

Recycling is Best Option for Disposing of Computers

Old computers and other electronic devices are the fastest growing portion of our waste stream. A household computer is expected to last 3-5 years; while in a business environment, a computer's life expectancy is about 2 years. Studies show more than 315 million desktop and laptop computers will become obsolete in the United States within a few years. That's roughly one computer for every person in the U.S. and the problem will only get worse. As technology becomes more advanced, people will continue to upgrade their electronic devices such as TV's and computers.

Computers commonly contain over a dozen metals ranging from precious to hazardous. They can actually be a very valuable resource when they are recycled. Precious metals found inside such as platinum, silver and especially gold have a high value. One metric ton of circuit boards and other electronic scrap from computers contain more gold than that recovered from 17 tons of gold ore.

The hazardous side of e-waste has become a global concern for human health and the environment. High amounts of lead, mercury and cadmium and other metals have classified e-waste as hazardous, therefore, complicating the disposal process for old computers. Along with the 315 million computers becoming obsolete, will come over 1.2 billion pounds of lead. The dangers to humans, plants, animals and the environment of these heavy metals are well known and why the disposal of this material is an issue of growing concern. In Lincoln, businesses are not allowed



to dispose of their computer equipment in the landfill. Households are exempt from these regulations and may dispose of them in the landfill.

So what happens to obsolete computers? It is believed that 75% of obsolete computers are stored by their owners because they are perceived to have some value. The remainder are recycled or put in a landfill. Many of those being stored are eventually disposed of as well. Recycling is always the best option for disposing of computers.

The Lincoln Recycling Office encourages those with old computers to recycle or reuse their equipment. See list at right for local organizations which accept computer donations and local businesses which recycle computers. Generally, households will need to deliver their computers to a local recycler. However, businesses which have a larger quantity of computer equipment can have businesses come to their facility and pick up the equipment for a fee.

If you have additional questions about computer recycling, please contact the recycling hotline at 441-8215.

Computer Donations

CATHOLIC SCHOOLS

488-2040, ext. 420

Computer requirements: P4, 128MB. Will accept laser printers. Flat screen monitors only.

CRAYONS TO COMPUTERS, LINCOLN PUBLIC SCHOOLS

c/o Ventures in Partnership
436-1012

Computer requirements: P4, 512MB. Flat screen monitors only.

LINCOLN ACTION PROGRAM

210 "O" Street
471-4528

www.lincoln-action.org
Accepts all computers, Pentium or newer.

SMDS, INC.

6005 Aylesworth Avenue
464-4357

www.sdmsinc.com

Residential Computer Recycling

COMPUTER RENAISSANCE

330 N. 48 Street, Suite B
465-4040

Fees apply.

SCHROCK INNOVATIONS

7160 S. 29 Street
423-9595

Fees apply.

TECHWARE RECYCLING

1835 W. "O" Street
499-3103

Fees apply.

Business Computer Recycling

A-TEC RECYCLING

Des Moines, IA
(800) 551-4912

www.a-tec-recycling.com

CP RECOVERY

Omaha, NE
(888) 411-6975, (402) 339-1513

www.cprecovery.com

ELECTRONIC RECYCLERS

Omaha, NE
(402) 658-9682

MERCURY WASTE SOLUTIONS

Roseville, MN
(651) 628-9370, (877) 636-6514

www.mwsi.com

MIDWEST ELECTRONIC RECOVERY

Walford, IA
(319) 846-2000

www.ewasterecycle.com

MIDWEST LAMP RECYCLING, INC.

Madison, WI
(800) 311-9636

www.budgetlampreclaimers.com

NUGENESIS, INC.

Mooreville, IN
(317) 834-8200, (800) 487-1010

TECHWARE RECYCLING

1835 West "O" Street, Lincoln, NE
(402) 499-3103

UNIVAR USA, INC.

