Managing Used Electronics

Electronics have become central to the workplace. Although they simplify and improve many tasks, electronics create an e-waste problem. Rapid innovations lead to millions of devices coming to the end of their useful lives each year. In Wisconsin, many electronics are banned from landfills and incinerators, and these must be reused, recycled or managed as hazardous waste when you are done with them.

This guide will help you navigate laws governing used electronics and manage electronics generated in workplaces, institutions and other non-household settings in a safe, legal and responsible manner.

Each electronic device contains valuable and harmful materials that need to be managed properly.

Legal Requirements for Managing Used Electronics

Lead, cadmium, mercury and other heavy metals are used in many consumer electronics. Steel, aluminum, precious metals, glass and plastics are also in our electronics. If electronics are landfilled, dumped or sent overseas to unregulated recyclers, toxic materials can get into the soil, air and water; workers can be hurt; and valuable materials are lost. For these reasons, there are several laws governing disposal of used electronics.

Wisconsin's electronics recycling law banned most consumer electronics from state landfills and incinerators. In addition to the electronics specifically banned from disposal (see *Electronics Banned from Wisconsin Landfills* sidebar), most non-household electronics must be reused, recycled or managed as hazardous waste under state and federal hazardous waste laws.

The combination of these laws can be distilled into this simple message:

When businesses, institutions and other workplaces need to dispose of old electronics, they must send them to:

1) **an organization that is willing to reuse them;**

2) **a legitimate electronics recycler; or**

3) **hazardous waste management facility.**

Most recyclers will work with you to handle all of your electronic devices, whether or not they are banned from disposal. Electronics may be sent to landfills or incinerators only if they are not on the banned list and if you, the generator, can demonstrate through testing that the equipment does not have any hazardous waste characteristics.

For more information on laws governing management of used electronics and hazardous waste, go to dnr.wi.gov and search "ecycle."

Electronics Banned from Wisconsin landfills and incinerators

- **Televisions**
- **Computers** *(desktop, laptop notebook and tablet computers)*
- **Desktop printers** *(including those that scan, fax and/or copy and 3D printers)*
- **Computer monitors**
- **Other computer accessories** *(including mice, keyboards and speakers)*
- **DVD players, VCRs and DVRs**
- **Fax machines**
- **Cellphones**

No matter which option you choose to manage e-waste, take time to choose a responsible organization.

Cost should not be the only factor you consider when sending electronics to a vendor for reuse or when selecting a recycler. If your used electronics are mishandled by a collector, recycler or reuse location, some of the cost of cleanup (and data security lapses) may again become your responsibility.

This section will help you choose a vendor you can be comfortable with.

Reusing Old Electronics

If your old electronics are in good working condition and you would like to try to resell them or donate them to other organizations, such as schools or non-profits, reuse may be your best option.

As an electronics management option, reuse includes reselling your electronics (independently or through a refurbisher/recycler) and donation (directly or after sending them to a refurbisher/recycler for evaluation and/or repair). Go to **dnr.wi.gov and search "ecycle"** to find lists of organizations that recycle and refurbish electronics.

Selling used electronics

Some companies sell or offer their used electronics to employees, while others sell refurbished equipment to buyers around the country and even overseas. Many electronics recyclers will work with you to determine whether your equipment can be refurbished and resold, and can manage the entire process for you (this is sometimes called "IT asset disposition" or "ITAD").

After completing the initial preparation steps listed in the *Preparing for Reuse* sidebar, contact electronics recyclers or refurbishers with your information to learn about their services and costs. Be sure to ask about data destruction when you contact them (see *Notes on Data Destruction* on page 4). In some cases, the recycler or refurbisher will set up an agreement with you to share revenue from certain resold equipment, or deduct this revenue from the cost of the services it is providing.

Donating Electronics

Donating useable electronics can benefit both the receiving organization and the organization making the donation. The depreciated value of donated equipment may be tax deductible. Note, however, that many organizations may limit what they accept—for example, only taking computers with certain processors, or not accepting anything more than a few years old.

Complete the steps listed in the *Preparing for Reuse* sidebar before you contact an organization you would like to donate to. An important part of this process is determining your data destruction needs and contacting an electronics recycler, refurbisher or software retailer to have this done (see *Notes on Data Destruction* on page 4). When you have completed these steps, contact your intended recipient and verify that they will accept donated electronics,

Preparing for
Reuse or Recycling

- **Make a list** of the items you would like to get rid of, including their ages and conditions.

