



A Business' Basic Guide for Hazardous Waste Management

Delaware Department of Natural Resources and Environmental Control,
Solid & Hazardous Waste Management Section

Environmental Concerns

Businesses generate waste every day. Once generated, a business must determine whether the waste is a hazardous waste. A business must handle and dispose of its hazardous waste in a manner that ensures the protection of human health and the environment. Achieving regulatory compliance with Delaware's *Regulations Governing Hazardous Waste (DRGHW)* will minimize human health and environmental hazards associated with improper hazardous waste management.

Who is a hazardous waste generator?

A **generator** is defined in DRGHW as "any person [company], by site, whose act or process produces hazardous waste identified or listed in Part 261." Household generated hazardous wastes are exempt from regulation. However, once combined with business-generated hazardous waste, all of the waste becomes subject to regulation.

How do I know if my waste is hazardous waste?

A business must first identify all waste streams generated by the site. This includes waste sent to a wastewater treatment plant, recycled materials, off-specification products/raw materials, unusable and/or expired products/raw materials, and all byproducts. The next step is to gather information about the waste to determine all possible hazards associated with that particular waste stream. Information can be found using Safety Data Sheets, company and/or employee knowledge, and analytical laboratory data.

The following questions can assist you in determining whether your waste is a hazardous waste.

- 1. Is the waste excluded or exempt from being a hazardous waste?*** Commonly excluded and/or exempted wastes include normal household refuse, samples sent to a testing laboratory, recycled scrap metal, demolition debris, wastewater discharged under a National Pollution Discharge Elimination System (NPDES) permit, and secondary materials reclaimed AND returned to the original process(es) in which they were generated.
- 2. Is the waste a listed hazardous waste?*** Commonly listed hazardous wastes include spent halogenated

solvents, distillation bottoms from hazardous chemicals, acute hazardous wastes, discarded commercial chemical products, and off-specification batches of chemical products.

- 3. Does the waste exhibit a hazardous characteristic?*** **Ignitable** wastes have a flash point below 140°F or is an ignitable compressed gas. **Corrosive** wastes are liquids with a pH ≤ 2 or ≥ 12.5 . **Reactive** wastes chemically react with substances, such as water, producing toxic fumes and/or are capable of detonation. Characteristic **toxic** wastes will release toxic metals (e.g., arsenic, cadmium, lead, mercury), pesticides, or volatile organic compounds (e.g., trichloroethylene {TCE}) under acidic conditions.

If your waste is **not** excluded or exempt, and you answered *yes* to question 2 and/or 3 for any waste produced by your business, your company is a **hazardous waste generator***. This factsheet will address the basic requirements for each generator category with regard to the management of hazardous waste.

If you determined that your waste is not considered a hazardous waste, it is still a solid waste and must be properly managed. If you need more help with your hazardous waste determinations, contact the Solid and Hazardous Waste Management Section (SHWMS) at 302-739-9403.

***NOTE:** Full details for exclusions, exemptions, characteristic toxic wastes, and listed wastes can be found in the following sections of DRGHW, Part 261.

Exclusions/Exemptions	§ 261.4
Characteristic Waste (D-listed)	§ 261.24
Non-specific Source Wastes (F-listed)	§ 261.31
Specific Source Wastes (K-listed)	§ 261.32
Acutely Toxic Wastes (P-listed)	§ 261.33(e)
Toxic Wastes (U-listed)	§ 261.33(f)

Determining Your Generator Category

Generator category is based on the amount of hazardous waste generated per calendar month. You will be either a conditionally exempt small quantity generator (CESQG), a small quantity generator (SQG), or a large

quantity generator (LQG) of hazardous waste. Do not include the amount of excluded and/or exempt waste, non-hazardous waste, used oil, or universal waste when determining your generator category.

See **Table 1** to help you determine your generator category based on the Monthly Generation Rate column.

Obtaining an EPA Identification (EPA ID) Number
LQGs and SQGs must complete a RCRA Subtitle C Site Identification (Notification) Form (EPA Form 8700-12) to obtain an EPA ID number free of charge. CESQGs are encouraged to obtain an EPA ID, though it is not required. You need only obtain an EPA ID once for each location. If the information changes, due to the business changing names or a change in ownership, resubmit the notification form with the updated information and check the subsequent notification box. Remember, EPA ID numbers are specific to a location. If you move, submit a subsequent notification indicating you are no longer generating hazardous waste at your previous location **AND** submit a notification form to obtain an EPA ID number for the new location. Forms are available on EPA’s website (<http://www.epa.gov/osw/inforesources/data/form8700/8700-12.pdf>).

CESQGs must mark containers of hazardous waste with the words “Hazardous Waste” or with the word “Waste” followed by a description to identify the contents of the container (e.g., Waste Acetone, Waste Solvent).

