

# Is Your Waste Hazardous?

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## Is Your Waste Hazardous?

A four-step process to help you determine if your waste is hazardous waste

State and federal law requires businesses and institutions to determine if their waste is hazardous. This process can be a complex task. It is best to approach the issue by asking a series of questions in a step-by-step manner. Careful review of **ch. NR 661, Wis. Adm. Code**, and systematically answering the following questions will help you determine if the waste you generate is hazardous. **NOTE** A flow chart illustrates this process on the last page.

1. Is the material solid waste?
2. Is it excluded from the hazardous waste rules?
3. Is it a listed or characteristic hazardous waste?
4. Is it a mixture containing hazardous waste, or is it derived from hazardous waste?

To determine if your waste is hazardous, consult **ch. NR 661** for details. This publication is not intended as a substitute for state rules or statutes. Rather, it is a brief summary to assist you in the hazardous waste identification process.

**How do I access the Wisconsin Administrative Code?** View statutes and administrative rules online at the Revisor of Statutes Web site:  
<http://www.legis.state.wi.us/rsb/stats.html>  
Purchase copies from the Wisconsin Department of Administration, Document Sales and Distribution, P.O. Box 7840, Madison, WI 53707-7840, (608) 266-3358.

## Step 1

### Is it solid waste?

Your first step is to consult **s. NR 661.02** to determine if your waste meets the definition of solid waste. For any material to be hazardous waste, it must first be solid waste. In this case, the term “solid” can be misleading, as it does not refer to a physical state. Solid wastes can be solid, liquid or contained gas. Broadly defined, solid waste is any material you will no longer be using for its originally intended purpose, and will be discarded, or treated to reclaim its original properties, or processed to be used for an alternative purpose.

#### **Solid waste is**

- Any material that is disposed of, burned for energy recovery, or incinerated.
- Inherently waste-like material such as dioxin-containing wastes. These materials pose a significant threat to human health and the environment.
- Recycled material. Recycling includes: materials reused as ingredients in a process; reclaimed; or used in certain ways (placed into or on the land, burned for energy recovery, or accumulated speculatively).

#### **Solid waste is not**

- Solids or dissolved material in domestic sewage.
- Industrial wastewater discharges. These are point sources subject to discharge permits.

My waste is not solid waste. ⇒ Not regulated as hazardous waste.

My waste is solid waste. ⇒ Step 2

## ☑ Step 2

### Is it excluded from hazardous waste regulation?



Your next step is to determine if your waste is excluded from hazardous waste regulation. Not all solid wastes qualify as hazardous wastes. Consult **s. NR 661.04 – Exclusions** to determine if your waste is excluded from hazardous waste regulation.

#### Exclusion Categories

- Exclusions from the definition of solid waste
- Exclusions from the definition of hazardous waste
- Exclusions for waste generated in raw material, product storage or manufacturing units
- Exclusions for laboratory samples and waste treatability studies

**NOTE** Refer to **s. NR 661.06** for exclusions for recyclable materials.

My waste is excluded. ⇒ Not regulated as hazardous waste.

My waste is not excluded. ⇒ Step 3

## ☑ Step 3



### Is it a listed or characteristic hazardous waste?

Is it a listed hazardous waste?

Consult **ch. NR 661, Subchapter D – Lists of Hazardous Wastes** to determine if your waste is included on the F, K, P, or U list. **Chapter NR 661** lists certain wastes according to their four-character EPA hazardous waste number.

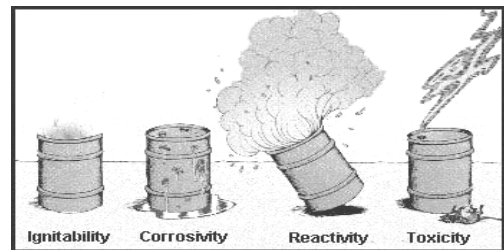
**F wastes** – **s. NR 661.31** lists hazardous wastes from *nonspecific sources* including certain spent solvents, many paint thinners, some brake and carburetor cleaners, vapor degreasing and dry cleaning solvents, electroplating wastes, manufacturing or process wastes.

**K wastes** – **s. NR 661.32** lists hazardous wastes from *specific sources* such as industrial processes like wood preserving; and manufacturing pesticides, organic chemicals and veterinary drugs.

**P wastes** – **s. NR 661.33(5)** lists acute hazardous wastes including unused chemicals such as certain cyanides, arsenic compounds and several pesticides. These wastes are extremely dangerous to human and environmental health in very small doses and with even short-term exposure.

**NOTE** A person generating (per month) or storing (at any time) more than 2.2 lbs. of acute hazardous waste is fully regulated as a large quantity generator.

**U wastes** – **s. NR 661.33(6)** lists toxic hazardous wastes, including unused chemicals, which pose health risks due to their persistence in the environment or their potential for migrating through the environment. These wastes are dangerous to human and environmental health in small doses, but are not as toxic as “P listed” wastes. An example of a “U listed” waste is discarded unused benzene, a chemical known to cause cancer.



Is it a characteristic hazardous waste?

Consult **ch. NR 661, Subchapter C – Characteristics of Hazardous Waste** to determine if your waste has any of the four hazardous waste characteristics. A waste displaying any of the following characteristics is hazardous: ignitability, corrosivity, reactivity or toxicity.

**Ignitability** is the waste's ability to burn or stimulate the burning of something else. Liquid wastes are ignitable (D001) if their flash point is below 140° F. Some non-liquids, flammable gases and oxidizers also have this characteristic.

