

Managing Used Electronics

Electronics have become central to the workplace. Although they simplify and improve many daily tasks, electronics also create an e-waste problem. Rapid innovations in technology lead to millions of electronics coming to the end of their useful lives every year. In Wisconsin, most electronic devices are banned from

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, 2009 Wisconsin Act 50, banned most electronics from state landfills and incinerators. In addition to the electronics specifically banned from disposal (see *Electronics Banned from Wisconsin Landfills* at right), most other business electronics must be reused or recycled, or managed as hazardous waste under federal and state hazardous waste laws.

For more information on hazardous waste characteristics, see Managing Unwanted Electronics and Component Parts in the Resources section on back.

landfills and incinerators, and must be reused or recycled, or managed as hazardous waste when you are done with them.

This guide will help you navigate the laws governing used electronics and assist you in managing workplace electronics in a safe, legal and responsible manner.

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

When businesses 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) a 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.



Electronics Banned from Wisconsin Landfills and Incinerators

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



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.

No matter which option you choose to manage your e-waste, it is important that you take time to choose a responsible company.

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 you think 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). Suggested websites for finding a recycler or refurbisher are listed in the Resources section at the end of this guide.

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 "asset management").

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 back page). 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 they are providing.

Donating Electronics

Donating useable electronics can benefit both the receiving organization and the company making the donation. The depreciated value of the 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 back page). When you have completed these steps, contact your intended recipient and verify that they will accept donated electronics,

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. The Resources section on the back lists websites that will help you find 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 at 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 *Notes on Data Destruction* on the back page. 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, read the DNR publication *Managing Unwanted Electronics and Component Parts* (see Resources on back page).

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 and institutions to destroy the data that old electronics contain.

Even if not required by law, it is **in your best interest to protect the information** on computers, tablets, printers or other electronics from unauthorized viewers 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.

A recycler or refurbisher's data destruction will help you fulfill data security responsibilities and protect sensitive or confidential customer, employee and business information. You can also find free or inexpensive software to "wipe" your hard drive.

Just deleting your files will not clear them off of your computer.

If you will be doing data destruction on your own, ask a computer software retailer for more information before determining that your data are erased.



Making Responsible Decisions

Wisconsin and neighboring states have thriving electronics recycling industries that benefit from your responsible actions.

When choosing management options for your old electronics, consider that, if they are mishandled even after leaving your hands, you may find yourself accountable for them again. Taking the time now to choose a recycler or refurbisher that will handle your materials and data with care will not only enhance Wisconsin's recycling industry, worker safety, and the environment, but it will also bring you peace of mind.



Resources

The following resources can help you find a new home for your old electronics.

- **DNR webpage on electronics recycling**, including a list of electronics collection sites and recyclers:
<http://dnr.wi.gov/topic/Ecycle/electronics.html>
- **Managing Unwanted Electronics and Component Parts**:
<http://dnr.wi.gov/files/PDF/pubs/wa/WA1307.pdf>
- **The Wisconsin Recycling Markets Directory**:
<http://wisconsinrecyclingdirectory.com>
- **Greener Gadgets electronics recycling directory**:
<http://www.grenergadgets.org/>
- **Earth 911 electronics recycling directory**:
<http://earth911.com/recycling/electronics/>



Wisconsin Department of Natural Resources

Bureau of Waste and Materials Management
P.O. Box 7921 | Madison, WI 53707-7921

This publication is available in alternative format (large print, Braille, audiotape etc.) upon request.

Please call (608) 266-2111 for more information. DNRWAE-cycling@wisconsin.gov

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