

Hazardous Waste Determination Guidance

Follow these simple steps to determine if your unwanted material is regulated as hazardous waste:

- A. If the material's original container included *radioactive* labeling, it is *radioactive waste*; if there is any known or measurable *radioactivity*, it is *radioactive waste*.
- **B.** If there are any known or suspected *infectious agents* present in animal parts, tissues, fluids, carcasses, blood or blood products; if there are any known or suspected *infectious agents* present in waste containing discarded materials contaminated with excretion, exudate, or secretions from humans or animals; human specimens or tissues which have been fixed in formaldehyde or other fixatives; waste which is contaminated through contact with or having previously contained chemotherapeutic agents; any laboratory or research waste that is *potentially infectious to humans, plants, or animals*, or would *pose a threat to the community or the environment* (e.g., *organisms with potentially significant environmental impact*, or *transgenic* or *recombinant organisms*), it is *biohazardous waste. Ethidium Bromide waste is NOT biohazard waste.*

If it is biohazardous waste, and it is *sharps*; or it is generated or produced as a result of the *diagnosis, treatment, or immunization of human beings or animals,* or it is generated or produced as a result of *research pertaining to the diagnosis, treatment, or immunization of human beings or animals*, it is **biohazardous medical waste**.



ADIOACTIVE



- C. It is *chemical hazardous waste* if it is a *hazardous chemical*, or includes a chemical component that is:
 - > Inherently waste-like; an expired or unknown chemical
 - On a list of regulated hazardous chemicals. Check these lists to see if your unwanted material contains any regulated hazardous chemicals:
 - ✓ US EPA Title III List of Lists: <u>https://www.epa.gov/sites/production/files/2015-03/documents/list of lists.pdf</u>
 - ✓ California List of Acutely Hazardous Chemicals, Toxics and Reactives: <u>https://www.dir.ca.gov/title8/5189.html</u>
 - Exhibits one of four defined hazardous waste characteristics. Check the Hazardous Chemicals List reference to see if your unwanted material contains any listed hazardous waste.
 - ✓ Hazardous Chemicals List Listing of 2,126 chemicals with hazardous waste characteristics, RCRA and CA waste code references: <u>Environmental Health & Safety : Waste Management</u>, <u>EPA's Defining Hazardous Waste</u>

1. Ignitable



- Flashpoint <140°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 a pH <2 or >12.5
- Solid that has pH <2 or >12.5 when mixed with equal weight of water

3. Reactive

- 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

4. Toxic

- 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
 - Use 22 CCR 66260.200 calculation to make a determination: <u>22 CCR 66260.200</u> <u>Toxicity Calculation - Example.xlsx</u>
- **D.** Other types of waste are also regulated as hazardous waste due to their characteristics and potential effect on the environment. These wastes include:

Universal Waste

- Batteries
- Fluorescent lamps
- Thermostats with mercury switches
- Electronic Waste (E-Waste)
 - PC monitors
 - Televisions
 - LCD screens
 - Cell phones
 - Any equipment that contains a circuit board and rechargeable batteries

> Special Waste

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



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