**Hazardous Waste**

A Hazardous Waste, as defined by EPA, is any waste that exhibits **one or more** of the following hazard characteristics: Ignitabilty, Corrosivity, Reactivity, or Toxicity, or is a Listed Waste. Such a waste is subject to all EPA hazardous waste labeling, storage and disposal regulations

Listed Wastes

**The F-list** (non-specific source wastes): This list identifies wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations. Wastes included on the F-list can be found in the regulations at [40 CFR §261.31](http://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol27/xml/CFR-2012-title40-vol27-sec261-31.xml) .

**The K-list** (source-specific wastes): This list includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing. Certain sludges and wastewaters from treatment and production processes in these industries are examples of source-specific wastes. Wastes included on the K-list can be found in the regulations at [40 CFR §261.32](http://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol27/xml/CFR-2012-title40-vol27-sec261-32.xml) .

**The P-list and the U-list** (discarded commercial chemical products): These lists include specific commercial chemical products in an unused form. Some pesticides and some pharmaceutical products become hazardous waste when discarded. Wastes included on the P- and U-lists can be found in the regulations at [40 CFR §261.33](http://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol27/xml/CFR-2012-title40-vol27-sec261-33.xml)

**Characteristic Hazardous Waste**

The **Ignitability** characteristic applies to wastes that are:

* Liquids with a flash point less than 140F
* Solids capable of spontaneous combustion under normal temperature and pressure
* Oxidizing materials
* Ignitable compressed gases
* Examples include ethanol, sodium nitrate, hydrogen gas, and xylene

The **Corrosivity** characteristic applies to wastes that are:

* Aqueous solutions with a pH less than or equal to 2 or greater than or equal to 12.5
* This does not apply to solid or non-aqueous materials
* Examples include hydrochloric acid, nitric acid, and sodium hydroxide

The **Reactivity** Characteristic applies to waste that are**:**

* Normally unstable and readily undergoes violent change without detonating, e.g., propargyl alcohol
* Reacts violently with water, e.g., sodium metal
* Forms potentially explosive mixtures with water, e.g., trichlorosilane
* When mixed with water it generates toxic gases, fumes, or vapors in a quantity sufficient to present a danger to human health or the environment, e.g., phosphorous pentachloride
* Capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement, e.g., 1,4-dioxane
* Readily capable of detonation or, explosive decomposition, or explosive reaction at standard temperature and pressure, e.g., diborane
* DOT forbidden explosive, e.g. trinitrotoluene.

**Toxic**: Toxic chemicals are listed as “D wastes” in RCRA. Common toxic metals as listed by EPA are arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Common toxic organic compounds are pyridine, benzene, carbon tetrachloride, dichlorobenzene, and methyl ethyl ketone. These chemicals have regulatory limits on the quantities that are considered hazardous waste. The concentration should be noted on any solutions containing toxic chemicals.