

# Conditionally Exempt Small Quantity Generator Handbook For Hazardous Waste Handlers



**March 2009**



State of Connecticut  
Department of Environmental Protection  
Bureau of Materials Management and Compliance Assurance  
Waste Engineering and Enforcement Division  
79 Elm Street, Hartford, Connecticut 06106  
Tel (860) 424-3023 | Toll-Free 1-888-424-4193 | [www.ct.gov/dep](http://www.ct.gov/dep)

## **Contact Information**

### **Emergency Contact Numbers**

<b>CT DEP Emergency Spill Reporting</b>	<b>(866) DEP-SPIL (toll free)</b>
	or
	(860) 424-3338
National Response Center	(800) 424-8802

### **Connecticut Department of Environmental Protection Numbers**

<b>Hazardous Waste Compliance Assistance</b>	<b>(888) 424-4193</b>
Solid Waste and Recycling Program	(860) 424-3366/3365
Stormwater and Wastewater Discharge Programs	(860) 424-3018
Underground Storage Tank Program	(860) 424-3374
Office of Pollution Prevention	(860) 424-3297
Bureau of Air Management	(860) 424-3436
Remediation Division	(860) 424-3705

This handbook is intended as an educational tool for Conditionally Exempt Small Quantity Generators. It does not constitute a complete reference to state, federal or local laws. In the event of inconsistency between this document and the regulatory language, the language in the [hazardous waste management regulations](#) controls. It is your responsibility to comply with all applicable laws. Relying on the information in this handbook will not protect you legally and may not be relied upon to create a right or benefit substantive or procedural, enforceable at law or in equity by any person. Final determination of the proper handling and disposal of waste is the sole responsibility of the generator.

The Department of Environmental Protection is an equal opportunity/affirmative action employer, offering its services without regard to race, color, religion, national origin, age, sex, or disability. In conformance with the Americans with Disabilities Act, the DEP makes every effort to provide equally effective services for persons with disabilities. Individuals with disabilities needing auxiliary aids or services should call (860) 424-3000.

**Does My Business Generate Hazardous Waste?**

Hazardous wastes are a group of wastes that are subject to special handling requirements because their mismanagement may lead to serious hazards to human health and the environment. These wastes are regulated under the Resource Conservation and Recovery Act (“RCRA”). When we hear the term hazardous waste, many of us think of industrial chemicals, however, that term includes many common items, as well. For example, when disposed of, clogged aerosol cans, hand sanitizing gels, and oil-based paints are hazardous wastes (all are ignitable).

Most businesses generate small quantities of hazardous waste. Businesses that generate less than 220 pounds (100 kilograms or about 26 gallons) of hazardous waste per month and accumulate no more than 2,200 pounds (1,000 kilograms or about 260 gallons) of hazardous waste on-site at any one time and that generate less than 2.2 pounds (1 kilogram) per month of acute hazardous waste are Conditionally Exempt Small Quantity Generators (CESQGs).

**Below are examples of some Businesses that may generate hazardous wastes:**

Chemical Laboratories	Hardware Stores	Printers
Laundries and Dry Cleaners	Metal Working Shops	Construction Contractors
Furniture and Wood Refinishers	Vehicle Maintenance and Dismantling Shops	Lawn and Garden Care Centers

As a CESQG, you will be required to comply with the following:

- ✦ [Perform a hazardous waste determination](#) on all the wastes you generate, and keep records of them for at least 3 years from the date of disposal.
- ✦ If you [hire a waste hauler](#) to take away your hazardous waste, be sure that the hauler has a valid EPA Identification number and permit to haul hazardous waste in Connecticut.
- ✦ Ensure that your hazardous waste is [disposed of at a permitted commercial hazardous waste treatment or disposal facility](#), or a household hazardous waste facility (or one-day collection event) permitted to take CESQG waste.
- ✦ Utilize [universal waste program](#) for batteries, fluorescent lamps, mercury-containing equipment, electronics, and pesticides.
- ✦ Comply with [used oil requirements](#) for any used oil that you generate.
- ✦ Comply with Connecticut’s [recycling laws](#)

# Contents

---

<b>STEP 1: EVALUATE YOUR WASTE.....</b>	<b>1</b>
What is a Hazardous Waste?.....	1
Characteristically Hazardous Wastes .....	1
Listed Hazardous Wastes.....	2
How do I Perform a Hazardous Waste Determination?.....	3
Laboratory Testing .....	3
Knowledge of Process .....	3
Is Recordkeeping Required? .....	3
Non-RCRA-Hazardous "Connecticut-Regulated" Wastes .....	4
EPA Hazardous Waste Codes for Waste Streams Commonly Generated by Small Businesses .....	5
<b>STEP 2: DETERMINE YOUR HAZARDOUS WASTE GENERATOR STATUS .....</b>	<b>6</b>
Procedure for Determining Your Generator Status .....	6
Episodic Generator .....	8
What do I do if I Exceed my Allowable Generation Rates in a Calendar Month? .....	8
<b>STEP 3: REGULATORY REQUIREMENTS.....</b>	<b>9</b>
<b>RECORDKEEPING .....</b>	<b>10</b>
<b>SAFE TRANSPORT AND DISPOSAL OF HAZARDOUS WASTE .....</b>	<b>11</b>
How do I Safely Transport my Hazardous Wastes? .....	11
Suggestions for Preparing Hazardous Wastes for Shipment.....	11
How do I Safely and Properly Dispose of my Hazardous Waste?.....	12
Can I bring my Hazardous Waste to a HHW Collection Facility or Event? .....	13
Manifests .....	14
<b>MANAGEMENT OF BATTERIES, LAMPS, MERCURY-CONTAINING EQUIPMENT, ELECTRONICS, AND PESTICIDES .....</b>	<b>16</b>
<b>USED OIL.....</b>	<b>19</b>
Do I Have to Test my Used Oil?.....	19
How Should I Manage the Used Oil I Generate? .....	21
<b>RECYCLING AND WASTE MINIMIZATION .....</b>	<b>22</b>
Required Recycling .....	22
How Does Waste Minimization Help Me?.....	23

