Minnesota Pollution Control Agency

Basic Hazardous Waste Requirements for Businesses

Hazardous Waste #1.00, September 2003

This fact sheet summarizes the "10 Steps to Compliance." For detailed information, see Hazardous Waste fact sheets 1.01 - 1.10.

Inside

Environmental Concerns

Minnesota Hazardous Waste Rules (Chapter 7045) state that "anyone who produces or manages a waste must evaluate that waste." Evaluating a waste means determining whether or not the waste is hazardous. Hazardous waste requires special handling and disposal to ensure protection of human health and the environment.

Who is a "generator"?

A *generator* is "any person (or company), by site, whose act or process produces *hazardous* waste." Included in this definition are businesses who are serviced by companies which regularly provide clean solvent and pick up used solvent for recycling. Households producing normal household waste are not generators. Businesses operated out of a home may be generators. To determine whether or not you are a generator, evaluate each waste you produce ("generate") using Step 1 below.

STEP 1a: Evaluate Your Waste

In order to evaluate your waste, first identify all waste that your business discards, including sewered and recycled waste, off-specification or unusable products, and by-products. Assemble information about each waste.

Information can be found in the Material Safety Data Sheets (MSDSs) for raw materials which are used in on-site processes or from employees' knowledge about the process. If you have no information about a waste, it may be necessary to have the waste analyzed by a laboratory.

To determine whether or not your waste is hazardous, use the information you have assembled to answer the following four questions for each waste on your inventory:

1. **Is the waste exempt?** (See Table 1.)
2. **Is the waste *listed* as a hazardous waste?** (See Table 2).
3. **Is the waste hazardous because it exhibits a hazardous *characteristic*?** (See Table 3.)
4. **Does the waste contain polychlorinated biphenyls (PCBs) at a concentration of 50 parts per million or more?**

If your waste is **not** exempt, and if you answered *yes* to question 2, 3, or 4 for any waste produced by your business, then your company is a *hazardous waste generator.* You will need to complete steps 2 through 10.

If you have determined that you generate no hazardous waste, you may stop here. If you need more help, contact hazardous waste staff in your metropolitan county or in the MPCA office closest to your business.

What is a generator required to do?

Follow Steps 1b-10 to comply with Minnesota Hazardous Waste Rules.

Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194
(651) 296-6300. toll-free (800) 657-3864, TDD (651) 282-5332 or (800) 657-3864

Table 1: Examples of Exempt Wastes *(Minn. R. pt. 7045.0120)*

- normal household refuse;
- nonhousehold refuse (unusable paper, cardboard, untreated wood, and plastic);
- samples sent to a testing laboratory;
- recycled scrap metal;
- demolition debris;
- hazardous waste generated in storage tanks, transport vehicles or pipelines until it leaves these units;
- waste discharged to surface waters under a National Pollution Discharge Elimination System (NPDES) permit;
- most air emissions permitted by the MPCA;
- mining overburden and certain wastes from processing ores;
- fly ash and related waste from burning of fossil fuels;
- waste from emergency spill cleanups approved by the MPCA commissioner; and
- certain wastes containing chromium III.

Table 2: Common Listed Wastes *(Minn. R. pt. 7045.0135)*

- Hazardous wastes from non-specific sources such as:

  F001: spent halogenated solvents used in degreasing, such as trichloroethylene, methylene chloride, 1,1,1-trichloroethane and carbon tetrachloride;

  F002: spent halogenated solvents such as those above but *not* used as degreasers, other examples are chlorobenzene, 1,1,2-trichloro- and 1,2,2-trifluoroethane;

  F003: spent nonhalogenated, ignitable-only solvents such as xylene, acetone, methanol and methyl isobutyl ketone;

  F004 spent nonhalogenated solvents such as cresols, cresylic acid and nitrobenzene;

  F005: spent nonhalogenated solvents such as toluene, methyl ethyl ketone, carbon disulfide and benzene;

  Spent solvent mixtures/blends containing 10% *before use* of F001, F002, F004, and/or F005, and;

  Various spent baths and solutions, distillation bottoms, waste-waters and filters (see F006-F039).

