

Environmental Fact Sheet

WASTE ELECTRONIC DEVICES

What kinds of Waste Electronic Devices are banned from landfill disposal?

Waste Electronic Devices from households and businesses cannot be disposed in the trash. Electronic Devices banned from landfill disposal include: computers, peripherals, computer monitors, cathode ray tubes, televisions, printers, personal electronics such as personal digital assistants and music players, electronic game consoles, printers, fax machines, all telephones, answering machines, videocassette recorders, DVD players, digital converter boxes, stereo equipment, and power supply cords (as used to charge electronic devices). There are many



other electronic devices that are not included in this list; it is recommended that devices that contain potential hazardous components such as circuit boards and screens be managed in the same manner even if they are not specifically banned from landfill disposal. In addition, whole electronic devices cannot be placed in the scrap metal bin.

Which Banned Electronic Devices are collected at E-cycles locations for free from <u>covered</u> entities?

- Computers (such as desktops, all-in-one computers, laptops, notebooks, netbooks, and tablets)
- Computer monitors (any type i.e. CRTs, flat panel displays, LCD displays, plasma displays)
- Printers (most types including multifunctional machines does not include floor-standing models)
- Televisions (any type i.e. CRTs, flat panel displays, LCD displays, plasma displays)
- Computer Peripherals (items sold exclusively for external use which connects to a computer such as a mouse, keyboard, scanner, external hard drive, etc.)

Note: A <u>Covered Entity</u> is a Vermont household, charity, school district, business with 10 or fewer employees (with no limit on the number of devices), or anyone else dropping off 7 or fewer devices.

Are there special management requirements for collectors of Banned Electronic Devices?

<u>Banned Electronic Devices</u> must be stored: 1) on a surface that prevents potentially hazardous materials in electronic devices from migrating into the soil, groundwater, or surface water, 2) within a structure or transportation unit that protects the electronic devices from precipitation, and 3) indoors. Outdoor storage is prohibited at any time. Electronic devices must be managed in a manner that prevents breakage during transportation, storage, and handling. For more information see: www.vtecycles.org.

How do I manage a broken or damaged Electronic Device?

Some electronic devices are fragile and subject to breakage e.g., Cathode Ray Tubes (CRTs), flat panel and LCD display screens). These devices pose a potential threat to human health and the environment because they contain hazardous substances such as lead and mercury and there is a physical threat from broken glass. Other electronic devices contain components with hazardous

constituents/substances that are more rugged (i.e. circuit boards, batteries, capacitors) under normal conditions (i.e. not bulging or leaking) and pose less of a threat.

As such, the decision about how to manage broken electronic devices should be based on the type(s) of components contained within a device as follows:

- <u>Damaged Electronic Devices whose only hazardous components are intact</u> and within the device, (such as circuit boards).
 - Do not require anything beyond the standard storage and packaging requirements for Electronic Devices. These standard requirements protect the devices sufficiently (even if they are damaged cosmetically) from any further damage.
- <u>Broken Cathode Ray Tubes</u> or "CRTs" (i.e., older televisions and computer monitors; contain leaded glass): If the CRT glass is broken or shows evidence of damage that could cause a release of glass particles under reasonably foreseeable conditions, the glass must be:
 - Placed in a closed container that is structurally sound and compatible with the glass. Do not dispose in the trash.
- Broken Electronic Devices that contain mercury lamps, where there is visual evidence that the lamp inside is broken (i.e. Liquid Cathode Display (LCD)):
 - Clean up immediately by carefully scooping up the glass fragments and powder with stiff paper.
 Pick up any remaining small pieces of glass and powder using sticky tape. Wipe area clean with
 a damp paper towel. Place glass and all cleanup materials in a closed container that is
 structurally sound and compatible with the waste (i.e. not a metal container). Do not dispose of
 in the trash.
 - o Do not vacuum broken lamps as this may spread mercury vapor.
 - If the screen is broken and the lamps are intact, the device must be protected and managed in a way to prevent further damage and potential breakage of the lamps during storage.

Bulging or Leaking Batteries

- Contain any battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container that is structurally sound and compatible with the contents of the battery.
- o The container must be kept closed and must lack evidence of leakage or spillage.

Labeling of Broken Devices

- Containers used to store broken electronic devices must be labeled "broken electronic waste" or "broken used electronics" and can be shipped to a recycling facility along with other containers of intact electronic devices.
- Multiple broken electronic devices can be placed into one collection container provided the commingled wastes are not incompatible.

For more information contact:

Vermont Department of Environmental Conservation
Waste Management and Prevention Division – Vermont E-cycles Program
1 National Life Drive, Davis 1
Montpelier VT 05620-3704
1-855-632-9253
www.vtecycles.org