SQGs and LQGs must mark containers of hazardous waste with the words “Hazardous Waste” and the accumulation start date. The accumulation start date is the date waste is first placed into the container or the date the container is moved from a Satellite Accumulation Area to the 180/90-day Accumulation Area.

180/90-Day Hazardous Waste Accumulation Areas
SQGs and LQGs must inspect and document inspections for all Accumulation Areas weekly to look for leaking containers, signs of deteriorated containers, and signs of deterioration in the secondary containment system. There must be enough aisle space to allow easy access and visibility to all containers of hazardous waste accumulated in these areas.

Secondary containment systems can be an enclosed building **OR** it can be an impervious area with adequate curbing to collect spills. Secondary containment systems must be able to hold 10% of the total volume of all containers or the volume of the largest container,

whichever is greater. The system must be free of cracks or gaps and sufficiently impervious so as to contain leaks and spills until the collected hazardous waste is detected and immediately removed.

A “No Smoking” sign must be posted in the Accumulation Area if there is any ignitable or reactive waste present. Remember that ignitable waste must not be accumulated near sources of ignition. LQGs cannot accumulate ignitable or reactive wastes within 50 feet (15 meters) of the site’s property line.

Additionally, depending on your site’s process, your site might not generate enough waste to be a SQG or LQG, but rather the site is a CESQG. Just like

SQGs and LQGs, a CESQG must not open, handle, and/or store containers of hazardous waste in a manner that can cause any container to leak.

Hazardous Waste Accumulation Limits
See **Table 1** for the maximum accumulation quantities and accumulation time limits.

Table 1: Generator Category and Accumulation Limits			
Size:	Monthly Generation Rate:	Maximum Accumulation:	Accumulation Time Limits:
CESQG	≤ 220 lbs (100 kg)	2,200 lbs (1,000 kg)	No limit
	≤ 2.2 lbs (1 kg) acute hazardous waste	2.2 lbs (1 kg) acute hazardous waste	
SQG	220 lbs – 2,200 lbs (100 kg - 1,000 kg)	13,200 lbs (6,000 kg)	Ship waste off-site within 180 ^o days of the date waste was first put into the container
LQG	≥ 2,200 lbs (1,000 kg)	No limit	Ship waste off-site within 90 [†] days of the date waste was first put into the container
	≥ 2.2 lbs (1 kg) acute hazardous waste		

^o 270 days if the disposal facility is located more than 200 miles from the generation site.
[†] A LQG may exceed the 90-day accumulation time limit **ONLY** with prior approval from the SHWMS.

Hazardous Waste Container Requirements
All containers of hazardous waste must remain closed unless adding or removing waste from the container. All containers of hazardous waste must be in good condition (e.g., not cracked or leaking) and compatible with the waste contained within. Incompatible wastes must not be mixed together within the same container nor should containers of incompatible wastes be accumulated together without physical separation.

Hazardous Waste Satellite Accumulation Area

A Satellite Accumulation Area is one having ≤ 55 gallons of hazardous waste or ≤ 1 quart of acute hazardous waste that is located at or near the point of generation and under the control of the operator. The point of generation is the place in the process where hazardous waste is first generated. When more than the aforementioned volumes of hazardous waste are accumulated in a Satellite Accumulation Area, the excess must immediately be dated and moved to an Accumulation Area.

Containers of hazardous waste in Satellite Accumulation Areas must be marked with the words "Hazardous Waste" or with the word "Waste" followed by a description to identify the contents of the container (e.g., Waste Acetone, Waste Solvent). The containers must be kept closed unless adding or removing waste, in good condition, and compatible with the hazardous waste within.

Depending on your site's process, it may or may not have a Satellite Accumulation Area. CESQGs do not have Satellite Accumulation Areas.

Hazardous Waste Shipments

CESQGs must maintain, for a period of three (3) years, all tolling agreements, letters of acceptance, or manifests demonstrating delivery of its hazardous waste to an off-site destination facility. A CESQG may **NOT** take its waste to a Delaware Solid Waste Authority Household Hazardous Waste Collection Event for disposal.

SQGs and LQGs must maintain, for a period of three (3) years, all manifests demonstrating delivery of its hazardous waste to a permitted off-site destination facility. Land Disposal Restriction (LDR) forms should accompany each manifest or be kept easily accessible for each hazardous waste stream generated at your location.

Transportation and Disposal of Hazardous Waste

A generator is responsible for its hazardous waste from the point of generation through its ultimate disposal, also known as "cradle to grave." Hazardous waste must be transported and disposed of properly to minimize human health and environmental hazards. It is the responsibility of the generator to choose a vendor who fulfills the following requirements:

- Transporters that have a current Delaware Hazardous Waste Transporter Permit
- Treatment, Storage, and Disposal Facilities (TSDF) that are permitted in the state in which the TSDF is located

If you need assistance in finding a permitted Delaware Hazardous Waste Transporter or are unsure if your

transporter has a valid permit, a list of Delaware Permitted Hazardous Waste Transporters can be provided. Please call 302-739-9403 to request a current list.