- Hazardous waste from specific sources such as preserving wood; formulating inks, pigments, chemicals, and pharmaceuticals, petroleum refining and metal smelting (see K-list).
- Discarded commercial chemical products, off-specification products, containers and/or spill residues (see P- and U-lists).

Table 3: Characteristic Wastes

(Minn. R. pt. 7045.0131

- **Ignitable waste - D001**:
  a liquid waste having a flash point less than 140° Fahrenheit; or, a non-liquid waste which is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture, or spontaneous chemical changes and when ignited, burns so vigorously and persistently that it creates a hazard; or, an ignitable compressed gas.
- **Oxidizing waste - D001:**
  wastes which add oxygen to a fire. Oxidizing substances often have *per* as the beginning of the name, *oxide* as the ending of the name, or *ate* in its chemical name.
- **Corrosive waste - D002:**
  water-based waste having a pH of 2.0 or less (strong acids) or 12.5 or more (strong bases); also, any material able to corrode 1/4 inch of steel per year.
- **Reactive waste - D003**:
  unstable or explosive wastes; wastes which react violently in the presence of water; and, sulfide or cyanide-bearing wastes which, when exposed to pH conditions between 2.0 and 12.5, give off toxic vapors.
- **Lethal waste - MN01:**
  wastes which have been found through testing to cause death when ingested, inhaled or absorbed.
- **Toxicity characteristic waste - D004-D043:** waste which, under acidic conditions, releases toxic metals, pesticides or volatile organic chemicals above certain limits. This classification includes these metals:
  - arsenic
  - barium
  - cadmium
  - chromium
  - lead
  - mercury
  - selenium
  - silver

STEP 1b: Determine Your Generator Size

Refer to Table 4 to help you determine your generator size. Do not count exempt (see Table 1), nonhazardous or used oil waste when determining size.

Table 4: Hazardous Waste Generator Size

If you generate:	Then your size is:
Less than 100 pound (10 gallons per year) *See hazardous waste fact sheet #1.50 for requirements.*	Minimal Quantity Generator (MQG)
220* pounds of less per month hazardous waste (about ½ drum liquid or less)	Very Small Quantity Generator (VSQG)
More than 220 pounds, but less than 2200 pounds per month hazardous waste (about ½ to 4 drums liquid)	Small Quantity Generator (SQG)
2200 pounds or more per month hazardous waste (about 4 drums liquid or more)	Large Quantity Generator (LQG)

**220 pounds is equal to 100 kilograms and is about 22 gallons.*

STEP 2: Obtain a Waste Identification (Waste I.D.) Number

Complete an Notification of Regulated Waste Activity Form to obtain a Waste I.D. number free of charge. Forms are available from the MPCA Web site (http://www.pca.state.mn.us/publications/w-hw7-09.pdf) or your metropolitan county hazardous waste office. This is a one-time notification unless any of the information provided on the form changes. If any of the information changes, renotify by using the same form and checking the *subsequent notification* box. **Waste I.D. numbers are specific to the location, so if you move to a new location you must get a new number**.

STEP 3: Annually Apply for a License; Pay a Fee

Just about all Minnesota businesses that generate a hazardous waste need a Hazardous Waste Generator License. Businesses located in Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, or Washington counties should contact their county hazardous waste staff for the appropriate forms. If you receive a license from one of these counties, you do **not** also need one from the MPCA.

In Greater Minnesota, businesses generating ten gallons of waste per year or less do not need a license. Businesses that apply for a Waste I.D. number will be sent a license application packet after they receive their number. Licenses are issued in June of each year.

All hazardous waste generators will be charged a license fee that varies with the amount of hazardous waste generated and how it is managed.

STEP 4: Place Waste in a Marked, Leakproof Container

When placing waste in a container, mark the container with:

- the words *"Hazardous Waste;"*
- a clear description of the waste; and
- the *accumulation start date* (the date waste is first placed in the container).

