



3629 Queen Palm Drive
Tampa, Florida 33619
813-627-2600

Local Hazardous Waste Programs:

Small Quantity Generator (SQG) Program of EPC:

- 813-627-2600

FL Dept of Environmental Protection / Tampa:

- 813-470-5700

Hillsborough County Household Hazardous Waste Program:

- RESIDENTIAL ONLY
- 813-272-5680
- Option 1

Local Solid Waste Departments:

Hillsborough County:

- 813-272-5680

City of Tampa:

- 813-348-1146

Plant City:

- 813-757-9208

City of Temple Terrace:

- 813-506-6570

Very Small Quantity Generators of Hazardous Waste

Guidance for Waste Management in Hillsborough County

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

All businesses generate solid wastes. Many businesses use hazardous materials in their processes, and as a result, some of the solid wastes they generate are also hazardous wastes. The methods a business operator employs to manage hazardous waste have a direct influence on business profits, as well as future liabilities for the property owner, the business owner, and the business operator.

The Hazardous Waste Program, under Subtitle C of the Resource Conservation and Recovery Act (RCRA), established a system for controlling hazardous waste from the time it is generated until its ultimate disposal (i.e., "cradle to grave"). The specific rules and regulations are found in Title 40 of the Code of Federal Regulations (CFR), Parts 260-280. In 1985, the State of Florida received

federal delegation to administer the RCRA program in Florida, and these regulations were adopted in Chapters 62-710 and 62-730 of the Florida Administrative Code (FAC). Chapter 62-710, FAC, contains the requirements for generators of used oil, and 62-730, FAC, contains the requirements for generators of hazardous waste. In 1993 the Small Quantity Generator (SQG) Program was created, and the state requirements were adopted in Chapter 1-7, Rules of Hillsborough County.

In November 2016, the US EPA finalized what is known as the *Hazardous Waste Generator Improvements Rule*. This Rule revises and updates the hazardous waste generator regulations to make the rules easier to understand, to facilitate better compliance, to provide greater flexibility in how hazardous waste is managed, and to close important gaps in the regulations. The State of Florida adopted the Hazardous Waste Generator Improvements Rule in July 2018, and the revised federal regulations are now effective statewide.

"Conditionally exempt small quantity generators (CESQGs)" are now called "very small quantity generators (VSQGs)."

WHAT IS A VSQG?

- Generates no more than 100-kg (220-lb) of hazardous waste in a single, calendar month
- Generates no more than 1-kg (2.2-lb) of acutely toxic hazardous waste in a single, calendar month
- Complies with specific conditions to remain exempt from most hazardous waste rules

Hazardous waste generators are subject to specific regulations based on the amount of hazardous waste they generate in a single calendar month. Large quantity generators of hazardous waste (LQGs) have more rules to comply with than SQGs, which in turn have more rules than VSQGs. In fact, there are just a few rules that are applicable to VSQGs, and they are found in Title 40, Part 262 of the Code of Federal Regulations (CFR).

*Good News!
VSQGs are exempt
from the majority of
hazardous waste
rules provided they
meet a few simple
requirements.*



*Used oil is not
considered
hazardous waste if
it is recycled.*



*P-listed wastes are
acutely toxic and
therefore have a
lower generation
threshold, as well as
more stringent
handling
requirements.*

CONDITIONS FOR VSQG EXEMPTION:

VSQGs are exempt from the majority of hazardous waste regulations, including training, container management, inspections, etc., provided they meet certain requirements laid out in [40 CFR 262.14](#). To maintain this exemption, VSQGs must:

1. Identify and count all hazardous waste generated at the facility.
2. Generate very small amounts of hazardous waste in each calendar month. This means less than 100-kg (220-lb) of hazardous waste and less than 1-kg (2.2-lb) of acute hazardous waste in each calendar month. **
3. Ensure that at all times there are less than 1,000-kg (2,200-lb) of hazardous waste and less than 1-kg acute hazardous waste on site.
4. Ensure that at all times there are less than 100-kg of cleanup debris from a spill of acutely toxic hazardous waste (i.e., P-listed) on site.
5. Dispose of hazardous waste at a facility authorized by the State of Florida to accept commercial hazardous waste, and keep records of hazardous waste disposal for at least three years. Recordkeeping for VSQGs is a State of Florida requirement ([62-730.030\(2\), FAC](#)).

