

MAKING HAZARDOUS WASTE DETERMINATIONS

Determining whether your waste is hazardous or not, is a very important responsibility. This process determines how the waste will be managed while on-site, and, most importantly, how it is to be disposed. Improper management and/or disposal of hazardous waste can potentially expose employees, the public, and/or the environment to imminent harm.



What is the Regulation? Title 40 – Protection of Environment - of the U.S. Code of Federal Regulations (CFR), Chapter I, most commonly abbreviated as 40 CFR contains the hazardous waste regulations. Each Title is broken up into Chapters. Chapter I contains all regulations pertaining to Environmental Protection. Each Chapter is broken into Parts. The 40 CFR Parts 260 through 273 contain the Hazardous Waste Regulations. Part 262 is the part containing generator standards for managing hazardous wastes. The requirement for generators to make a hazardous waste determination for all their solid wastes is found at

Part 262, section 262.11. We abbreviate this entire path to the regulation as 40 CFR 262.11. The regulations are published by the Federal Government on the internet at the following web address:

<http://www.epa.gov/epacfr40/chapt-I.info/>.

Making a Hazardous Waste Determination The first thing a generator must realize is that making this determination is a process; not just the running of laboratory analyses. The following are brief descriptions of the different types of hazardous wastes. The regulations containing the exact text of the definitions and requirements are found at 40 CFR, Part 261 – Identification and Listing of Hazardous Wastes.

- I. **Step one: Determine if the waste is excluded or exempted from regulation under the Resource Conservation and Recovery Act (RCRA).** The reason for this is that it may be regulated under one of a number of other sets of regulations and the Government doesn't want to regulate it twice.
- II. **Step two: Determine if the waste is a listed hazardous waste.** This is important because these wastes were included in the lists because they either are, or contain, a chemical that is a known or suspected carcinogen, mutagen, or teratogen. In other words, they can cause cancer, severe mutations, or otherwise create severe irreversible illness or injury to humans (or plants and animals) or can otherwise do serious damage to the environment.

There are four lists as follows:

- a) **Non-Specific Source List or F List. 40 CFR 261.31.** This is a list of chemical wastes used by many different industries, i.e. no-specific industry source. All these wastes get a capital F plus a three digit number for its waste code.
- b) **Specific Source List or K List. 40 CFR 261.32.** This list is chemical wastes from specific manufacturing processes for a specific industry. All these wastes get a K plus three digits for the waste code.
- c) **Acutely Toxic List or P List. 40 CFR 261.33.** This is a list of acutely toxic chemicals, which means they are extremely dangerous or deadly in one or just a few exposures. There are also very

strict volume limits regarding storage of these types of wastes because they are so deadly. All these wastes get a P plus three digits for the waste code.

d) Toxic List or U List. 40 CFR 261.34. This is a list of toxic chemicals, which means they can cause cancer or severe irreversible illness or disease upon chronic (repeated) exposure. All these wastes get a capital U plus a three digit number for its waste code.

III. Step three: Determine if the waste is characteristically hazardous.

The chemical characteristics of concern are as follows:



a) Ignitable. 40 CFR 261.21. A liquid with a flash point less than 140°F or a material that is listed as a Class 5.1 Oxidizer by the US Dept. of Transportation. These wastes get a D001 code.

b) Corrosive. 40 CFR 261.22. An aqueous (waterborne) liquid that has a pH of less than or equal to 2 or greater than or equal to 12.5. Also, any material that can corrode steel at a certain rate or greater by a prescribed lab test. These wastes get a D002 code.



c) Reactive. 40 CFR 261.23. Any material that can explode or combust spontaneously (air reactive) or by reaction with water (water reactive), to an extent that it causes a severe hazard to human health or the environment, and/or creates a hazardous dust, mist, fume, or gas. These wastes get a D003 code.



d) Toxic. 40 CFR 261.24. Any material that contains greater than a certain amount of any of 40 hazardous compounds listed in this section when determined by the prescribed test called a Toxicity Characteristic Leachate Procedure (TCLP). This list contains 8 RCRA metals, 2 pesticides, 2 herbicides, and 28 volatile or semi-volatile compounds of concern. These wastes get a D004-D043 code depending on the parameter(s).

For characteristic waste only, a generator can use what's known as acceptable knowledge to limit the number of parameters you must sample, or eliminate the need for sampling altogether. However, if regulators are in doubt of the acceptable knowledge used for determination purposes, it is advisable to be able to back up that knowledge with sampling or other definitive information to prove the assertion valid. Usually, the first step would be to **consult the manufacturer** or the **Material Safety Data Sheet (MSDS)**. This will often reveal if the waste is RCRA regulated.

If your waste meets any one or more of the above criteria, it is a RCRA-regulated hazardous waste and must be managed on-site as such and be properly disposed by a qualified permitted facility.

If you have any questions regarding making a hazardous waste determination please call the New Mexico Environment Department's Hazardous Waste Bureau for further assistance and information. The contact telephone number is (505) 476-6000 or toll free at (866) 428-6535.