

Electronic Waste

University of Tennessee Safety Guide EC-021

Document Contact: EHS-Environmental Compliance

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Purpose

The purpose of this document is to provide guidance for electronic waste disposal in accordance with the National Recycling Coalition's Electronics Recycling Initiative and Environmental Protection Agency (EPA) regulations (40 CFR 261).

Scope and Applicability

This shall apply to all students, staff and faculty at the University of Tennessee Knoxville campus. This plan also applies, where applicable, to operational aspects in facilities leased by UT.

Definitions and Abbreviations

Abbreviations

EHS - Environmental Health and Safety

Definitions

E-Waste: "Electronic waste" may be defined as discarded computers, office electronic equipment, entertainment device electronics, mobile phones, television sets and refrigerators. This definition includes used electronics which are destined for reuse, resale, salvage, recycling, or disposal.

Techno Trash - diskettes, CD's, DVD's, cell phones, PDAs, pagers, digital cameras, handheld games, CD players, and MP3 players

Roles and Responsibilities

Employees and students shall:

- i. Identify electronic devices under their control that can be recycled
- ii. Participate in the e-waste disposal program
- iii. Make suggestions for process improvements to the recycling coordinator and to EHS.
- iv. Actively seek to reduce waste generation.

Recycling Coordinator shall:

- i. Pickup e-waste from departments upon request.
- ii. Ensure the electronic waste is palletized and properly stored until shipment.
- iii. Ensure the electronic waste is being recycled or disposed of in an environmentally responsible manner.
- iv. Serve as the point of contact for contractors who remove electronic waste.
- v. Encourage recycling and waste reduction in departments
- vi. Disseminate information regarding e-waste opportunities and outcomes to the university community
- vii. Collect and tabulate data regarding e-waste disposal activities.

Guidance

Below are some examples of common electronic devices; this is by no means a complete list.

- CRT devices including older televisions and computer monitors
- LCD desktop computer monitors and laptop computers
- LCD televisions
- Plasma televisions
- Portable DVD players with LCD screens
- Cash registers and oscilloscopes containing CRTs
- Computers
- Computer keyboards and other peripherals
- Telephones, cell phones, and answering machines
- Stereo equipment, radios, tape and CD players/recorders, phonographs
- Video cassette recorders and calculators
- Microwaves

When electronic equipment breaks or becomes obsolete, it must be properly disposed or recycled. This electronic equipment may contain heavy metals and other materials that can become hazardous to human health and the environment, including:

- **Lead:** Computer monitors and televisions contain a cathode ray tube (CRT). CRTs contain leaded glass and are the largest source of lead, a poisonous metal, in municipal waste.
- **Mercury:** Some electronic equipment contains recoverable quantities of mercury, another poisonous metal.
- **Cadmium:** Rechargeable nickel-cadmium (NiCd) batteries are the largest source of cadmium in municipal waste.

The United States Environmental Protection Agency (USEPA) currently classifies discarded electronic equipment that contains these hazardous materials as characteristic hazardous wastes under the Resource Conservation and Recovery Act.

Do not place any electronic equipment in the trash, even if it is broken.

Electronic waste that needs discarded can be either picked up by the Recycling department, or dropped off in front of dock # 4 at the Facilities Services "Fleming" warehouse.

The Recycling Coordinator palletizes the e-waste, or places the e-waste in Gaylord boxes properly labeled.

The Recycling Coordinator ships the e-waste to an electronics recycler, and ensures the waste is handled in an environmentally responsible manner.

Recordkeeping and Data Analysis

Records shall be kept on the amount of e-waste that is recycled by Facilities Services on an annual basis.

Other departments that conduct recycling activities are encouraged to submit data to the Facilities Services Recycling Coordinator.

Summary data of e-waste disposal efforts are submitted to the Vice Chancellor for Finance and Administration

Training and Information

Information regarding recycling is disseminated to the university community periodically via UT media outlets.

Information regarding recycling is available at: <http://recycle.utk.edu/>

References

EHS Hazardous Waste Management Policy

Disclaimer

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