- **Decide when** you will be done with them.

- Determine how you will have your **data destroyed.**

- Resolve how you will **transport** them or if you need pickup.

- **Contact the organizations** you are interested in sending the items to and get cost and service information.

- **Work with the organization** to generate documents of property transfer or to receive certificates of recycling.

including the items that you have to offer. If your electronics need to be refurbished or repaired before you can donate them, also contact a refurbisher to get cost and service information.

If you move forward with a donation, keep records of your property transfer. Work with the receiving organization to generate documents that show who received your electronics, and that the electronics you sent met any vendor-specific conditions for acceptance. This documentation will help protect you if the electronics are later found to have been mishandled (for example, illegally dumped or sent to a landfill).

Recycling Used Electronics

If your electronics are broken or obsolete and cannot be reused, or if you are not comfortable with reuse because of data security concerns, recycling is likely your best option.

Recycling consists of taking apart each electronic item to recover its reusable materials. It is up to you to choose a legitimate recycler that meets your needs. Go to dnr.wi.gov and search "ecycle" to find a list of recyclers.

Safely dismantling electronics is technical work. Not all recyclers take all types of electronics and some have superior environmental performance and certifications that assure proper management of used electronics.

It's always a good idea to talk with a least two or three recyclers before deciding where to take your materials. Recyclers that hold R2 or e-Stewards certifications are independently audited to ensure they are meeting high standards for responsible recycling and worker safety. Even if recyclers have these certifications, you should still ask questions of all potential recyclers to be sure you are comfortable with how they will handle your equipment.

For suggestions on questions to ask, see the *Questions to Ask Potential Recyclers* sidebar. Before choosing a recycler, read *Important Notes on Data Destruction* on page 4. If you have high security needs, you may want to find a recycler that will do on-site data destruction before taking equipment away for recycling. You may also want to visit a recycler's facility to see its operations and security procedures.

Managing Electronics as Hazardous Waste

Managing used electronics as hazardous waste is expensive and requires you to follow state and federal hazardous waste rules.

Reuse and recycling are usually the most efficient and cost-effective options. If you would like more information on managing used electronics as hazardous waste, go to **dnr.wi.gov and search "hazardous waste."**

Questions to Ask
Potential Recyclers

1. **Do you accept e-waste from businesses?**

2. **Do you accept all electronic items?**

3. **What do you charge?**

4. **Do you pick up the items at our location?**

5. **How do you destroy data?**

6. **What do you do with the electronics you collect?**

7. **What steps do you take to ensure worker and environmental safety?**

Important Notes on
Data Destruction

State and/or federal laws require many businesses, institutions and other organizations to destroy the data the old electronics contain, especially data related to health or student records.

Even if not required by law, **it is in your best interest to protect the information** on cellphones, computers, tablets, storage devices, printers and other electronics from unauthorized users and criminals looking to exploit personal or financial information.

Whether you plan to resell, donate or recycle your electronics, be sure to ask a recycler or refurbisher about their data destruction practices. Many have trusted methods that use U.S. Department of Defense or other nationally recognized data destruction standards. You can also check for certifications from the National Association for Information Destruction (NAID).

A recycler or refurbisher's data destruction will help you fulfill data security responsibilities and protect sensitive or confidential customer, employee and business information.

If you will be doing data destruction on your own, check with device manufacturers, operating system providers or electronics retailers for specific instructions or software. Make sure devices are disconnected from "cloud"-based services and websites, especially those that automatically upload or sync files.

Making Responsible Decisions

Choosing a responsible recycler or refurbisher can prevent pollution and expensive cleanups.

If your electronics are mishandled, even after leaving your hands, you may find yourself accountable for them again. Responsible recycling has a cost, and sites like those shown in the photos here are the result of households and organizations not asking enough questions of potential "recyclers." Taking time to choose a recycler or refurbisher that will handle your devices and data with care will not only enhance Wisconsin's recycling industry and protect human health and the environment—it will also give you peace of mind.

Resources

The DNR website has many resources to help you find the right solution for your unwanted electronics, including tips for choosing a recycler, requirements for collecting and storing electronics, and lists of electronics recyclers.

Go to dnr.wi.gov and search "ecycle."