A generator must determine the status of a hazardous waste shipment and report to the State if a manifest with the TSDF's signature is not received within 35 days of the initial shipment date on the manifest. An Exception Report must be submitted within five (5) calendar days if a manifest with the TSDF's signature is not received within 45 days of the initial shipment date on the manifest.

Planning for Emergencies

Prevent emergencies by having up-to-date work practices, providing adequate training to your employees, and having a clean and well-maintained working environment. In addition, emergency response procedures to deal with a spill must be developed and implemented. Keep emergency equipment and spill kits in an easily accessible place with clear labels so they are ready for use in the event of an emergency.

If you are a SQG or LQG you must:

- Designate an emergency coordinator
- Maintain emergency equipment such as fire extinguishers, spill kits, and decontamination equipment
- Have an internal communication/alarm system and/or telephone easily accessible near each Accumulation Area
- Provide and document adequate training for personnel handling hazardous waste
- Notify local authorities (e.g., police department, fire department, and hospital) of the site's hazardous waste activities and the location(s) where hazardous waste is accumulated at your site

SQGs are required to post contact information for the emergency coordinator, the location(s) of emergency equipment, and the fire department's telephone number by the telephone for each Accumulation Area.

LQGs are required to have a complete *contingency plan* that is periodically reviewed and amended, as applicable. A printed copy must be maintained on-site and must, at a minimum, contain the following:

- Describe actions to be taken in an emergency
- Describe arrangements with local authorities
- List contact information (including home addresses) for all designated emergency coordinators
- List all emergency equipment on-site and its locations
- Have a site evacuation plan

Train Personnel on Hazardous Waste Management

It is the responsibility of the hazardous waste generator to train employees on proper hazardous waste management. This is not the same as the commonly coined “Right-to-Know” training or “Slip, Trips, and Falls” training that many businesses offer its employees. Hazardous waste training must be specific to the hazards that your employees can encounter while managing wastes determined to be hazardous.

SQGs and LQGs are required to train **ALL** employees who handle hazardous waste, including the site’s emergency coordinator. LQGs must train new employees who handle hazardous waste within 6 months of starting employment and conduct annual refresher training for all employees handling hazardous waste.

LQGs must also maintain a list of personnel who handle hazardous waste including their job title, written job description, and amount of training needed for their hazardous waste management duties. Remember that the emergency coordinator(s) must have adequate hazardous waste management training and that this training also needs to be refreshed annually.

CESQGs have no hazardous waste training record keeping requirements. However, the SHWMS staff strongly recommends CESQGs develop a basic hazardous waste management training program to ensure its employees are familiar with the hazards of the wastes they handle. This training should include what to do during an emergency.

Recordkeeping Requirements

Requirement	CESQG	SQG	LQG
Maintain analytical data or other reports for waste stream characterizations	✓	✓	✓
Maintain manifests or other shipment documentation for 3 years	✓	✓	✓
Maintain manifest exception reports for 3 years (if applicable)	✓	✓	✓
Maintain Land Disposal Restriction (LDR) forms		✓	✓
Conduct and maintain records documenting weekly inspections at central Accumulation Areas for 3 years		✓	✓
Provide one-time hazardous waste specific training to all employees handling hazardous waste		✓	
Provide annual hazardous waste specific training to all employees handling hazardous waste			✓
Make arrangements with local emergency response agencies (police, fire, and hospital) notifying them of the type of waste accumulated on-site and its hazards. Maintain records of notifications.		✓	✓
Designated an emergency coordinator		✓	✓
Post emergency information near Accumulation Area telephone		✓	
Develop and continually update hazardous waste contingency plan and provide a copy to local emergency response agencies			✓
Maintain list of employees, job titles, and job descriptions for each employee handling hazardous waste			✓
File annual report by March 1 each year and maintain each for 3 years			✓

More Information

This factsheet is a summary provided as a courtesy to businesses. It is not intended as a substitute for DRGHW.

State hazardous waste regulations are in 7 DE Admin Code 1302, Delaware’s *Regulations Governing Hazardous Waste*, Parts 260-266, 268, 273, and 279. <http://regulations.delaware.gov/AdminCode/title7/1000/1300/1302/index.shtml>

For more assistance, contact DNREC, Solid and Hazardous Waste Management Section at 302-739-9403 or Karen J’Anthony, Program Manager, at karen.janthony@state.de.us

Other Available Factsheets

Satellite Accumulation, Aerosol Can Management, Waste Lamp Management, Universal Waste, Used Oil Management, Electronic Equipment, Hospital Waste, Pharmaceutical Waste, Dry Cleaner Hazardous Waste Management