



RCRA Waste Determination
(2-page factsheet)
Resource Conservation & Recovery Act

To determine if your waste is regulated as a hazardous waste you must answer six (6) questions:

1. **Is it a “solid waste”?** Only a solid waste can be a hazardous waste. The solid waste can be in the form of a solid, liquid, or contained gas. The regulation defines solid waste as any material that is discarded by being either abandoned, inherently waste-like, or recycled by being applied to the land, burned for energy recovery, reclaimed as fuel, contains dioxin, or is accumulated speculatively (stored in lieu of expeditious recycling). For more details on solid waste definition see *40 CFR Parts 260 and 261*.
2. **Is the solid waste excluded?** Certain wastes are excluded from the definitions of solid waste or hazardous waste. For more details on this definition see *40 CFR Parts 261 Subpart E*.
3. **Is the solid waste a “listed waste”?** There are four categories of hazardous waste. Each category includes a list of specific wastes that are always considered to be hazardous waste. The four categories are F, K, P, U wastes. For more details on listed waste see *40 CFR Part 261*.
 - F – listed: wastes that are generated from general production and maintenance processes.
 - K – listed: wastes that are generated from specific industrial processes.
 - P – listed: chemical products that are being discarded for a variety of reasons. These wastes are considered “acute hazardous waste”.
 - U – listed: chemical products that are being discarded for a variety of reasons but are not “acute hazardous waste”.
4. **Is the solid waste a characteristic waste?** The generator needs to determine if the waste poses specific characteristics regardless if the same waste is also a listed waste. Some wastes might be both listed and characteristic and in these cases there may be a greater risk to human health and the environment and Land Disposal Restrictions would apply. The four hazardous waste characteristics are:
 - Ignitability: a waste that easily catches fire.
 - A liquid that is <24% alcohol with a flash point less than 140 degrees Fahrenheit (60 C).
 - Corrosivity: a waste that are acidic or alkaline, these wastes can readily corrode or dissolve flesh, metal, or other materials. Corrosive wastes are the most common hazardous wastes.
 - A liquid with a pH <2 or >12.5
 - A liquid that corrode steel at a faster rate than ¼ inch per year at 131 degrees Fahrenheit (55 C).

- Reactivity: a waste that generate toxic gases or are capable of exploding when exposed to water.
- Toxicity: waste that contain high enough levels of one or more of the 40 toxic substances identified in 40 CFR Part 261.24 and when exposed to water produce a leachate with toxic constituent concentrations above the limits in the regulation (e.g. heavy metals, pesticides).

5. **Is the solid waste a mixture?** The mixture rule is intended to ensure that mixtures of hazardous wastes with non-hazardous wastes are regulated in a manner that minimizes threats to human health and the environment.
- Mixing non-hazardous waste with a listed waste in any amount will be considered a hazardous waste.
 - Mixing a non-hazardous waste with a characteristic waste is considered a hazardous waste only if the mixture itself exhibits the characteristic (ignitable, corrosive, reactive, or toxic). It is illegal to simply dilute a hazardous waste for the purpose of removing a hazardous waste characteristic.
6. **Is the solid waste derived from a hazardous waste?** The derived-from rule is intended to capture waste residues as a result of treatment, storage, and disposal processes. For example, ash created by burning a hazardous waste is considered derived from that hazardous waste. This principle applies regardless of the actual health threat posed by the waste residue or the residue's chemical composition.
- Listed waste, regardless of quantity, is considered a hazardous waste under the derived-from rule
 - Characteristic waste (not including toxicity), depending on concentration, is considered hazardous waste under the derived-from rule if they exhibit the characteristic.

Contained-in Policy when listed or characteristic wastes are spilled onto soil or contaminate equipment, buildings, or other structures, the **mixture rule** and **derived-from rule** do not apply because these materials are not actually wastes they are considered “environmental media” and “debris”. Often debris will become contaminated during normal industrial operations. The media and debris must be managed as hazardous wastes.