<b>SUGGESTED BEST MANAGEMENT PRACTICES FOR CESQGS.....</b>	<b>25</b>
Managing Your Hazardous Waste in Container(s).....	25
Managing Your Hazardous Waste in Tank(s) .....	26
Conducting Inspections .....	27
Planning for Emergencies .....	28
Responding to Emergencies.....	30
Personnel Training.....	31
<b>APPENDIX 1 – HAZARDOUS WASTE DETERMINATION.....</b>	<b>32</b>
Hazardous Waste Determination Summary Sheet.....	32
Toxic Characteristic Waste Codes .....	34
F-Listed Wastes .....	35
<b>APPENDIX 2 – HAZARDOUS WASTE INSPECTIONS.....</b>	<b>36</b>
Inspection Log for Hazardous Waste Storage Areas .....	37
<b>APPENDIX 3 – EMERGENCY POSTING .....</b>	<b>38</b>
<b>APPENDIX 4 – GENERATOR CATEGORY COMPARISON .....</b>	<b>39</b>
<b>APPENDIX 5 – TRAINING RECORD FORM.....</b>	<b>40</b>
<b>APPENDIX 6 – EXAMPLE OF A COMPLETED MANIFEST .....</b>	<b>41</b>
<b>GLOSSARY.....</b>	<b>42</b>
<b>ADDITIONAL RESOURCES .....</b>	<b>43</b>













## STEP 1: EVALUATE YOUR WASTE

Businesses that generate a waste are required to determine whether or not that waste is hazardous. This can be challenging, as the RCRA regulations establish a complex definition of the term hazardous waste. Some general knowledge about the basic characteristics of the wastes may be helpful in making this determination, but some laboratory testing is usually required.

### What is a Hazardous Waste?

There are two ways a waste may be considered a hazardous waste: (1) if it is *Characteristically Hazardous*, or (2) if it is *Listed Hazardous* waste. A list of hazardous wastes frequently generated by small businesses appears on [page 5](#).

**Characteristically Hazardous Wastes** are wastes that exhibit any one of the four characteristics listed below, and begins their 4-digit EPA waste code with "D". An abbreviated definition is given for each one here. They are fully defined in the federal hazardous waste regulations.

CHARACTERISTIC	DEFINITION	TESTING	EXAMPLES
<b>IGNITABILITY</b> <b>EPA Waste Code D001</b>	 Liquid waste with a flash points lower than 140°F  Ignitable solids  Ignitable compressed gases  Materials that are designated by the U.S. DOT as oxidizers.	Laboratory certified by the CT Dept. of Public Health	<ul style="list-style-type: none"> <li>used solvents</li> <li>waste gasoline</li> <li>spent adhesives</li> <li>non-empty container of alcohol based hand sanitizer gel</li> </ul> 
<b>CORROSIVITY</b> <b>EPA Waste Code D002</b>	 Liquid wastes with a pH less than or equal to 2.0  Liquid wastes with a pH greater than or equal to 12.5	The most accurate way to determine pH is with a laboratory test.	<ul style="list-style-type: none"> <li>waste muriatic acid</li> <li>caustic paint strippers</li> <li>non-empty containers of drain cleaner</li> </ul> 
<b>REACTIVITY</b> <b>EPA Waste Code D003</b>	 Materials that are: normally unstable; react violently, explode, or emit toxic fumes when mixed with water  Capable of exploding at room temperature and pressure or when heated under confinement.	Laboratory certified by the CT Dept. of Public Health	<ul style="list-style-type: none"> <li>cyanide compounds</li> <li>blasting caps</li> <li>dynamite</li> <li>other explosives</li> <li>non-empty aerosol cans</li> </ul> 
<b>TOXICITY</b> <b>EPA Waste Code D004</b>	 Materials containing greater than the regulated concentration of any of 40 contaminants listed in <a href="#">Appendix 1</a> .	Determined in a certified lab by a test called the Toxicity Characteristic Leaching Procedure (TCLP)	<ul style="list-style-type: none"> <li>lead-based paint chips</li> <li>spent methyl ethyl ketone solvent</li> <li>waste gasoline (contains benzene)</li> </ul>

**Listed Hazardous Wastes** are wastes that are specifically identified in one of four lists developed by EPA in the federal hazardous waste regulations. Each hazardous waste listing includes a description of a specific type of waste that EPA considers hazardous enough to warrant regulation.

Hazardous waste listings describe wastes that are generated by certain industries, come from common industrial processes, or include specific chemical compounds as their main active ingredient. Several hundred specific solvents, metal finishing waste streams and sludges, pesticides, various organic and inorganic chemicals, and discarded commercial chemical products are included in these lists.

The four groups of listed hazardous wastes are easily identified by the letter that begins their 4-digit EPA waste code (i.e., "F," "K," "U," or "P"). The four groups are classified as follows:

**NOTE** Common "F" Listed solvents are listed in [Appendix 1](#).  
The complete EPA List can be found at [EPA Listed Hazardous Waste List](#)

LISTED WASTE	DEFINITION	EXAMPLES
"F" Listed Waste	wastes from certain common, nonspecific industrial activities	<ul style="list-style-type: none"> <li>spent halogenated solvents (e.g., methylene chloride, 1,1,1-trichloroethane, perchloroethylene)</li> <li>waste paint solvents (e.g., acetone, methyl alcohol, butyl alcohol, xylene, methyl ethyl ketone (MEK), methyl isobutyl ketone (MIBK), ethyl acetate)</li> <li>electroplating wastewater treatment sludges</li> </ul>
"K" Listed Waste	Wastes from certain specific industrial processes	Rarely, if ever, generated by small commercial businesses.
"U" Listed Waste and "P" Listed Waste	Discarded commercial chemical products, off-spec products, container residues, and spill residues of such products	<ul style="list-style-type: none"> <li>certain old pesticides, solvents, and other chemical products <a href="#">EPA Listed Hazardous Waste List</a></li> </ul>

**NOTE** Material *contaminated* with any of the above materials...becomes a "hazardous waste". A common example is soil where a solvent has spilled. Environmental regulations are configured so that "dilution is not the solution."

## How do I Perform a Hazardous Waste Determination?

All businesses are required to perform a Hazardous Waste Determination on the waste they generate to identify whether or not that waste is hazardous. A hazardous waste determination may be conducted either by having a representative sample of the waste tested by a state certified laboratory or by applying knowledge of the waste and its hazardous characteristics or a combination of the two. In Connecticut, hazardous waste determinations must be reviewed and recertified at least once during each twelve (12) month period or whenever a process generating a waste changes ([Hazardous Waste Determination Summary Sheet](#)).

### TIP

Check the Material Safety Data Sheets that come with all products containing hazardous materials to help with hazardous waste determinations. <http://www.msdssearch.com/>

Also, your national trade association or its local chapter may be able to assist you with hazardous waste determinations.

### Laboratory Testing

Laboratory analyses should be conducted on a representative sample of a specific waste stream for flash point, corrosivity, reactivity, toxicity (TCLP), volatile organic compounds (VOCs) and semi-volatile organic compounds (semi-VOCs). Some waste streams should also be tested for PCBs and specific listed wastes that may be present in the waste stream. Such laboratory analyses must be performed by a state certified laboratory ([DPH: Certified Testing Laboratories](#)). Laboratories can provide guidance regarding correct procedures and equipment for collecting a representative sample.

