

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

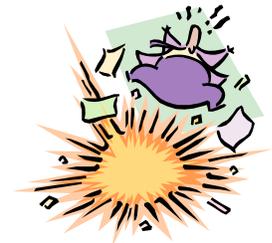


- **Corrosive**

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

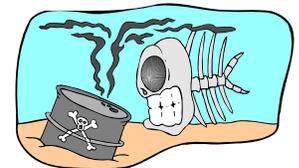
- **Reactivity**

- 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

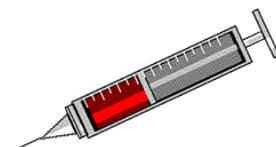
- PC monitors
- Televisions
- LCD screens
- Cell phones
- any equipment that contains a circuit board
- and rechargeable batteries



Examples

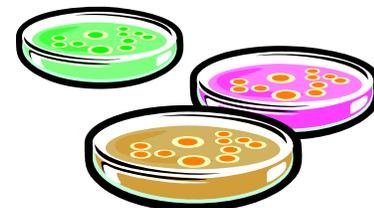
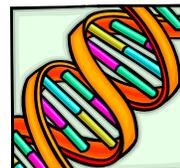
Medical Waste

- 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