****A VSQG experiencing an episodic event may generate and accumulate hazardous waste in accordance with [Subpart L of 40 CFR 262](#) without changing its status. Note that Subpart L has additional container management and labeling requirements, and the VSQG must notify the State of Florida of the event.**

What is Hazardous Waste?

Hazardous wastes are identified and listed in Part 261 of Title 40 of the CFR. In order to be classified as a hazardous waste, the material must be a solid waste, and it must not be one of the materials excluded under [40 CFR 261.4](#). If the material is not excluded, there are two basic ways a waste is classified as hazardous:

The waste is listed.

This means it appears on a list of wastes that have been determined to be hazardous. These listed wastes are categorized and defined in [Subpart D of 40 CFR 261](#). Listed wastes are identified by a letter followed by a three digit number.

1. Wastes are from nonspecific sources (**F-listed**): e.g., spent lacquer thinner (F005), electroplating sludge (F006), wood treatment wastes containing CCA (F035)
2. Wastes are from specific sources (**K-listed**): e.g., wastes from zinc yellow pigment production (K002), wastes from explosives manufacturing (K044), wastes from petroleum refining (K049)
3. Wastes are commercial chemical products, off-spec products, residues, or spill residues:
 - **U-listed** wastes: e.g., acetone (U002), formaldehyde (U122), xylene (U239)
 - **P-listed** wastes: e.g., warfarin (P001), nicotine (P075), sodium azide (P105)

The waste has hazardous characteristics.

This means there is some threshold that must be met for the material to be hazardous. The testing methods and thresholds for each of these characteristics are defined and described in [Subpart C of 40 CFR 261](#). Characteristically hazardous wastes are identified with the letter "D" followed by a three digit identification number.

1. **Ignitability** (D001)– It has a flashpoint <140 °F.
2. **Corrosivity** (D002) – It has a pH ≤2.0 or ≥12.5.
3. **Reactivity** (D003) – It reacts violently and or generates toxic gases when mixed with water (refer to [the rule](#) for a complete definition).
4. **Toxicity** (D004-D043) – The TCLP extract of a sample of the waste exceeds the hazardous threshold for at least one constituent. *Some common characteristically toxic constituents are provided on page 4 of this Fact Sheet.*



Performing a hazardous waste determination

All generators, regardless of size or status, are required to evaluate all the solid waste that is generated at their respective facilities. The purpose of the evaluation is to determine whether the waste is hazardous or not. The instructions for performing a waste determination are laid out in [40 CFR 262.11](#).

Step 1:

Do any exclusions exist for the material in [40 CFR 261.4](#)? If the material is excluded under this part, the waste determination is complete. Be sure to check if specific conditions must be met to claim the exclusion. For example, most solvent contaminated rags are excluded, but only if they are managed in a specific way. *Some common excluded materials are provided on page 4.*

Step 2:

Is the waste on one of the lists in [Subpart D of 40 CFR 261](#)? If the waste material is on one of the four lists, the waste is hazardous, and the waste determination is complete. *Some common listed hazardous wastes are provided on page 4.*

Step 3:

Does the waste exceed any of the thresholds for characteristically hazardous waste found in [Subpart C of 40 CFR 261](#)? This can be determined in one of two ways:

- a. **Apply generator’s knowledge of the waste and the way it was generated if possible.** Acceptable knowledge may include knowledge of the manufacturing or other process that generated the waste, or information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste.
- b. **Analyze a representative sample of the waste material using the tests specified for each characteristic.** Compare the results of the testing to the thresholds listed in Subpart C of 40 CFR 261. If any of those thresholds are exceeded, the material is hazardous waste. This is the appropriate method to use when the source of the waste is unknown.

What is the Toxicity Characteristic Leaching Procedure (TCLP?)

The TCLP is the test used to determine whether a waste has the characteristic of toxicity.

Solid waste deposited in landfills generates liquid leachate as it decomposes, compacts, and comes into contact with stormwater. This leachate is typically acidic, and hazardous chemicals can migrate, or “leach” into it if they come in contact with it. As the leachate drains or discharges from the landfill, the environment can become contaminated with hazardous waste.