Omaha, NE
(800) 909-4897

www.chemcare.com

Who To Contact For More Information

CITY OF LINCOLN

- Recycling Operations (recycling hotline) – 441-8215
- Solid Waste Operations (landfill disposal information) 441-8102
 - Wastewater Operations (wastewater or sewer assistance) 441-7961
- Water Production & Distribution (water distribution, quality or conservation steps) – 441-7571
- Watershed Management (storm drain, erosion control or mud in street) 441-4959
- Parks and Recreation Department (parks and green space) – 441-7847
<http://lincoln.ne.gov>

LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT

- Hazardous Waste (assistance for households and businesses) 441-8021
- Air Quality – 441-8040
- Keep Lincoln and Lancaster County Beautiful – 441-8035
<http://lincoln.ne.gov>

WASTECAP OF NEBRASKA

(Business recycling assistance)
436-2383
<http://wastecapne.org>

UNIVERSITY OF NEBRASKA-LINCOLN EXTENSION IN LANCASTER COUNTY

(Information on recycling, yard waste alternatives, agricultural pesticide container recycling, and more.)
441-7180
<http://lancaster.unl.edu>

Reduce Hazardous Waste For Home

The best way to protect your home from toxic materials is to keep them out of the home. To keep these materials out of the home, buy less hazardous materials.

When deciding which products to buy, read the labels on the products. If the product label says the product can be cleaned up with water, the product probably is not toxic or hazardous. A good example of this type of product is latex paint. The paint can label will say you can clean brushes and your hands with soap and water. Latex paint is less hazardous and less toxic.

Hazardous Products

Products are considered hazardous if they are:

- **Flammable or Combustible:** They can easily ignite.
- **Explosive or Reactive:** They can detonate or explode through exposure to heat, sudden shock or pressure.
- **Corrosive:** They can cause a chemical reaction that can burn or destroy living tissue or other materials.
- **Toxic:** They are capable of causing injury or death through ingestion, inhalation or skin absorption.

Read the Label

Labels of hazardous products are required by law to include certain warnings. Hazardous product labels often list the principal hazards such as "flammable," "causes burns to skin and eyes," or "vapor harmful." Key words to look for are called "Signal Words." Signal words indicate the level of toxicity of the

product. Purchase the products with the safest or lowest level of hazard.

- **No Word:** if the labels contain no signal word or special warnings, or if it explains you can use water or soap in clean up, the product is safe to use.
- **Caution:** the product is slightly toxic. This product with this signal word on the label is not as safe as the first product but is safer to use than products with any other signal word on the label.
- **Warning:** the product is moderately toxic. This product is more hazardous than one with "caution" on the label.
- **Danger:** The product is highly toxic, corrosive or extremely flammable.
- **Poison:** The product is highly toxic.

Minimize Your Risk

Make sure the product you want to buy poses the lowest level of risk by reading and understanding the label. Purchase the product with the lowest

level signal word. If the label does not contain words like "Flammable," "Corrosive," "Explosive," "Reactive," "Poison" "Toxic," or "Hazardous," the product may be safe to use.

The words "natural" or "organic" do not indicate a safe product. A product labeled "all natural ingredients" can still contain hazardous materials. If you feel uncomfortable with the ingredients or the instructions for use, do not purchase the product.

Accidental ingestion of certain products or breathing fumes can cause injury or death. Keep away from small children and pets. If you can't keep children or pets away from it, do not buy it. Many labels will specifically say to keep out of the reach of children. Many lawn products warn to keep children and pets off the lawn for a period of time after applying product.

Businesses Toxics Reduction

The best way for businesses to avoid the health risks and costs of hazardous materials is to reduce or eliminate the materials.

The first step is to reduce the amount of hazardous materials businesses own or use. Some people will read the directions on a product and use twice as much as is recommended. They believe more is better or will work faster. The amount not needed to do the job is waste. A smart choice is to buy material just before it is needed. Don't buy large quantities and store them on site, doing so invites dangerous accidents. Buying what is needed when it is needed, reduces the risk of accidents.

The second step is to reduce the hazard. Buy materials least hazardous or toxic possible to do the job. Many manufacturers now make citrus-based or water-based solvents. Buy latex and water-based paints. Avoid products that have the words "warning," "danger" or "poison" on the label. If a product requires users to have special training or protective equipment, that is a potentially hazardous product.

Solvent substitution information is available on several Web sites:

- The Solvent Alternative Guide (SAGE) at <http://clean.rti.org>
- Enviro\$en\$e at <http://es.epa.gov>
- The Western Regional Pollution Prevention Network (WRPPN) at <http://www.wrppn.org/irta>

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