### Knowledge of Process

A knowledge-based hazardous waste determination involves a well thought out process in which the materials used and the waste generating process are considered. More often than not, it is easier to use knowledge to characterize the waste as hazardous than to characterize it as non-hazardous. In a knowledge-based determination, you must have documentation demonstrating that the information used is valid, verifiable, and correctly applied. You may presume a waste is hazardous based on its characteristics or on past laboratory analysis, provided there is no change in how the waste was generated. [Hazardous Waste Determinations/Knowledge of Process Fact Sheet](#)

### Is Recordkeeping Required?

As a generator, you must keep records of any test results, waste analysis, or other determination made for at least three years from the date that the waste was sent off-site for treatment, storage, or disposal. Recharacterization of the company's wastes must be done at least once during each twelve (12) month period or whenever a process generating a waste changes.



## Non-RCRA-Hazardous “Connecticut-Regulated” Wastes

There are several types of industrial wastes that are not considered hazardous waste under RCRA, but are still regulated by the CT DEP. These are commonly referred to as non-RCRA hazardous wastes or Connecticut-Regulated Wastes. Non-RCRA hazardous wastes should be evaluated for suspected RCRA hazardous constituents prior to treatment or disposal. The table below describes the types of waste and waste codes assigned to non-RCRA hazardous wastes.

<u>Code</u>	<u>Description</u>	<u>Examples</u>
CR01	Waste PCBs ‡	PCB Oils, PCB Ballasts, PCB Transformers
CR02	Waste Oil	Fuel Oil, Lubricating Oil, Hydraulic Oil
CR03	Waste Water Soluble Oil	Cutting Oil, Cooling Oil
CR04	Waste Chemical Liquids	Latex Paint, Sludges, Glycol/Glycol Substitutes
CR05	Waste Chemical Solids †	Grinding Dust, Oily Rags, Corrosive Solids

These wastes cannot be placed in an on-site dumpster, but must instead be segregated and picked up by a hauler that has a permit to transport Connecticut-Regulated Wastes.

There are no requirements for generators of these materials, other than to ensure that they are properly disposed. As a best management practice, store these materials in a manner similar to that for hazardous waste (i.e., in secure, closed containers, in a storage area with an impervious base and secondary containment, etc.). When the material is shipped, the law does not require that the generator prepare a waste manifest, but as a practical matter, haulers will often ask for one (either for their recordkeeping purposes, or because it is required under the receiving facility’s operating permit).

‡ Please see the [DEP PCB Program](#) for information on proper management of PCBs.

† There is, however, an exemption from transporter permit requirements for “waste chemical solids” (e.g., dried latex paint or paint chips). Such wastes do not have to be hauled by a permitted transporter, but they must still be sent to a permitted storage treatment or disposal facility. If sent to a facility in Connecticut for treatment or disposal, this facility must be permitted to take Connecticut-Regulated Wastes.

## Solvents:

Solvents, spent solvents, solvent mixtures, or solvent still bottoms are often hazardous. The following are some commonly used hazardous solvents (also see ignitable wastes for other hazardous solvents, and 40 CFR 261.31 for most listed hazardous waste solvents):

Benzene	F005	Toluene	F005
Carbon Disulfide	F005	Trichloroethylene	F001,F002
Carbon Tetrachloride	F001	Trichlorofluoromethane	F002
Chlorobenzene	F002	Trichlorotrifluoroethane	F002
Cresols	F004	(Valclene)	
Cresylic Acid	F004	White Spirits	D001
O-Dichlorobenzene	F002		
Ethanol	D001		
2-Ethoxyethanol	F005		
Ethylene Dichloride	D001		
Isobutanol	F005		
Isopropanol	D001		
Kerosene	D001		
Methyl Ethyl Ketone	F005		
Methylene Chloride	F001,F002		
Naphtha	D001		
Nitrobenzene	F004		
2-Nitrobenzene	F004		
Petroleum Solvents	D001		
(Flashpoint less than 140°F)			
Pyridine	F005		
1,1,1-Trichloroethane	F001,F002		
1,1,2-Trichloroethane	F002		
Tetrachloroethylene	F001,F002		
(Perchloroethylene)			

## Acids/Bases:

Acids, bases, or mixtures having a pH less than or equal to 2 or greater than or equal to 12.5 are considered corrosive (for a complete description of corrosive wastes, see 40 CFR 261.22). All corrosive materials and solutions have the waste code D002.

The following are some of the more commonly used corrosives:

Acetic Acid	Hydrofluoric Acid	Potassium Hydroxide
Chromic Acid	Nitric Acid	Sodium Hydroxide
Hydrobromic Acid	Perchloric Acid	Sulfuric Acid
Hydrochloric Acid	Phosphoric Acid	

## Dry cleaning Filtration Residues:

Cooked powder residue (perchloroethylene plants only), still residues, and spent cartridge filters containing perchloroethylene or valclene are hazardous and have the waste code F002. Still residues containing petroleum solvents with a flashpoint less than 140°F are considered hazardous and have the waste code D001.

## Heavy Metals/Inorganics:

Heavy metals and other inorganic waste materials are considered hazardous if the extract from a representative sample of the waste has any of the specific constituents concentrations as shown in 40 CFR 262.24, Table 1. Materials may include dusts, solutions, wastewater treatment sludges, paint wastes, and waste inks. The following are common heavy metals/inorganics:

Arsenic	D004	Chromium	D007	Selenium	D010
Barium	D005	Lead	D008	Silver	D011
Cadmium	D006	Mercury	D009		

## Ink Sludges Containing Chromium and Lead:

This category includes solvent washes and sludges, caustic washes and sludges, and water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead. All ink sludges have the waste code K086.

## Ignitable Wastes:

Ignitable wastes are any liquids that have a flashpoint less than 140°F; any non-liquids that are capable of causing a fire through friction, absorption of moisture, or spontaneous chemical change that creates a hazard when ignited; or any ignitable compressed gas as described in 49 CFR 173.300 (for a complete description of ignitable wastes, see 40 CFR 261.21). Examples are spent solvents, solvent still bottoms, oxidizers, epoxy resins and adhesives, and waste inks containing flammable solvents. Unless otherwise specified, all ignitable wastes have the waste code D001.

Acetone	F003	Chlorobenzene	F002
Benzene	F005	Cyclohexanone	F003
n-Butyl Alcohol	F003	Ethyl Acetate	F003
Ethyl Benzene	F003	Ethyl Ether	F003

## Lead-Acid Batteries:

Used lead-acid batteries should be reported on the notification form only if they are not recycled. Used lead-acid batteries that are recycled do not need to be counted in determining the quantity of waste that you generate per month. Special requirements do apply if you recycle your batteries on your own premises (see 40 CFR Part 266).

Lead Dross	D008
Spent Acids	D002
Lead-Acid Batteries	D008

## Pesticides:

The pesticides listed below are hazardous. Wastes marked with an asterisk (\*) have been designated acutely hazardous. For a more complete listing, see 40 CFR 261.32 for specific listed pesticides, and other wastes, wastewaters, sludges, and byproducts from pesticide formulators.

*Aldicarb	P070	Methoxychlor	D014
Amitrole	U011	*Methyl Parathion	P071
Endrin	D012	*Parathion	P089
2,4-D	D016	*Phorate	P094
1,2-Dichloropropene	U084	Toxaphene	D015
*Heptachlor	P059	Silvex	D017
Lindane	U129, D013		

## Reactives:

Reactive wastes include materials or mixtures that are unstable, react violently with or form explosive mixtures with water, generate toxic gases or vapors when mixed with water (or when exposed to pH conditions between 2 and 12.5 in the case of cyanide or sulfide bearing wastes), or are capable of detonation or explosive reaction when heated or subject to shock (for a complete description of reactive wastes, see 40 CFR 261.23). Unless otherwise specified, all reactive wastes have the waste code D003. The following materials are commonly considered to be reactive:

Acetyl Chloride	Cyanides	Organic Peroxides	Permanganates
Chromic Acid	Hypochlorites	Perchlorates	Sulfides

## Spent Metal Finishing and Cyanide Wastes:

Spent plating wastes contain cleaning solutions and plating solutions with caustics, solvents, heavy metals, and cyanides. Cyanide wastes may also be generated from heat treatment operations, pigment production, and manufacturing of anticaking agents. Plating wastes generally have the waste codes F006-F009. Cyanide heat treating wastes generally have the waste codes F010-F012 (see 40 CFR 261.31 for a more complete description of plating wastes).

**EPA Hazardous Waste Codes for Waste Streams Commonly Generated by Small Businesses**

This list can be used as a guide for conditionally exempt small quantity generators to determine which of their wastes, if any, are hazardous, and to determine the EPA waste codes associated with each waste. It is not intended to provide a comprehensive list of all waste codes and waste streams that small businesses could generate. Except for the pesticide and wood preserving categories, this list does not include waste codes for commercial chemical products that are hazardous when discarded unused. These wastes, as well as all others not listed here, can be found in Title 40 of the Code of Federal Regulations Part 261. If you have any questions, contact the CT DEP.

## STEP 2: DETERMINE YOUR HAZARDOUS WASTE GENERATOR STATUS

If you generate a Listed hazardous waste or Characteristic hazardous waste you are a hazardous waste generator. There are three types of hazardous waste generators: large quantity generators (LQGs), small quantity generators (SQGs), and conditionally exempt small quantity generators (CESQGs), based on the amount of hazardous waste generated. The less hazardous waste your company generates, the less regulatory requirements you have, and the less money that needs to be spent on compliance.

### Procedure for Determining Your Generator Status

Once you determine that you generate hazardous waste, you need to measure the amount of hazardous waste you generate each month to determine your generator status. The following three tasks should be reviewed annually to account for possible changes in waste generation rates at your company.

**Task 1:** Conduct hazardous waste determinations on all waste generated at your company as previously described. Use the table below to help you determine what to count and what not to count.

DO Count:	Do NOT Count:
All quantities of listed and characteristic hazardous wastes that are:	Wastes that:
<ul style="list-style-type: none"><li>Accumulated on the property for any period of time before disposal or recycling. (Dry cleaners, for example, must count any residue removed from machines as well as spent cartridge filters.)</li><li>Packaged and transported away from your business.</li><li>Generated as still bottoms or sludges and removed from product storage tanks.</li></ul>	<ul style="list-style-type: none"><li>Are reclaimed continuously onsite without being stored prior to reclamation, such as dry cleaning solvents.</li><li>Are managed in an elementary neutralization unit, a totally enclosed treatment unit, or a wastewater treatment unit without being stored first.</li><li>Universal wastes (see <a href="#">page 16</a>).</li><li>Non-hazardous used oil. (see <a href="#">page 19</a>).</li><li>Scrap metal that is recycled (ex. drained oil filters).</li><li>Connecticut-Regulated Wastes (see <a href="#">page 4</a>).</li></ul>

**Task 2:** Calculate the total amount of hazardous waste generated per calendar month at your company. The Conversion Chart on the following page provides general guidance to understand the specific generation quantities.

KILOGRAMS	POUNDS	GALLONS †	55 GALLON DRUMS
1 kg	2.2 lbs	~ 1 qt	-
100 kg	220 lbs.	~ 26 gal	~ ½ of a drum
1,000 kg	2,200 lbs	~ 260 gal	3 to 5 drums

† Gallon equivalents will vary according to the density of your waste. For example, water weighs 8.33 lbs/gal, virgin motor oil weighs less; perchlorethylene weighs more.

**Task 3:** Determine your company’s generator status and associated regulatory requirements from the table below. Your hazardous waste generator category should be based on your “worst case” generator category. For example, if you will operate as a CESQG during some months and as a SQG during other months, you are considered a SQG and are required to apply for an EPA Identification Number and to comply with all other SQG requirements.

[Determining Hazardous Waste Generator Category](#)

	Conditionally Exempt Small Quantity Generator	Small Quantity Generator	Large Quantity Generator
Hazardous Waste Generation Rate (per calendar month)	No more than 220 lbs of hazardous waste AND no more than 2.2 lbs of acute hazardous waste.	From 220 lbs up to 2,200 lbs of hazardous waste AND no more than 2.2 lbs of acute hazardous waste.	More than 2,200 lbs of hazardous waste OR more than 2.2 lbs of acute hazardous waste.
Max. Amount of Hazardous Waste Stored On-Site	No more than 2,200 lbs of hazardous waste †	No more than 2,200 lbs of hazardous waste †	More than 2,200 lbs of hazardous waste
Max. Storage Time	None †	180 Days	90 Days †
Regulatory Burden	Minimal	Multifaceted	Complex

**† WARNING:** If more than 2,200 lbs of hazardous waste are stored on-site at any one time, you will be operating as a Large Quantity Generator and will be required to comply with much more stringent regulations.

If more than 2,200 lbs of hazardous waste are stored on-site for more than 90 days, then you will be operating as a STORAGE facility and will be required to comply with substantially more stringent regulations than a Large Quantity Generator.

## Episodic Generator

### What do I do if I Exceed my Allowable Generation Rates in a Calendar Month?

If a CESQG exceeds the allowable generation rate in a calendar month due to a unique occurrence or an unforeseeable/infrequent event, such as environmental remediation, it may be an episodic generator. If it becomes a repeated occurrence, changing your generator status will be required. Until the waste is removed from the site, you must comply with the more stringent regulations associated with being a small or large quantity generators, depending upon the amount of hazardous waste generated. The business can return to CESQG status after the waste is transported off site for disposal and as long as it does not generate more than 220 pounds in any one calendar month during the next 12 months.

CT DEP recommends that episodic generators document their waste generation and accumulation rates carefully each month to support any claims of episodic generation. The CT DEP places the burden of proof on the generator to demonstrate it was not subject to additional requirements.

**For Example:** A CESQG (generates less than 220 pounds of hazardous waste per month) performs a one-time clean-out of its maintenance shed. 300 pounds of hazardous waste is generated as a result of the clean-out. The business must follow all Small Quantity Generator requirements (i.e., inspections, training, emergency response procedures, etc.) while the waste remains on site. The business can return to CESQG status after the waste is transported and as long as they do not generate 220 pounds or more in any one calendar month during the next 12 months.

## STEP 3: REGULATORY REQUIREMENTS

---

You are a CESQG if you generate no more than 220 lbs of hazardous waste and no more than 2.2 lbs of acute hazardous waste per calendar month. As a CESQG, you are exempt from many state requirements if you comply with the following:

- ✚ Perform a **hazardous waste determination** on all the wastes you generate.
- ✚ **Accumulate** on site no more than 2,200 lbs of hazardous waste, no more than 2.2 lbs of acute hazardous waste, and no more than 220 lbs of residue or contaminated soil from cleanup of an acute hazardous waste spill. CESQGs have no accumulation time limit.
- ✚ If you **hire a waste hauler** to take away your hazardous waste, be sure that hauler has a valid EPA Identification number and transporter's permit to haul waste in Connecticut.
- ✚ Ensure that your hazardous waste is **disposed of at a permitted commercial hazardous waste treatment or disposal facility**, or at a household hazardous waste facility (or one-day collection event) that is permitted to take CESQG waste.
- ✚ Keep **records** of all test results and other information used to make these determinations for at least three years from the date that the waste was last sent off-site for disposal.
- ✚ Comply with **Department of Transportation (DOT) regulations**.
- ✚ Utilize the **universal waste program** for any Universal Wastes that you generate. Universal Wastes are wastes that are subject to a special, reduced set of requirements, and include batteries, fluorescent lamps, mercury-containing equipment, electronics, and occasionally, certain pesticides.
- ✚ Comply with **used oil requirements** for any used oil that you generate.
- ✚ Comply with Connecticut's **recycling laws**.

A Generator Compliance Comparison Chart is available in [Appendix 4](#) for your review. This chart is an overview of hazardous waste requirements based on generator status.

### BE CAREFUL!

If at any time your waste generation or storage amounts increase beyond CESQG levels, you must comply with the more stringent requirements for the higher generator category.

A CESQG must keep records of any test results, waste analyses, or other records of hazardous waste determinations for at least three years from the date that the waste was last sent for off-site treatment, storage, or disposal. If applying knowledge of the waste and its hazard characteristics as a determination, you must be able to clearly demonstrate how the knowledge was correctly applied in making the determination and maintain documentation supporting this determination.



If you use a manifest for off-site shipment of your hazardous waste, you should retain a signed copy of each manifest for at least three years or until you receive a signed copy from the designated facility as confirmation of delivery. Generally, this signed copy should be kept at the facility for at least three years from the date the waste was accepted by the initial transporter.

### ***What Does this Mean to Me?***

You must keep copies of all records and documents related to hazardous waste determinations to demonstrate that you are aware of the hazards associated with your wastes and to enable you to properly manage and dispose of your waste in accordance with the regulations.

#### **TIP**

Permanently maintaining copies of all manifests is strongly recommended as it may ease future property transfers, liability issues, etc.



# SAFE TRANSPORT AND DISPOSAL OF HAZARDOUS WASTE

---

## How do I Safely Transport my Hazardous Wastes?








To safely transport and remove hazardous waste from your facility, the regulations require that you must either:

1. Offer your hazardous waste to a transporter who has an EPA ID Number and a [current transporter permit](#); or
2. Transport your own hazardous waste. If you transport your own hazardous waste, you must not transport more than 2,200 lbs/month (which is about 260 gallons/month) and you must transport the waste in your own vehicles to a permitted facility.

## Suggestions for Preparing Hazardous Wastes for Shipment

When you are ready to offer your hazardous waste for offsite shipment to a permitted commercial hazardous waste facility, you must verify that you are in compliance with applicable Department of Transportation (DOT) regulations.

The DOT also regulates activities identified as Pre-Transport Functions, which include:

-  Determining the DOT hazard class of the material
-  Properly selecting, filling, and closing the shipping container
-  Marking and labeling the shipping container
-  Preparing and reviewing shipping papers (See Preparing a Uniform Hazardous Waste Manifest on [page 14](#))
-  Providing and maintaining emergency response information
-  Certifying that the hazardous waste and packaging is in compliance with DOT regulations
-  Selecting, providing, or affixing placards, if needed






### TIP

Since the pre-transport functions can be complicated, contact your waste hauler to see if they can provide you with assistance in completing the pre-transport function. If you are hauling your own hazardous waste, contact the disposal facility or the Household Hazardous Waste Program coordinator for assistance.



## How do I Safely and Properly Dispose of my Hazardous Waste?

CESQGs must ensure delivery of both hazardous waste and non-RCRA hazardous waste (Connecticut Regulated Waste) to a facility that can properly manage it. Below are the proper facilities where your waste should be managed:

-  A CTDEP permitted [Commercial Hazardous Waste Facility](#). Often these facilities can also manage your non-RCRA hazardous (Connecticut Regulated Waste), universal waste, and used oil.
-  A facility permitted, licensed, or registered by a state other than Connecticut to manage municipal or industrial solid waste. It is illegal to send hazardous waste to a municipal solid waste landfill in the State of Connecticut.
-  A facility that uses, reuses or legitimately recycles the waste or treats the waste prior to reuse or recycling.
-  For universal waste, a universal waste handler or destination facility subject to universal waste requirements.
-  With prior approval, a Household Hazardous Waste Collection facility or event.

### NOTE

If you don't have internet access, you may call the DEP Hazardous Waste Compliance Assistance at (888) 424-4193 to have Hazardous Waste Facility and Permitted Transporter lists mailed to you

## Can I bring my Hazardous Waste to a HHW Collection Facility or Event?

Towns or other regional entities serving towns administer Household Hazardous Waste (HHW) programs. These towns or regional entities are not required to offer collection to a CESQG but they may choose to offer collections. The programs will accept common hazardous wastes such as oil-based paints, solvents, acids, pesticides, and waste gasoline. There are some wastes that are prohibited from the collections. To participate, the CESQG must contact the HHW program administrator with a complete list of wastes to determine if they are acceptable and to make an appointment. **Please note, Household Hazardous Waste Collections generally run from April to early November.**

Contact the HHW program administrator to find out if they will be conducting CESQG hazardous waste collections and what would be required for participation. A list of the program administrators can be found at the DEP website ([Household Hazardous Waste Collection Schedule](#)) or by contacting your municipality's Department of Public Works. HHW program administrators may also offer assistance with safe transportation requirements.

### **Collections for CESQGs are by appointment only. No exceptions.**

Here are some important steps the CESQG is required to perform in order to participate:

1. Perform a hazardous waste determination.
2. Prepare a list of all the hazardous wastes to be disposed.
3. Contact the HHW program administrator to determine what wastes are acceptable and to schedule a time to bring in the wastes.
4. Sign forms provided by the HHW program administrator certifying that the business is a CESQG. The program administrator may refer you to its hazardous waste vendor.
5. Prepare the wastes for transportation.

## How Much Will it Cost?

The HHW program administrators determine disposal costs, which is dependent on the amount and type of waste. It is generally less expensive for a CESQG to take its hazardous waste to a HHW collection than to have a licensed hazardous waste transporter come to the generation site.

## Manifests

A hazardous waste manifest is a shipping document used to track hazardous waste. The manifest serves as an immediate identifier for waste characteristics, potential incompatibilities, quantities, etc. in the event of a serious accident involving the shipment. CESQGs are not legally required to use manifests, however, many haulers and disposal facilities require them.

A manifest is used when a generator offers hazardous waste for transportation to offsite waste facilities. A manifest may also be used to transport non-RCRA hazardous wastes. A single manifest consists of 6 copies, each designated for specific destinations.

### Completing the Manifest

An example of a hazardous waste manifest is in [Appendix 6](#) (page 41). When completing the manifest, you should:

- ✓ If your company had been assigned an EPA ID Number, fill in that number in the EPA I.D. Field. If you do not have an EPA ID Number, you could use any of the following: "CTCESQG", "CTCESQG99999", or "CVS024248900".
- ✓ Verify that all 6 copies of the manifest are intact before starting.
- ✓ Print or type so all copies are legible. Instructions on how to complete the manifest are on the back of each page.
- ✓ Verify that if a field is left blank, it's supposed to be left blank.
- ✓ Different types of containers, different shipping names, different Reportable Quantity (RQ) values, and different waste codes all warrant separate lines on the manifest
- ✓ Enter the facility description (i.e. address, phone number, contact person), proper DOT shipping name, hazard class and UN/NA number for the hazardous waste, hazardous waste code, type and quantity of container(s), additional descriptions and emergency information.
- ✓ Assure the correctness of all items.
- ✓ If the information is correct, sign the manifest certification by hand and obtain the handwritten signature of the transporter and the date of waste acceptance on the manifest. You must be aware that signing a manifest does not alleviate any of your liability.
- ✓ Retain and distribute copies as indicated on the back of the manifest document.

### BE CAREFUL!

Most hazardous waste vendors provide their clients with a completed manifest. Once you sign the document as the generator, you are certifying that the information provided is accurate and in compliance with applicable EPA and DOT regulations. If the information is incorrect, ensure it is corrected before signing the manifest.

## Who Gets What?

Once completed, the six copies of the manifest are distributed as follows:

**Page 1:** Destination facility to destination state

**Page 2:** Destination facility to generator state

**Page 3:** Destination facility to generator

**Page 4:** Destination facility copy

**Page 5:** Transporter copy

**Page 6:** Generator's initial copy

### TIP

At the time of transport, the Transporter gets Pages 1-5 and the Generator gets Page 6.

### NOTE

Be sure to photocopy Page 1 of the manifest and send a copy to the CTDEP within 7-days of the date of shipment to the below address:

Hazardous Waste Management Program  
Manifest Program  
Department of Environmental Protection  
79 Elm Street


## Should I Retain Manifests and Land Disposal Restriction (LDR) Notification Forms?


A generator should retain a signed copy of each manifest for at least three years or until he/she receives a signed copy from the designated facility as confirmation of delivery. Generally, this signed copy must be kept at the facility for at least three years from the date the waste was accepted by the initial transporter. If a Land Disposal Restriction notification is received from the disposal facility (generally only if out-of-state) keep a copy of that document with the manifest for at least three years. Since the manifest documents proper disposal, retaining copies of manifests is strongly recommended.


## MANAGEMENT OF BATTERIES, LAMPS, MERCURY-CONTAINING EQUIPMENT, ELECTRONICS, AND PESTICIDES


---

In addition to Hazardous Waste, CESQGs commonly generate materials which are regulated as **universal waste**. There are five waste streams that can be managed as universal waste in Connecticut. These universal wastes are:

 **batteries** (All sizes and types of NiCad, silver button cell, lead acid, but **not** alkaline, nickel metal hydride, spent lithium ion or zinc air batteries)

 **lamps** (e.g., electric lamps including fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps)

 **mercury-containing equipment** (e.g., thermostats, thermometers, manometers, mercury switches)

 **electronics** (e.g., computers, televisions, VCRs, copiers, radios, cell phones, and small electronics)

 **pesticides:**

Certain pesticides may qualify as Universal Wastes when disposed. The kinds of pesticides that qualify include:

1. Pesticides that are under a mandatory recall by EPA, and others that have been voluntarily recalled by the registrant.

And,

2. Pesticides that are collected under a pesticide collection program.

### Is Universal Waste Training Required?

Employees who are responsible for managing universal waste (for example, a janitor that is responsible for replacing light bulbs) must be trained in the proper handling and emergency procedures for the universal waste they manage as part of their job.

### How Long Can I Store my Universal Waste?

You can store universal waste on site up to one year from the date the universal waste is generated. There are two classes of universal waste handlers. A *small quantity handler* of universal waste accumulates no more than 5,000 kilograms at any one time (This is equivalent to approximately 17,600, 48-inch lamps or approximately 450 computers) and a *large quantity handler* accumulates more than 5,000 kilograms at any one time (for example: big box stores and recycling centers).

## How do I Store my Universal Waste?

Universal waste must be managed in a way that prevents releases of any universal waste component or constituent to the environment. Used electronics must be stored in a building with a roof and four walls or in a cargo carrying portion of a truck. Damaged batteries, pesticides, mercury containing thermostats and equipment, lamps and cathode ray tubes (CRTs) must be stored in a container that is:

- Closed
- Structurally sound
- Compatible with contents
- Capable of preventing leakage, spillage, or damage

A minimum of 36-inch of space is recommended between universal waste containers.

### TIP

You can stack batteries and electronic equipment onto a pallet with shrink wrap or in a cubic yard (Gaylord) shipping container to keep secure.

Be sure to protect battery terminals by either capping or taping. Do not use conductive materials.

## How do I Mark Universal Waste Containers?

You must mark each universal waste container and/or item with an accumulation start date. You have one year to dispose of universal wastes from the start date listed on the container. Additional marking requirements are specific to the type of universal waste and are listed below:

- When labeling their respective containers the words "Universal Waste", "Waste" or "Used" must precede the type of waste, (i.e. "batteries", "mercury containing equipment", "lamps", and "electronics"). **For example: "Used Lamps"**
- Recalled pesticides should be marked with the manufacturers label and one of the markings from above. Unused pesticides should be marked with the manufacturer's label, DOT label, or other approved label and one of the markings listed above.



**For Example:** Company Z generates two sizes waste fluorescent bulbs - a 36-inch and 48-inch model. Each bulb is the “eco-friendly, green tip bulb”. On a particularly bad day, four 36-inch bulbs and four 48-inch bulbs become spent. The maintenance worker removes them and deposits them in the only storage container they have, which is for 36-inch bulbs. The top is placed over the 48-inch bulbs which are now sticking out of the container by 12 inches. This should not be a problem says the electrician - after all, they are “eco-friendly bulbs” and they are covered.

Unfortunately, even “eco-friendly bulbs” must follow universal waste management rules. The facility should immediately order 48-inch bulb containers and transfer the longer bulbs to the new containers so that the tops can be correctly applied. Each container should be labeled as “Universal Waste - Lamps” with a start date.

## Off-Site Shipments

Universal waste must be shipped to a facility authorized to accept universal waste in accordance with applicable DOT regulations. In addition, if you are a large quantity handler of universal waste, you must track your shipments with the use of a log, invoice, or shipping document. This tracking document must include the following information:

- ◆ Your company name and address
- ◆ Quantity of each type of universal waste
- ◆ Date of shipment

You need to keep these records on file for three years from the date of shipment.

## What if There is a Spill or Release Involving Universal Waste?

In the event of a release of universal waste and if it is safe to do so, you should:

1. Immediately contain the release
2. Determine whether any material resulting from the release is a hazardous waste
3. Manage that material as hazardous waste. Incidental breakage of fluorescent lamps may be managed as universal waste.

## USED OIL

---

One waste stream commonly generated by CESQG's is used oil. [Used oil](#) is usually not a hazardous waste, however, it must be managed in accordance with used oil management regulations.

### What is Used Oil?

Used oil includes used crankcase (engine) oil and other motor vehicle oils; used liquid and semi-solid gear, chain, and ball bearing lubricants; used metalworking fluids and oils; used heat transfer oils; and used hydraulic and compressor oils. Materials that contain or are contaminated with used oil can also fall under the definition of used oil, such as used oil filters, oily rags and wipers, used absorbents, and oily wastewater.

### Is it Hazardous?

Used oil is not considered hazardous waste unless it is mixed with a hazardous waste such as a chlorinated solvent. Simply stated, DO NOT mix used oil with hazardous waste.

### Do I Have to Test my Used Oil?

Yes. When testing used oil for hazardous constituents, four steps must be taken in this order:

1. Determine if it is mixed with any listed hazardous waste. If it has, it must be managed as a listed hazardous waste.
2. Determine if it has been mixed with any characteristic hazardous waste. If it has, it must be tested to determine if it is characteristically hazardous, and if it is, it must be managed as a hazardous waste.
3. Test for total halogens. If the oil contains total halogens of greater than 1,000 parts per million (ppm), it must be managed as hazardous waste.
4. If the oil tested at over 1,000 ppm of halogens, you can rebut the presumption of mixing by having the oil tested for the presence of chlorinated solvents. If no listed hazardous waste solvent is present over 100 ppm, the oil does not have to be managed as hazardous waste.

Used oil testing can be conducted in a laboratory, or you can test for total halogens using inexpensive, EPA approved total halogen field testing kits. These total halogen test kits are available from numerous sources, including industrial supply or health and safety supply companies. The following is not an endorsement of the company or their product, but offered for your information: CHLOR-DTECT 1000 or CHLOR-D-TECT Q4000 (available from Dexsil Corp, Hamden, CT, [www.dexsil.com](http://www.dexsil.com)).



## What are the Requirements for Used Oil Storage in Tanks or Containers?

- Place the tank or container on an impervious base. If the tank or container is outdoors, you must provide for secondary containment equal in volume to the capacity of the storage tank. If the area is uncovered, the secondary containment must be large enough to contain additional rainwater and/or snow. If the tank or container is indoors, no secondary containment, device or structure is required.
- Label the tank or container **"Used Oil"**.
- Prepare a Spill Prevention, Control, and Countermeasures (SPCC) Plan if you store more than 1,320 gallons of used (or new) oil above-ground in tanks or containers over 55 gallons in size.



## What are Recommended Practices for Used Oil Storage in Tanks or Containers?

- Locate the tank or container in an aboveground area, preferably roofed, that will prevent unauthorized access or vandalism, minimize possibility of fire or explosion and accidental release of oil to the environment.
- Lock the tank or container's fill spout when not in use.
- Visually inspect the tank or container on a regular basis for leaks or malfunctions.
- Instruct all employees who handle used oil on the proper operation and management of the oil storage area. Assign one person the responsibility for monitoring oil storage.
- Use kitty litter, saw dust or a commercially available product to absorb oil from minor spills and properly dispose of any used absorbents.

### NOTE

Keep records of used oil collection. If only used oil generated on-site is stored in the tank or container, no state permits are needed to install an above ground collection tank, but check with your municipality, because local permits might be needed.

## How Should I Manage the Used Oil I Generate?

Used crankcase oil, automatic transmission fluid, power steering fluid and hydraulic fluid are all considered used oil and can be mixed and managed together. Collect and store used oil in a secure collection tank or drum, separate from other wastes. There are two options for managing used oil.

1. Burn the used oil in space heaters for energy recovery (i.e., to heat your shop), providing the heater burns only used oil generated on-site or received from “do-it-yourself” oil changers.

**NOTE:** Used oil heaters must:

- 🔥 have a maximum design capacity of not more than 0.5 million BTU’s per hour; and
  - 🔥 vent combustion gases outside the building; and
  - 🔥 burn only used oil that you generate or that you have collected from your do-it-yourself customers.
2. Contract with a permitted waste oil transporter to haul oil to a permitted recycling facility. Commercial haulers of such used oil must be permitted to transport used oil in Connecticut. See the [DEP: Waste Transporters and Facilities](#).

## How Should Used Oil Absorbent Material Be Disposed?










Materials that *contain* or are *contaminated with* used oil can also be considered used oil. The most common of these materials are used oil *absorbent pads, rags and wipers*, and *absorbents* (such as kitty litter, speedi-dri, and absorbent pigs).

If you produce waste oil absorbent material as a result of maintenance, you must collect all used oil absorbent material, test for hazardous constituents and transport either as hazardous waste or used oil, depending on the test results.

However, if the absorbents do not have free-draining oil and are not going to be burned for energy recovery, they are no longer subject to regulation as used oil. In this case, these soaked absorbents must have a hazardous waste determination and be disposed of as hazardous or Connecticut-Regulated Wastes accordingly.








### Required Recycling

To ensure compliance with the Connecticut **mandatory** recycling law everyone who generates solid waste must make provision for the separation of recyclables from other solid waste. Simply stated, in Connecticut, recycling is state law. Items that are **required** to be recycled include:

-  Glass & metal food and beverage containers
-  Corrugated cardboard
-  Newspaper
-  White office paper
-  Scrap metal
-  Nickel cadmium rechargeable batteries (from electronics)
-  Waste crankcase oil
-  Lead acid batteries (from vehicles)
-  Leaves (must be composted)

*Grass* is banned from disposal at landfills and resource recovery facilities (incinerators). Grass clippings should be left on the lawn.

Items that **should** be recycled include:

-  Plastic containers with a number  or 
-  Magazines
-  Drink boxes, and mini-juice cartons
-  Discarded mail
-  Used electronics [e.g., personal computer, laptops & Notebooks, monitors, printers, toner & ink cartridges, servers & networking equipment, scanners, digital cameras, keyboards, mice & peripherals, speakers, cables, cords & wires, small handheld electronics, cell phones & PDAs]

To ensure that the State's mandate is met, companies should:

1. Conduct a solid waste audit and determine what recycling is deficient.
2. Maintain proof of recycling compliance with all mandatory items. This may be in the form of contract(s) with the hauler(s), market(s), etc.
3. Designate a Recycling contact for the company.
4. Develop an operations manual/plan for recycling. If you have an Environmental Health & Safety Procedures/Plan, incorporate your recycling plan and update it every 2 to 3 years. The basics for the plan should include provisions for collection (internally), storage, and disposition of the recyclables. The CTDEP web site has a [Business Recycling Profile](#) form and additional guidance is on the [Reduce/Reuse/Recycle At Work](#) web page.

## How Does Waste Minimization Help Me?

If you minimize the amount of waste you generate on a monthly basis, you may also minimize your compliance obligations. Waste minimization can also help by reducing:

- Waste management costs
- Raw material purchase costs
- Raw material and product losses
- Environmental clean up liability
- Possibility of DEP enforcement and penalties
- Workplace accidents and worker exposure
- The quantity and toxicity of hazardous and solid waste generation
- Waste management recordkeeping and paperwork burden
- Insurance costs

At the same time, waste minimization can improve:

- Production efficiency
- Profits
- Good community relations
- Product quality
- Overall environmental performance

**Source Reduction** - any action that reduces the amount of waste exiting from a process

- Process modification
- Chemical substitution
- Improvements in chemical purity
- Improvements in housekeeping
- Improvements in management practices
- Increase in machine efficiency
- Recycling within process
- Inventory management

## Hazardous Waste Minimization Tips

Waste minimization means finding ways to reduce or eliminate the generation of hazardous waste. Some general ways to do this include:

- Alter work practices and/or equipment so that you use less virgin material. Obviously, using less virgin material means generating less waste.
- Switch from hazardous products to non-hazardous ones.
- Recycle or reuse materials on-site.
- Eliminate activities that generate hazardous waste (e.g., by discontinuing certain services, or sub-contracting them out to off-site companies).

Some specific waste minimization options for your business include:

- ◆ **Used Oil:** Keep hazardous waste and other contaminants out of your used oil so that it does not have to be handled as a hazardous waste.
- ◆ **Waste Fuel (gasoline, diesel):** Send the waste fuel that you generate for recycling (fuel blending) rather than for disposal or incineration. Waste fuels that are recycled in this way are exempt from regulation as hazardous waste.
- ◆ **Parts Washing:** Switch from a hazardous parts washing solvent (low-flash mineral spirits, chlorinated solvents) to a non-hazardous one (high-flash mineral spirits or water-based cleaners).
- ◆ **Paint Stripping:** Instead of sandblasting or using hazardous paint strippers (methylene chloride) to remove paint, use non-hazardous strippers or dustless sanders.
- ◆ **Paints/Solvents:** Look into having painting done by off-site contractors. If you must paint on-site, use as little paint and as little solvent as possible to get the job done. Evaluate use of less hazardous paints (latex instead of oil-based; lower VOC paints, etc.). Look into non-hazardous solvents for cleaning up. Reuse solvents by settling out the paint solids or recycle them in an on-site solvent recycling still.
- ◆ **Rags/Wipers:** Use only non-hazardous cleaning agents/solvents for cleanup. Send your rags to an industrial laundry instead of disposing of them.
- ◆ **Batteries (Lead-Acid and Household Types):** Replace hazardous batteries (NiCad, lead acid, etc.) with nonhazardous batteries (alkaline, nickel metal hydride, etc.) whenever possible.
- ◆ **Old Virgin Products:** Try not to stock items which are hazardous. If this is not possible, see if the manufacturer will take the material back, or if there is someone else who can legitimately use the product.

## SUGGESTED BEST MANAGEMENT PRACTICES FOR CESQGS

### Managing Your Hazardous Waste in Container(s)

Containers are **portable** devices used for collecting, storing, treating and transporting hazardous waste. They can be of any size and, generally, can be easily moved. Some common examples include five-gallon safety cans and 55-gallon drums.

#### How Long Can I Keep Containers On-site?

A CESQG has no time limit for storage of hazardous waste as long as the amount of waste does not exceed 2,200 lbs (1,000 kilograms or about 260 gallons). However, it is strongly recommended that waste be removed on a yearly basis, even if the amount of waste on site is far less than 2,200 lbs.

#### What are the Best Management Practices for Containers?

- **Labeling** – Hazardous waste containers should be marked or labeled with the words “Hazardous Waste” and other words that identify the contents of each container or tank, such as “flammable”, “acid”, “alkaline”, “cyanide”, “reactive”, “explosive”, “halogenated solvent” or the chemical name. If the material in the container is unknown, it must be managed as a hazardous waste until laboratory analysis provides the information necessary for proper hazardous waste determination. The label should identify that the material is unknown and that laboratory analysis is pending.



- **Container Condition** - All containers used for the storage of hazardous waste should be in good condition. If a container begins to leak, transfer the contents to another container. