

## LEE COUNTY'S POLLUTION PREVENTION PROGRAM

239-652-6126

### Recycle/Disposal Option for Electronic Items

The Electronics Recycling Facility is located at 6441 Topaz Court in Fort Myers. There is a fee for electronic disposal, so please contact Lee County's Division of Solid Waste at 239-533-8000 for the correct amount for whatever type of electronics you may have. Remember that any electronics that are not properly recycled by a business as a "Universal Waste" must be added to the facility's monthly total of generated hazardous waste to calculate the facility's generator status.

Electronic waste (e-waste) is growing at **three times** the rate of any other waste. US EPA states that 20 million computers become obsolete in 1998; **only 13% were reused or recycled.**

Electronic waste can consist of the following:

- Television
- Computer Monitor
- Computer Central Processing Units
- Peripherals such as keyboards, mouse, printer, scanner, modems, cables.
- Desktop phones
- Fax machines
- Portable telephones
- Communication radios

E-waste can contain the following Hazardous materials:

Television and computer monitors contain cathode ray tubes (CRT). CRTs contain **lead**, highly toxic heavy metal. The Department of Environmental Protection states that CRTs may be the largest source of **lead** in Florida's solid waste stream.

- Each computer or TV display contains an average of **4 to 8 pounds of lead**. (3)
- 315 million computers become obsolete in the years 1997-2004. These computers contain a total of more than **1.2 billion pounds of lead** (3)
- Monitor glass contains about 20% lead by weight (3)
- Lead can also be found in computer circuit boards (3).
- Consumer electronics already contribute to 40% of the lead in landfills (3)
- Lead accumulates in the environment and affects the nervous system, blood system, kidney and developing brain of children (3).
- Lead can leach from landfills and go into your drinking water.

**Cadmium** is another heavy metal that comes from computers. The largest source is Nickel Cadmium batteries found in laptops; **cadmium** can also be found in circuit boards (3).

- Estimated 2 million pounds of Cadmium is contained in the 315 million computers that become obsolete in 1997-2004.
- Cadmium accumulates in the body, particularly the kidneys (3)

- It can enter your system through breathing or eating/drinking.
- This is important in Lee County because we incinerate our waste, this causes cadmium to be released into the air and settle in the water.

**Mercury** is a heavy metal found in electronic waste.

- **An estimated 70% of heavy metals (this includes mercury and cadmium) found in landfills come from e-waste (3).**
- **Mercury** can be found in computer switches and flat panel screens
- **Mercury** accumulates through the food chain, especially in fish.
- It can damage brain function.
- 315 million computers that become obsolete between 1997-2004 **400,000 pounds of mercury (3)**

**Hexavalent Chromium** (Chromium VI) is still used by some manufactures as corrosion protection of untreated steel.

- Chromium VI easily passes into systems through cell membranes. It can cause DNA damage.
- Asthmatic Bronchitis is an allergic reaction linked to Chromium VI.
- 315 million computers that became obsolete in 1997-2004 **about 1.2 million pounds of Hexavalent Chromium was present (3).**

### Pollution Prevention- What can you do to help

Reduce

- Use equipment as long as possible
- Upgrade a slower system to get more use out of it
- Consider a lease where you can trade up to a faster system

Reuse

- Refurbish

Recycle

- Electronics equipment can be recycled for metals, plastics, glass and etc.
- Check with the location you purchase your equipment from or the manufacture, some offer a return program

Sources

1. [www.dep.state.fl.us/waste/categories/electronics/pages/contacts.htm](http://www.dep.state.fl.us/waste/categories/electronics/pages/contacts.htm)
2. <http://florida.earth911.org>
3. [www.svtc.org/cleancc/pubs/poisonpc2004.htm](http://www.svtc.org/cleancc/pubs/poisonpc2004.htm)