INTRODUCTION

Many businesses, both large and small use hazardous materials in their processes. Many of these processes produce wastes. A portion of these wastes may be hazardous. The method a business manager employs to manage hazardous waste will have a direct influence on business profits and future liabilities for the property, the business, and its owners.

The purpose of this paper is to provide basic information to industry and public agencies that may be generators of small quantities of hazardous waste and to inform them of their responsibilities for proper hazardous waste management.

HOW CAN I DETERMINE IF I HAVE HAZARDOUS WASTE?

All generators of waste materials are required by law to identify and evaluate their waste. Evaluating waste streams means determining whether or not the waste is hazardous. Evaluate each waste you produce using Step 1 below to determine whether you are a generator.

Step 1: Evaluate Your Waste

First, inventory and assemble information about your waste. An inventory consists of identifying all wastes that your business discards including sewered and recycled waste, unusable products, and by-products.

Material Safety Data Sheets (MSDSs) for your raw materials can be used to help identify your waste. Your Trade Association may be a good source of information. They can provide assistance for evaluating your wastes as well as assistance in handling, packaging and labeling your waste. If you have no information about your waste, it may be necessary to have the waste analyzed by a laboratory.

To determine whether your waste is hazardous, answer the following questions for each waste on your inventory.

1. Is the waste exempt from regulation? (i.e., recycled used oil, lead acid batteries that are reclaimed, domestic sewage, permitted industrial discharges, see Table 1)
2. Is the waste listed as a hazardous waste? (i.e., spent halogenated and certain non-halogenated solvents, see Table 2)
3. Is the waste hazardous because it exhibits a hazardous characteristic? (ignitable, corrosive, reactive, toxic, see Table 3)

Call DEP for a list of EPA Hazardous Waste codes for waste streams commonly generated.

If your waste is not exempt and you answered yes to questions 2 or 3 for any waste produced then your business is a generator of hazardous waste.
Step 2: Determine Generator Size

The amount of all hazardous waste generated or accumulated at your business will determine which category you fit in (see Table 4). Each category has its own requirements for waste management. If you generate less than 100 kg (220 lbs.) in any one month of hazardous waste and no more than 1 kg (2.2 lbs.) of acutely hazardous waste in any one month, you are a conditionally exempt small quantity generator (CESQG) and the RCRA hazardous waste regulations require you to:

1. Determine whether the wastes you generate are regulated as hazardous waste under RCRA law (see Steps 1 & 2).
2. Keep the amount of hazardous waste you generate in any one month less than 220 pounds or under 2.2 pounds for an acute hazardous waste (i.e., arsenic and cyanide compounds) in one month.
3. Keep the amount of hazardous waste you have accumulated on your site less than 2,200 pounds.
4. Dispose of your waste only at a site that is approved by the Florida Department of Environmental Protection (DEP).1

Step 3: Record Keeping

A conditionally exempt small quantity generator that chooses to send its hazardous waste to an off-site treatment, storage or disposal facility shall document delivery of its hazardous waste through written receipts and other records, which are retained for at least three years. The written receipts and other records shall include:

1. Name and address of the generator and the treatment, storage or disposal facility,
2. Type hazardous waste delivered,
3. Amount of hazardous waste delivered, and the
4. Date of shipment.

For additional information on the Small Quantity Generator requirements call or write for:

FLORIDA’S HANDBOOK FOR SMALL QUANTITY GENERATORS OF HAZARDOUS WASTE

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Florida Department of Environmental Protection
Hazardous Waste Regulation Section, MS4560
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Phone: (850) 245-8707
www.dep.state.fl.us

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1 Solid Waste facilities cannot accept these wastes pursuant to 62-701.300 F.A.C. Many counties have hazardous waste collection centers that will accept hazardous waste from conditionally exempt small quantity generators for a reduced fee during scheduled collections. Contact your county solid waste agency or DEP at (850) 245-8707 for more information.
EPA Hazardous Waste Tables

TABLE 1: EXEMPT WASTE
- Domestic sewage;
- Irrigation waters or industrial discharges permitted under the Federal Water Pollution Control Act;
- Certain nuclear material as defined by the Atomic Energy Act;
- Household wastes, including hazardous waste;
- Certain mining wastes;
- Agricultural wastes, excluding some pesticides;
- Used oil filters that have been properly drained and recycled;
- Recycled used oil and lead acid batteries that are reclaimed;
- Universal Wastes (hazardous waste batteries, pesticides and mercury thermostats) managed under 40 CFR, Part 273;
- Mercury containing lamps and devices destined for recycling (Chapter 62-737, F.A.C.)

TABLE 2: LISTED WASTE EXAMPLES
Hazardous wastes from non-specific sources:
- **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 1,1,2-trichloro-1,2,2-trifluoroethane and chlorobenzene;
- **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,
  - distillation bottoms from recovering solvents;
- Hazardous waste from specific sources such as certain plating bath solutions; wastewater treatment sludge; and,
  - wastes from the heat treatment of metals (see K-list);
- Discarded commercial chemical products, off-specification products, containers and/or spill residues (see P- and U-lists).

TABLE 3: CHARACTERISTIC WASTES
- **Ignitability-D001**: a liquid waste having an alcohol content greater than or equal to 24% or has a flash point of less than 140°F. Examples are solvents and paint thinners;
- **Oxidizer-D001**: wastes that 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. Examples are ammonium nitrate, perchlorates, and peroxides;
- **Corrosivity-D002**: a liquid waste material having a pH of less than 2.0 or greater than 12.5. Examples are acids and caustics;
- **Reactivity-D003**: waste materials that react to water, shock, heat, and pressure, and undergo a rapid or violent chemical reaction. Some examples are explosives and cyanides wastes;
- **Toxicity-D004-D043**: waste which release toxic metals, pesticides or volatile organic chemicals above certain limits under acidic conditions. Includes 8 heavy metals and 32 organic chemicals including 10 pesticides. Wastes in this category need only contain small amounts of mercury, arsenic, lead, or one of the other heavy metals, or organics such as benzene, trichloroethylene, perchloroethylene, methyl ethyl ketone, or one of the ten pesticides.
### TABLE 4: GENERATOR SIZE

1. **CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR**
   - less than 100 kilograms\(^2\) in any one month (about ½ a 55-gallon drum\(^3\)) of hazardous waste, or
   - you generate less than 1 kilogram of an acute hazardous waste (see P-list\(^4\)), and
   - you never accumulate more than 1,000 kilograms (2,200 lb.) of hazardous waste at any time.

2. **SMALL QUANTITY GENERATOR**
   - more than 100 kilograms but less than 1,000 kilograms in any one month (about ½ to 5 - 55 gallon drums) of hazardous waste.
   - ship stored waste within 180 days after the waste was first put into the container, and
   - you never accumulate more than 6,000 kg (13,200 lb.).

3. **LARGE QUANTITY GENERATOR**
   - more than 1,000 kilograms in any one month (about 5 - 55 gallon drums) of hazardous waste, or
   - you generate 1 kilogram or more of an acute hazardous waste in any one month, and
   - ship stored waste within 90 days after the waste was first put into the container unless storage facility permit is obtained.

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\(^2\) 1 kilogram = 2.2 pounds  
\(^3\) These volumes are based on the weight of water (8 lb. /gallon) and are only provided for the purpose of estimating generator status. Heavier wastes like metal sludges (20 lb. /gallon) and chlorinated solvents such as perchloroethene, freon and trichloroethylene (12-13.5 lb. /gallon) will need to be evaluated based on their actual weight per gallon.  
\(^4\) Contact the DEP for hazardous waste lists.