


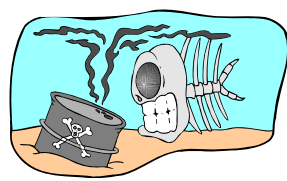


Determination of Hazardous Waste Category



Follow these conceptually simple steps to determine if the unwanted material you create is regulated as a hazardous waste

1. If there is any known or measurable radioactivity (above background), it is a **Radioactive Waste**
2. If there are any known or suspected infectious agents, unrecognizable human specimens/ tissue, animal tissue/ carcasses & body parts, body fluids, blood or blood products (absorbed), or transgenic organisms and it is produced as a result of the diagnosis, treatment or immunization of humans or animals or research pertaining to the diagnosis, treatment or immunization of humans or animals then it is a **Biohazardous** or **Medical Waste**
3. If there are chemical components that are hazardous:
 - On a regulatory list of **acutely** or **extremely hazardous** materials (www.epa.gov/swercepp/ehs/ehsalpha.html & www.dir.ca.gov/title8/5189a.html)
4. Or hazardous due to a characteristic:
 - **Ignitable**

 - Flashpoint <140 degrees F
 - Capable of causing fire at standard temperature and pressure through friction, absorption of moisture, or spontaneous chemical changes
 - Is an ignitable compressed gas
 - Is an oxidizer
 - **Corrosive**

 - Liquid with pH <2 or >12.5
 - Solid that has pH <2 or >12.5 when mixed with equal weight of water
 - **Reactivity**

 - Normally unstable and readily undergoes violent change
 - Reacts violently with water
 - Forms potentially explosive mixtures with water
 - Forms toxic gases, vapors, or fumes when mixed with water
 - Is a Cyanide or Sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes
 - Is capable of detonation or explosive decomposition if subjected to a strong initiating source or heated under confinement
 - Is readily capable of detonation or reaction at standard temperature and pressure
 - **Toxicity**

 - Has an acute oral LD50 less than 2,500 mg/kg
 - Has an acute dermal LD50 less than 4,300 mg/kg
 - Has an acute inhalation LC50 less than 10,000 ppm as a gas or vapor
 - Has an acute aquatic 96-hour LC50 less than 500 mg/L
 - Has been shown through experience or testing to pose a hazard to human health or environment because of its carcinogenicity (carcinogen, mutagen, teratogen), acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment
5. Inherently waste-like, expired or unknown chemicals

Then it is a **Chemical Hazardous Waste**

Other types of waste are also regulated due to their chemical characteristics and potential effect on the environment, these include:

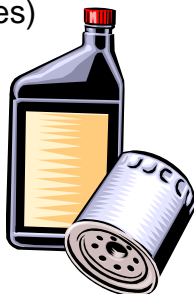
Universal Waste

- Batteries
- Lamps (fluorescent)
- Thermostats (with hg ampoules)



Special Waste

- Used oil
- Used oil filters
- Lead-acid batteries



e-Waste

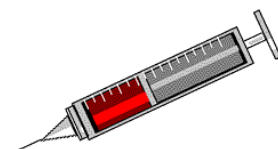
- PC monitors
- Televisions
- LCD screens
- Cell phones
- any equipment that contains a circuit board
- and rechargeable batteries



Examples

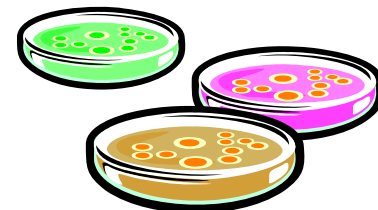
Medical Waste

- Diagnosis, treatment or immunization of humans/animals
- Research on diagnosis, treatment or immunization of humans/animals
- Includes all hypodermic needles by statute
- Blood and blood products
- Lab wastes of significant virulence and quantity



- Cell, bacteria and viral cultures
- Transgenic plants
- Tissue culture supplies

Biohazardous Waste



Chemically Hazardous Waste

- Waste solvent from lab
- Waste solids from chromatography
- Still bottoms from drying still

