraries, file servers, communications subsystems, printers, CRTs and monitors, point-of-sale systems, check-imaging systems and ATMs must go through an evaluation and tear-down process during demanufacturing.

Presently, all items must be handled and disassembled during demanufacturing before they can be recycled and disposed of, a labor-intensive process that often requires handling toxic substances. Since freight and labor charges must be offset, and since most types of consumer electronics, (PCs, small printers, etc,) actually have a negative value, meaning that the costs involved with the demanufacturing process are not offset by the values of the raw material constituents, many of Harwood International's Recycling Services are fee based.

Simple Computer Item Disposal Fees (Per Item)

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| • Monitors | \$ 10.00 |
| • Desktop Computers | \$ 5.00 |
| • Desk-Side Computers | \$ 8.00 |
| • Laptops | \$ 8.00 |
| • Computer Printers (Under 40#) | \$ 10.00 |
| • Computer Printers (Over 40#) | \$ 15.00 |
| • UPS Systems | \$ 8.00 |
| • Keyboards, Mice, Cables | \$ 2.00 Per Pound |

Complex System Disposal Fees

- I.T. Center Floor Sweep (CCOD) Services \$0.45 Per Pound
- Computer Equipment Removal & Disposal \$0.45 Per Pound

Secure Data Destruction Services

- Drive Data Destruction Service \$65.00 Per Hour

Service Requirements Not Listed

- By negotiated contract