

HOW SHOULD I MANAGE HAZARDOUS WASTES?

www.dep.state.fl.us/waste/categories/hazardous

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.

Step 2: Determine Generator Size

The amount of all hazardous waste generated or accumulated at your business will determine which category you fit in. Each category has its own requirements for waste management.

If you generate less than 100 kg (220 lbs.) per month of hazardous waste and no more than 1kg (2.2 lbs.) of acutely hazardous waste in a calendar month, you are a conditionally exempt small quantity generator (CESQG). Refer to the CESQG Requirements section for more information.

If you generate between 100 kg and 1,000 kg (220-2,200 lbs.) per month of hazardous waste and no more than 1kg (2.2 lbs.) of acutely hazardous waste in a calendar month, you are a regulated small quantity generator (SQG). Refer to the SQG Requirements section for more information.

If you generate more than 1,000 kg (2,200 lbs.) per month of hazardous waste or more than 1kg (2.2 lbs.) of acutely hazardous waste in a calendar month, you are a large quantity generator (LQG). For assistance contact DEP headquarters at 850-245-8707.

CESQG REQUIREMENTS

1. Perform a hazardous waste determination on all your waste generated.
2. Do not generate more than allowed per calendar month.
3. Do not accumulate more than 1,000 kg on your site.
4. Dispose of your waste only at a site that is approved by the Florida Department of Environmental Protection (DEP).¹
5. Keep waste disposal/management records at your facility for at least three years. Receipts must include name and address of the generator and the treatment, storage or disposal facility; type hazardous waste delivered; amount of hazardous waste delivered; and the date of shipment

SQG REQUIREMENTS

1. Perform a hazardous waste determination on all your waste generated.
2. Do not generate more than allowed per calendar month.
3. Obtain an EPA Identification number. Application forms can be obtained from DEP Tallahassee office or from any of the DEP district offices or on the DEP Web. The EPA/DEP I.D. number is site specific, so if you move to a new location you must get a new EPA/DEP I.D. number.
4. Place waste in a compatible container in good condition and not leaking. Label each container with the words "Hazardous Waste".

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.

Include generator's name and address; federal waste code numbers; and date the waste was first put into the container (accumulation start date).

5. Store Waste Properly. Waste must be stored in compatible containers. Accumulate up to the limits.
 - ü Keep containers closed.
 - ü Do not mix wastes.
 - ü Provide adequate aisle space for easy access and visibility.
 - ü Containers must be inspected at least weekly to check for leaks and signs of corrosion.
 - ü Do not accumulate waste more than 180 days from the accumulation start date.
6. Transport and Dispose of Waste Properly
Choose a licensed transporter that has met the following requirements:
 - ü Obtained an EPA/DEP I.D. number;
 - ü Use manifests;
 - ü Ability to clean up hazardous waste discharges during transportation-related incidents;
 - ü Documentation of financial liability.A list of commercial hazardous waste transporters can be found on the DEP Web Page under Database Reports.
7. Manifests and Transport of Hazardous Waste. The Uniform Hazardous Waste Manifest is a multi-copy shipping document that must accompany hazardous waste shipments. The State of Florida requires the use of this manifest when disposing of hazardous waste.
8. Emergency Procedures Plan
 - ü Designate an emergency coordinator;
 - ü Post emergency information by the phone; and,
 - ü Provide and document adequate training for personnel handling hazardous waste.
9. Preparedness and Prevention Plan.
 - ü Maintain a safe work place;
 - ü Accessible telephones;
 - ü Maintain fire extinguishers and spill control equipment;
 - ü Maintain aisle space in work area;
 - ü Notify police, fire department, and state emergency response teams of the types of wastes handled at your facility.
10. Keep records for a minimum of three years:
 - ü Manifests;
 - ü Land Disposal Restriction (LDR) Forms;
 - ü Manifest exception reports;
 - ü Analytical and other reports;
 - ü Training documents;
 - ü Inspection logs; and,
 - ü Correspondence.

Example Wastes

- Antifreeze
- Batteries
- Corrosive Waste
- Ignitable Waste
- Inks
- Lamps (fluorescent – HID) and Mercury Devices (thermostats, Manometers, switches/relays)
- Metals such as Arsenic, Cadmium, Lead, Mercury, Silver
- Paints
- Photographic Wastewater
- Reactive Waste
- Solvents
- Toxic Waste
- Used Oil (and Used Oil Filters)

HAZARDOUS WASTE MANAGEMENT OPTIONS

Hazardous waste management and off-site disposal can be challenging and expensive for small businesses. But not all hazardous waste must be shipped off site for treatment or disposal. There are a number of allowable ways that small businesses can minimize their hazardous waste on site. They are:

- Domestic Sewage Exclusion;
- Elementary Neutralization;
- Recycling;
- Treatment in Accumulation Containers; and
- Burning in Small Boilers and Industrial Furnaces

If after reviewing the information contained in this section, it looks like any of the five waste minimization methods could be effective at your facility, you should conduct further research at both the Federal and state level to confirm their allowance and understand the specific operational requirements. Information on whom to call and where to get further information is provided at the end of this section. Small businesses should remember that the waste minimization methods described in this section should only be conducted as part of a comprehensive hazardous waste management program that addresses all regulatory requirements.

