

**Characteristic Wastes and Listed Wastes Codes**

Both characteristic wastes and listed wastes are categorized using the applicable EPA hazardous waste codes.

- (A) Listed HW's are located in several sections within 40 CFR 261 and are grouped into the following categories of EPA HW numbers:
  - (1) F Wastes (40 CFR 261.31): Wastes from nonspecific sources (e.g., spent solvents used in cleaning operations).
  - (2) K Wastes (40 CFR 261.32): Wastes from specific sources (e.g., wastewater treatment sludge from the manufacturing or processing of conventional explosive materials).
  - (3) P Wastes (40 CFR 261.33): Acutely hazardous discarded commercial chemical products, off-specification products, container residues, and spill residues thereof.
  - (4) U Wastes (40 CFR 261.33): Toxic discarded commercial chemical products, off-specification products, container residues, and spill residues thereof.
  
- (B) Characteristic HW's are designated as EPA waste numbers beginning with the letter "D" and are described in 40 CFR 261.20 - 24. They are identified as follows:
  - (1) Ignitable Wastes (D001): Any solid waste when it is a liquid and has a flash point of less than 140o F; when it is not a liquid and is capable of igniting a vigorous, persistent fire through friction, absorption of moisture, or spontaneous chemical change; when it is an ignitable compressed gas; or when it is an oxidizer.
  - (2) Corrosive Wastes (D002): Any solid waste that has a pH less than or equal to 2 or greater than or equal to 12.5, or a solid waste capable of corroding steel at a rate greater than 0.25 inch per year.
  - (3) Reactive Wastes (D003): Any solid waste with any of the following properties:
    - (a) Normally unstable and readily undergoes violent change without detonating,
    - (b) Reacts violently with water,
    - (c) Forms potentially explosive mixtures with water,
    - (d) Generates toxic gases when mixed with water,
    - (e) Cyanide or sulfide bearing and capable of generating toxic gases when exposed to pH conditions between 2 and 12.5,
    - (f) Capable of detonation or an explosive reaction when exposed to a strong initiating force or when heated under confinement,

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- (g) Capable of detonation or an explosive decomposition reaction in normal room conditions,
  - (h) A forbidden Department of Transportation (DOT) hazard class 1 explosive.
- (4) Toxic Wastes (D004 - D043). Any solid waste, the extract of which, when tested using the Toxicity Characteristic Leaching Procedure (TCLP), contains contaminant(s) exceeding the allowable level(s). Described in 40 CFR 261.24 is a list of contaminants, allowable levels, and corresponding D Waste numbers.
- (C) Emission residues from air pollution control equipment and sludge from wastewater treatment plants may display an HW characteristic. Toxicity is the most common characteristic of these residues and sludge. Therefore, these residues and sludge must be evaluated to determine whether they are HW, and, if so, they must be managed appropriately.
  - (D) Several pesticides exhibit toxic waste characteristics. Facilities that use pesticides must determine whether the waste pesticides and pesticide waste products (containers, rinsate, etc.) meet the definition of toxic HW listed above. When ready for disposal, pesticides and pesticide waste products meeting this definition must be managed as HW.
  - (E) Mixtures of a non-HW and listed HW are also considered HW and must be managed appropriately.
  - (F) Mixtures of a non-HW and a characteristic HW are regulated as HW only if the entire mixture exhibits one of the four hazardous characteristics.
  - (G) Because of the regulations summarized above, it is extremely important to segregate waste streams, both hazardous and non-hazardous, to avoid the added expense of managing HW when it can be avoided through proper segregation.