Recognizing Hazardous Waste

Disposing of Hazardous Waste

Departments with waste chemicals may contact Environmental Health & Safety at 678-2044 or 678-4672 for guidance on proper disposal methods. Please be prepared to provide EH&S with the name of the waste chemical, quantity, container type, container size, and related data.

Finding Additional Information

Additional information on proper management and disposal of hazardous waste may be found in Tennessee Rule Chapter 1200-1-11; in Title 40, Parts 260 through 270 and 279, of the Code of Federal Regulations; and via the Environmental Health & Safety web page at: http://ehs.memphis.edu.

What is Hazardous Waste?

A waste material is a hazardous waste if it exhibits a characteristic of a hazardous waste or if it is listed as a hazardous waste by the U.S. Environmental Protection Agency (EPA) or by the Tennessee Department of Environment and Conservation.

Your Responsibility for Proper Disposal of Hazardous Waste

Your department is responsible for proper disposal of its chemical wastes, and you are accountable for compliance with University policy and with federal, state, and local hazardous waste regulations.

Failure to properly identify, handle, and dispose of hazardous waste places you at risk for criminal and/or civil liability.

Never place any waste chemical in the trash or dump it down the drain unless you have confirmed that it is not a hazardous waste and that it is acceptable for disposal through such means. Introduction of any hazardous chemical into a storm sewer is prohibited.

Hazardous Waste Characteristics

A hazardous waste will exhibit one of the following characteristics.

Ignitability

A waste may exhibit the characteristic of ignitability if the label or Material Safety Data Sheet (MSDS) indicates any of the following properties:

- Flammable
- Combustible Liquid
- Oxidizer

Examples include spent paint thinner with a flash-point less than 140°F and pressurized aerosol cans marked flammable.

Corrosivity

A waste may exhibit the characteristic of corrosivity if the container label or MSDS indicates that the material is corrosive.

Concentrated hydrochloric (muriatic) acid, nitric acid, sulfuric acid, potassium hydroxide (caustic potash), and sodium hydroxide (caustic soda) are examples of materials that may be hazardous wastes due to corrosivity.

Reactivity

A waste may exhibit the characteristic of reactivity if the container label or MSDS indicates any of the following properties:

- Oxidizer
- Pyrophoric
- Water Reactive
- Organic Peroxide
- Unstable (reactive)
- Explosive

Examples of wastes that exhibit the characteristic of reactivity include dry picric acid, potassium, sodium, and many cyanide compounds.

Toxicity

The EPA lists a number of elements and compounds that may cause a waste to exhibit the toxicity characteristic. These items include heavy metals such as arsenic, chromium, lead, mercury, and silver; also included are organic compounds such as 2,4-D, carbon tetrachloride, chloroform, and vinyl chloride.

Many of these toxic materials may be found in common items like batteries, spent black and white photo fixers, fluorescent tubes, color cathode ray tubes, and other electronic devices.

Listed Wastes

In addition to wastes that exhibit hazardous characteristics, the EPA publishes lists of specific items that are classified as hazardous wastes. These items are listed on the basis of potential for harm to humans and/or the environment.

Examples of listed wastes range from spent solvents like methylene chloride, benzene, and trichloroethylene to highly toxic chemicals like arsenic, beryllium, and sodium azide.