Regulatory Allowances for On-Site Waste Minimization

Generators should first try to reduce or eliminate waste generation through source reduction. Source reduction is synonymous with pollution prevention (P2) and includes any activity that reduces or eliminates the generation of hazardous waste at the source. When source reduction is not feasible then, when possible, waste should be recycled or treated to reduce the volume and toxicity of the waste. From a practical perspective, there are substantial incentives for source reduction and waste minimization; for example avoiding the high costs of disposing of hazardous waste and limiting liability concerns.

Small businesses should look for source reduction opportunities (e.g., through careful chemical purchasing and inventory control, substitution of hazardous chemicals with less hazardous replacements, etc.). In addition, generators can sometimes treat their hazardous waste to reduce the volume or toxicity of the waste. Typically, small businesses do not have permits for treatment, storage or disposal of hazardous wastes since the RCRA permitting process is very burdensome and costly. However, RCRA does contain provisions for treating and disposing of hazardous waste on-site without a permit.

On-Site Disposal: As for disposal, there is an allowance that provides for certain wastes to be disposed of down the drain, even if they may be hazardous. Wastes that are mixed with domestic sewage and discharged to a publicly owned treatment works (POTW) are not regulated under RCRA (see 40 CFR 261.4(a)(1)). **Florida Law adopts 40 CFR 261 by reference (see FAC 62-730.030).** This exclusion is commonly called the “domestic sewage exclusion” (DSE). Essentially, a small business tied to a POTW may discharge waste down the drain as long as it is in compliance with all applicable wastewater standards. Applicable wastewater standards typically include national pretreatment standards (40 CFR 403.5), state limits and discharge limits imposed by the POTW. In some cases, wastes that meet the RCRA definition of hazardous may be acceptable for sewer disposal. Check with your local sewer authority for restrictions or prohibitions. Be aware that hazardous waste stored prior to discharge is regulated and dilution of waste in order to meet discharge limits is prohibited. The DSE is limited in its applicability. There are no other means of on-site disposal of hazardous waste available to hazardous waste generators. **Do not discharge this waste to a septic system.**

On-Site Treatment: There are several regulatory exclusions that allow generators to treat hazardous waste without a permit. Some of these treatment exclusions may be useful in furthering waste reduction efforts. Treating hazardous waste on-site in ways other than provided for in the regulatory exclusions subjects generators to extremely high fines (e.g., up to \$50,000 per day) and possible criminal penalties (i.e., jail time). **Before treating hazardous waste on site, generators must be absolutely sure that the treatment they are considering is allowed without a RCRA permit.** In addition, generators must ensure that they have proper procedures, equipment and skilled employees to conduct treatment safely and effectively on-site.

EPA’s exclusions that allow generators to treat hazardous waste on-site without a permit are described below.

Elementary Neutralization	Florida Law adopts 40 CFR 270.1 by reference (see FAC 62-730.220). Elementary neutralization units (as defined in 40 CFR 260.10) may be used to neutralize D002 (corrosive) wastes without any worry of RCRA permitting requirements. Two important points to remember are (1) elementary neutralization only refers to pH adjustment, and (2) neutralized waste should only be discharged down the drain if it meets all applicable Elementary Neutralization discharge standards. Check with your local sewer authority for restrictions or prohibitions. Do not discharge this waste to a septic system.
Recycling	Florida Law adopts 40 CFR 270.1(c) by reference (see FAC 62-730.220). EPA allows generators to recycle hazardous wastes without a permit. In its regulations, EPA states that a material is “recycled” if it is used, reused or reclaimed (40 CFR 261.1). A material is “used or reused” if it is either (1) employed as an ingredient to make a product, or (2) employed in a particular function as an effective substitute for a commercial product. A material is “reclaimed” if it is processed to recover a useful product or if it is regenerated. Although EPA considers recycling a form of treatment, it does not require recyclers to obtain a treatment permit. In 40 CFR 261.6 (1), EPA states that “the recycling process is exempt from regulation.” Generators may be able to take advantage of this exemption by distilling solvents, reclaiming precious metals (e.g., silver) from solutions, or precipitating metal salts.
Treatment in Accumulation Containers	Follow EPA interpretation. Generators may treat hazardous wastes in accumulation containers without obtaining a treatment permit provided the containers are managed in compliance with EPA’s container management standards in 40 CFR Part 265, Subpart I. Examples of treatment in accumulation containers include precipitating heavy metals from solutions, and oxidation/reduction reactions. Remember, treatment residues may still require management as a hazardous waste and, residues destined for land disposal are subject to land disposal restriction (LDR) treatment standards (40 CFR 268).
Small Boilers and Industrial Furnaces	Florida Law adopts 40 CFR 266 by reference (see FAC 62-730.181). The “small-quantity on-site burner exemption” (40 CFR 266.108), which is part of the Boiler and Industrial Furnace (BIF) regulations, allows hazardous waste generators (small or large quantity) to burn small quantities of hazardous waste in an on-site boiler without a permit. The quantity of waste that can be burned onsite is determined by the “terrain-adjusted stack height” as described in the regulation and the boiler’s total fuel requirement. Some additional restrictions apply to the properties of waste that can be burned (i.e., Btu value) and small businesses taking advantage of this allowance are subject to simple notification and recordkeeping requirements. Before burning hazardous waste on site, consult not only with the state regulators: both the hazardous waste agency and the air pollution control agency.

Source: The information in this section was adapted from “Little Known But Allowable Ways to Deal with Hazardous Waste”, EPA 233 -B-00-002, May 2000

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