Prior to shipping the waste, follow additional Minnesota Department of Transportation (MnDOT) labeling requirements. Your transporter should be familiar and able to help you with these requirements.

STEP 5: Store Waste Correctly and Only Up to Limits

Indoor storage of hazardous waste is regulated by fire codes and building codes. In addition:

- keep containers closed;
- provide enough aisle space for easy access and visibility;
- protect waste from inadvertent damage;
- store containers in an area without floor drains; and
- restrict access to those persons responsible for the waste.

When **storing outdoors** you must also:

- store liquid waste on a curbed and impermeable surface; and
- protect waste from the elements – rain,snow, sunlight, etc.

See Table 5, page 4 for accumulation and storage limits.

STEP 6: Transport and Dispose of Waste Correctly

A generator is forever responsible for his or her hazardous waste. To help ensure the waste is transported and disposed of properly, and to reduce generator liability, choose a transporter who fulfills the following requirements:

- has a Waste I.D. number;
- is currently registered as a hazardous waste

transporter by the Minn. Department of Transportation.

- has fulfilled specific training requirements;
- maintains adequate liability insurance;
- carries credentials in the vehicle; and
- transports the waste to a permitted facility.

Generators should contact the facility after shipment to ensure the waste was received and properly treated and/or disposed of.

Table 5: Accumulation and Storage Limits

If your size is:	Accumulation limits are:	Storage time limits – ship waste within:
VSQG	2200 lbs (1000 kg)	180 days* of the date 1000 kg has been accumulated (write on the container the date it became full)
SQG	6600 lbs (3000 kg)	180* days of the date waste was first put into the container – *accumulation start date*
LQG	No limit	90 days of the accumulation start date unless a storage facility permit is obtained

**270 days if the facility is located more than 200 miles from the generation site.*

STEP 7: Manifest Shipments of Hazardous Waste

A manifest is a multi-copy shipping paper which must accompany off-site shipments of hazardous waste. Transporters often provide them. Manifests and instructions are also available from Minnesota's Bookstore, 117 University Avenue, St. Paul, MN or call (651) 297-3000 or toll-free (800) 657-3757.

STEP 8: Plan for Emergencies

Maintain appropriate emergency response and spill equipment in an accessible area. If you are a small or large quantity generator:

- notify local authorities of the kinds and amounts of hazardous waste stored at your site;
- designate an emergency coordinator;
- post emergency information by the telephone; and
- provide and document adequate training for personnel handling hazardous waste.

Large quantity generators need a complete contingency plan.

STEP 9: Train Personnel

Hazardous waste training is not the same as employee right-to-know training. Hazardous waste training requirements depend upon generator size. VSQGs have no training requirements; however, MPCA staff strongly recommends that personnel handling hazardous waste become knowledgeable about the hazards associated with the waste and with appropriate safety procedures.

Step 10: Keep Records

Maintain these records *for a minimum of three years:*

- manifests;
- manifest exception reports;
- license applications and renewals;
- analytical and other reports;
- training documents (SQGs and LQGs);
- inspection logs; and
- Land Disposal Restriction (LDR) forms. (These forms are not required for VSQGs.)

In addition, MPCA staff strongly recommends keeping pertinent MSDSs, correspondence and all required documents for the life of the business.

For More Information

Your metropolitan countyand the MPCA have staff available to answer questions. For more information, contact your metropolitan county hazardous waste office or the MPCA office closest to your county.

Metro County Hazardous Waste Offices

Anoka County	(612) 422-7093
Carver County	(952) 361-1800
Dakota County	(952) 891-7020
Hennepin County	(612) 348-8100
Ramsey County	(651) 773-4466
Scott County	(952) 496-8177
Washington County	(651) 430-6655

Minnesota Pollution Control Agency

Toll free	(800) 657-3864
Brainerd	(218) 828-2492
Detroit Lakes	(218) 847-1519
Duluth	(218) 723-4660
Marshall	(507) 537-7146
Rochester	(507) 285-7343
St. Paul	(651) 297-2274
Willmar	(320) 214-3786
Web Site	*http://www.pca.state.mn.us*