

The Missouri Department of Natural Resources brought together stakeholders to get input on what direction Missouri should take to manage discarded electronics (e-scrap). A partnership evolved that includes private, public and nonprofit recyclers, state and local governments and retail organizations. This partnership developed a three pronged strategy called e-cycle Missouri:

### **Missouri E-cycling Standards - MOEST**

A set of best management practices for electronic equipment recyclers and demanufacturers to use will help ensure these services protect the environment.

### **Voluntary Tiered Registration Levels**

The stakeholder group created four levels of registration to promote the adoption of Missouri E-cycling Standards by facilities that collect and process e-scrap. Each level represents an increasing commitment to follow Missouri E-cycling Standards and adopt additional environmental controls. Individuals or businesses can confidently choose a recycler at the registration level that best meets their needs.

### **Education and Outreach**

Raising public awareness of the environmental impacts associated with discarded electronics will be a key part of the e-cycle Missouri education and outreach activities. These efforts will also include the how and where part of the equation by providing a Web site that lists all of the registered services in Missouri.

## **Electronic Waste Is Growing**

If you have an outdated computer or two in your basement, you're not alone. The U.S. Environmental Protection Agency estimates that more than 2 million tons of computers and other electronics are disposed of each year. Currently, only about 20 percent of these materials are recycled.

With a constant supply of newer, faster electronic products on the market, Americans continually replace older models. This trend shows no signs of slowing. As a result, electronics have become one of the fastest growing waste streams or portions of our trash.

Computer monitors and older TVs contain an average of four pounds of lead. In addition to lead, electronics can contain chromium, cadmium, mercury, beryllium, nickel, zinc and brominated flame retardants. Properly disposing of or recycling electronics prevents pollution.

### **Before You Pull the Plug**

You've relied on your trusty computer for many years, but sadly it can no longer keep up with the younger models out there. It's time to trade up. But before you pull the plug, consider these possibilities:

- Improve it by adding memory or other upgrades;
- Donate working computers to a school or charity; or
- Take it to a recycler where some parts can be reused or its heavy metals recycled.

### **What to Recycle**

Each collection site has its own list of accepted items and fees, if applicable. The most commonly accepted items include:

- Computers - CPUs, monitors, keyboards and mice
- Printers
- TVs
- Hand held devices
- Cell phones

Note: Fees are often necessary to cover the recycler's costs to dispose of the hazardous components. Check with the individual recycler to find out more about its services and fees.

### **How to Recycle**

- Take your unwanted electronics to one of the recyclers registered with the Missouri Department of Natural Resources. A list is available on the department's Hazardous Waste Program's Web site at [www.dnr.mo.gov/env/hwp](http://www.dnr.mo.gov/env/hwp) or by calling (573) 751-3176 or 1-800-361-4827.
- Participate in a collection event hosted by a city, county or solid waste management district. For a list of district contacts, visit the department's Solid Waste Management Program's Web site at [www.dnr.mo.gov/env/swmp](http://www.dnr.mo.gov/env/swmp) or call (573) 751-5401 or 1-800-361-4827.
- Contact electronics retailers in your community to find out if they have a take-back program.
- Visit the manufacturer's Web site to find out if they participate in a take-back program.

## Special Note For Businesses, Non-Profits and Schools

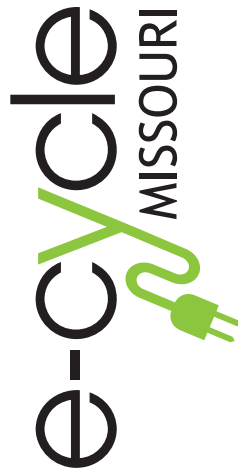
Did you know that all businesses, non-profits, schools and public agencies are required by law to properly manage certain discarded electronics? Some electronics may be classified as hazardous waste. Computer monitors, televisions, circuit boards and other electronics contain heavy metals so they cannot be legally disposed of in the trash. Reuse or recycling through a recycler registered with the Missouri Department of Natural Resources will help ensure your facility follows environmental laws.

For additional information on the legal requirements, contact the department's Hazardous Waste Program at (573) 751-3176 or 1-800-361-4827.

### Facts

- It is estimated that Americans own more than 500 million TVs (working and non-working) in the U.S. The CRT (cathode ray tube) in a TV monitor can contain up to four pounds of lead.
- The National Safety Council estimates that nearly 63 million computers became obsolete in 2005.
- The average lifespan of a computer has fallen from 4.5 years in 1992 to an estimated two years in 2005.
- An estimated 10.2 million used computers are exported from the U.S. each year. Most end up in countries that have less stringent environmental laws than in the U.S.

Source: *Basel Action Network*



### For More Information:

e-cycle Missouri: [www.e-cyclemo.org](http://www.e-cyclemo.org)  
e-cycle St. Louis: [www.ecyclestlouis.org](http://www.ecyclestlouis.org)  
eCycling, U.S. EPA: [www.epa.gov/epaoswer/hazwaste/recycle/ecycling](http://www.epa.gov/epaoswer/hazwaste/recycle/ecycling)

The logo for e-cycle Missouri features the word "e-cycle" in a lowercase, sans-serif font. A green power cord with a two-pronged plug is integrated into the letter "y" of "cycle". To the right of "e-cycle", the word "MISSOURI" is written in a smaller, uppercase, sans-serif font.

e-cycle  
MISSOURI

A black and white photograph of a pile of discarded electronic equipment, including computer monitors, keyboards, and other peripherals, serving as the background for the right side of the page.

Electronics  
**Reuse  
Refurbish  
Recycle**

Solutions for  
your unwanted  
electronics

[www.e-cyclemo.org](http://www.e-cyclemo.org)