**Corrosivity** is the waste's ability to destroy or deteriorate materials, chemically burn skin, enhance the movement of toxic chemicals in the environment, react dangerously with other wastes and harm fish and other aquatic life. Aqueous (water-containing) wastes are corrosive (D002) if their pH is less than or equal to 2 or greater than or equal to 12.5. Liquid wastes are corrosive if they corrode steel by more than one-quarter inch per year.

**Reactivity** is the waste's tendency to react violently or explode. Wastes are reactive (D003) if they are unstable either alone or in the presence of water. Reactive wastes can form explosive mixtures with water and produce dangerous quantities of toxic gases, vapors or fumes when mixed with water or when exposed to mild acids or bases. They can detonate, react or decompose explosively.

**Toxicity** is the ability of hazardous constituents to leach out of the waste. Wastes are toxic (D004-D043) if they release or leach any of thirty-nine specified heavy metals, pesticides and other organic chemicals above their regulatory level concentrations.

- My waste is a listed or characteristic hazardous waste. ⇒ Regulated as hazardous waste.
- My waste is not a listed or characteristic hazardous waste. ⇒ Step 4



**Testing** - Not sure if your waste has any hazardous waste characteristics? To analyze your waste,

contact a laboratory certified under **ch. NR 149**. Call DNR's Laboratory Certification or Registration Program at **(608) 267-7633** for a list of certified labs. Remember, the generator is responsible for determining if their waste is hazardous and although sampling and analysis are not as convenient as relying solely on generator knowledge, they provide advantages. Accurate waste determination is a critical factor for demonstrating compliance with hazardous waste rules.

## **Step 4**

**Is it a mixture containing hazardous waste or is it derived from hazardous waste?**

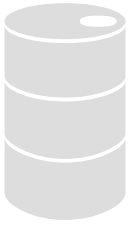
Is it a mixture containing hazardous waste? Consult **s. NR 661.03(1)(b)4.**, to determine if your waste is a mixture containing hazardous waste.

- Non-hazardous waste mixed with listed hazardous waste is hazardous.
- Non-hazardous waste mixed with characteristic hazardous waste is hazardous if it continues to exhibit a hazardous characteristic after mixing.
- Non-hazardous waste mixed with characteristic hazardous waste is not hazardous if the waste does not exhibit a hazardous characteristic after mixing.

**NOTE** Any waste mixing may be hazardous waste treatment and may be subject to hazardous waste treatment facility licensing requirements.

**Is it derived from hazardous waste?**

According to **s. NR 661.03(3)**, waste is considered hazardous if it is derived or generated from treatment, storage or disposal of a listed hazardous waste including sludge, spill residues, ash, emission control dust or leachate.



**Empty containers** that once stored hazardous waste are not hazardous waste. To be empty, a container generally must have been emptied using practices commonly employed to remove materials from that type of container. Also, it must have less than 1 inch of waste remaining or less than 3 percent, by weight, of the total container capacity remaining, if the container holds less than or equal to 119 gallons, or less than 0.3 percent if the container holds greater than 119 gallons.

- My waste contains a characteristic hazardous waste or is derived from one, but it no longer has any characteristics. ⇒ Except for land disposal restrictions, not regulated as hazardous waste.

**NOTE** This determination may not mean your waste can go into a dumpster or down a drain. Never put anything other than sanitary waste into a septic system unless you have a specific permit. Non-hazardous wastes are subject to solid waste rules, wastewater rules or both.

- Additional Steps for Non-hazardous Waste

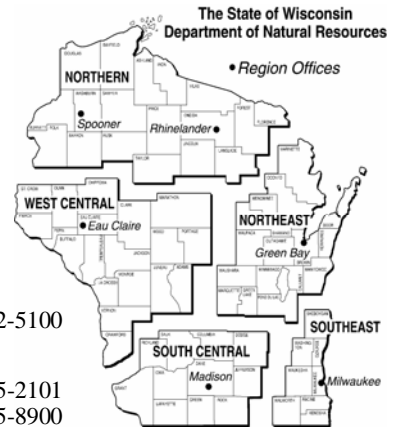
- Document hazardous waste exemptions and exclusions in your files. Keep records of lab analysis, other determination information and land disposal restriction notification.

**NOTE** Land disposal restrictions require hazardous waste to meet certain treatment standards before being disposed of in a landfill to lessen any threat to human health and the environment. For more information, consult <http://www.epa.gov/epaoswer/general/orientat/rom36.pdf>

- Contact the landfill, industrial burner or wastewater treatment plant before disposal.
- Re-evaluate your waste periodically to verify the composition has not changed.
- Keep current with hazardous waste rule updates that may affect the classification of your waste.

- My waste contains a listed hazardous waste or is derived from one. ⇒ Regulated as hazardous waste.

**Assistance Is Available** Call your regional Waste and Materials Management Program staff at <http://dnr.wi.gov/org/aw/wm/contacts/regions.htm>



Northeast Region	(920) 662-5100
Northern Region	
Spooner	(715) 635-2101
Rhinelander	(715) 365-8900
South Central Region	(608) 275-3266
Southeast Region	(414) 263-8500
West Central Region	(715) 839-3700

### For More Information

- Consult Waste and Materials Management Program publications at <http://dnr.wi.gov/org/aw/wm/publications/>
- Consult hazardous waste administrative rules and statutes at <http://dnr.wi.gov/org/aw/wm/hazard/>
- Consult solid waste administrative rules and statutes at <http://dnr.wi.gov/org/aw/wm/solid/>

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