One of the most basic goals of the RCRA rules is to keep commercial hazardous waste out of landfills where it can leach out and contaminate the

groundwater. To help accomplish this goal, generators must use [EPA Test Method 1311](#), the Toxicity Characteristic Leaching Procedure, or TCLP.

To simulate landfill conditions, the lab prepares an acidic solution and puts the sample of waste in it. After 24 hours, the acidic solution is analyzed to determine if any constituents from the sample leached out. If the waste leaches during the TCLP test, it will leach into the landfill, and the waste is hazardous. If the waste does not significantly leach during the TCLP, it will not leach in the landfill, and the waste is not characteristically toxic hazardous waste.

Waste must be evaluated at the point of generation. This means before it has been treated, mixed or otherwise adulterated.



The purpose of the TCLP is to simulate the conditions of a landfill and see if it would be okay to discard the waste into the regular trash.



COMMON CHARACTERISTICALLY TOXIC HAZARDOUS WASTE CONTAMINANTS

There are 40 characteristically toxic contaminants identified by EPA, but the ones in the tables below are most commonly encountered at VSQGs. A solid waste is characteristically toxic if the extract from a representative sample of the waste contains any of the contaminants below at the concentration equal to or greater than the limits shown in column 2 of the tables. Please refer to [the rule](#) for a complete list of contaminants.

Heavy Metals	Limit (mg/L)	HW No.
Arsenic	5.0	D004
Barium	100.0	D005
Cadmium	1.0	D006
Chromium	5.0	D007
Lead	5.0	D008
Mercury	0.2	D009
Selenium	1.0	D010
Silver	5.0	D011

Organic Compounds	Limit (mg/L)	HW No.
Benzene	0.5	D018
Carbon Tetrachloride	0.5	D019
Chloroform	6.0	D022
Methyl Ethyl Ketone	200.0	D035
Pyridine	5.0	D038
Tetrachloroethylene	0.7	D039
Trichloroethylene	0.5	D040
Vinyl Chloride	0.2	D043

Pesticides	Limit (mg/L)	HW No.
Heptachlor /Epoxide	0.008	D031
Lindane	0.4	D013
2,4-D	10.0	D016

DID YOU KNOW?

You can ask for compliance assistance anytime! Just contact the Hillsborough County SQG Program at 813-627-2600 or at SQG@epchc.org.

COMMON EXCLUDED WASTES

There are many materials that are specifically excluded from the definitions of solid and/or hazardous waste. The common materials below are NOT hazardous wastes. Note that in some cases, the exclusion exists only if certain conditions are met. A conditional exclusion is noted in column 2 below.

Excluded Material	Exclusion Conditions
Household hazardous waste	No
Scrap metal to be recycled	No
Material subject to the Clean Water Act	No
Solvent-contaminated wipes	Yes
Lead-acid batteries to be reclaimed	Yes
Cathode ray tubes to be recycled	Yes
Spent solvents to be recycled	Yes

COMMON LISTED HAZARDOUS WASTES

There are many listed hazardous wastes, however, the following wastes are the most commonly encountered listed hazardous waste streams. For a complete description of the wastes below, or for the complete lists of hazardous waste, please refer to [the rule](#).

HW No.	Hazardous Wastes from Non-Specific Sources
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons. Includes spent solvent mixtures containing at least 10% of these halogenated solvents before use.
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane. Includes spent solvent mixtures containing at least 10% of these halogenated solvents before use.
F003	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol. Includes spent solvent mixtures containing only these spent non-halogenated solvents.
F004	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene. Includes spent solvent mixtures containing at least 10% of these non-halogenated solvents before use.
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane. Includes spent solvent mixtures containing at least 10% of these non-halogenated solvents before use.

HW No.	Commercial Chemicals
U003	Acetonitrile
U159	Methyl ethyl ketone
U134	Hydrofluoric acid
U080	Methylene chloride
U002	Acetone
U160	Methyl ethyl ketone peroxide

HW No.	Acutely Hazardous Commercial Chemicals / Residues
P066	Methomyl
P075	Nicotine and nicotine salts
P001	Warfarin and warfarin salts if >0.3%
P012	Arsenic trioxide