COUNTY OF Olmsted DEPARTMENT OF ENVIRONMENTAL RESOURCES
Clean Air • Clean Energy • Clean Soil • Clean Water

# Industrial Solid Waste Fact Sheet

# Electronic Wastes- Category 19

## Definition

Electronic waste is any waste that has a circuit board or a cathode-ray tube (CRT). These products may contain lead, cadmium, or mercury at levels that are harmful to human health and the environment. They may include:

- televisions,
- answering machines,
- camcorders,
- cameras,
- central processing units (CPUs),
- compact disc (CD) players,
- computers,
- video display devices (projectors),
- video game systems,
- digital video disc (DVD) players,
- electronic storage devices,
- game systems,
- fax machines,
- radios,
- satellite receivers,
- scanners,
- Stereos,
- telephones,
- typewriters,

## Special Disposal Conditions

The Electronic equipment above is prohibited from disposal as municipal solid waste and is required to be properly recycled per Minnesota Statutes. The Olmsted County Recycling Center Plus (OCRC) may accept electronics for recycling. If the waste is not considered an electronic waste by the definition above, then the waste material may be directed to the Olmsted County Kalmar Landfill or the Olmsted Waste-to-Energy Facility (OWEF), depending on the waste material's properties.

## Generator Requirements

See page 2

## Procedures

**Typical Delivery types**

- bulk
- drums
- Boxed
- bagged

**Background**

Electronic waste is any waste that has a circuit board or a cathode-ray tube (CRT), including, but not limited to, answering machines, camcorders, cameras, central processing units (CPUs), compact disc (CD) players, computers (including their peripherals), CRTs, digital video disc (DVD) players, electronic storage devices, game systems, fax machines, radios, satellite receivers, scanners, stereos (including receivers and speakers), telephones (rotary and cordless), televisions (including flat screens), typewriters, video cassette recorders (VCRs), video display devices (projectors), video game systems, and video equipment. CRTs and circuit boards within electronic devices may contain lead, cadmium, or mercury at levels that are harmful to human health and the environment. CRTs are considered the largest single source of lead in Minnesota's municipal waste, containing 5-8 pounds of lead per unit. Lead makes up approximately 20 percent of each CRT.

**Disposal**

Minnesota Statutes, section 115A.9565, prohibits the disposal of electronic products containing CRTs in municipal solid waste. Minnesota Statutes, section 115A.1310 established the Minnesota Electronics Recycling Act. This law requires “covered electronic devices" such as computers, peripherals, facsimile machines, DVD players, video cassette recorders, and video display devices to be recycled. The Olmsted County Recycling Center Plus (OCRC) is a MPCA registered collection site for electronic waste. If a device is not covered under Minnesota Statutes, sections 115A.9565 or 115A.1310, the waste material may be directed to the Olmsted County Kalmar Landfill or the Olmsted Waste-to-Energy Facility (OWEF), depending on the waste material’s combustion properties and the concentration(s) of any contaminant(s) present.

**Testing Requirements**

Unless complete documentation exists to characterize completely the waste material (using knowledge of the process that generates the waste and the raw materials that are used in the process), waste generators must evaluate the waste material using the Toxicity Characteristics Leaching Procedure (TCLP) for those pa-rameters that can reasonably be expected to be present. This testing is required to ensure 1) the waste ma-terial is not a regulated hazardous waste and 2) the waste material is acceptable for disposal at an Olmsted County solid waste management facility. If available, Material Safety Data Sheets (MSDSs) for any contaminants present must be provided.

**Documentation**

A current, approved Industrial Solid Waste Evaluation Form must be on file with the Olmsted County Environmental Resources Department. The waste hauler must present a current, approved Non-Hazardous Industrial Solid Waste Tracking Form at the time of delivery.

**Special Generator Requirements**

If necessary, special generator requirements will be determined on a case-by-case basis.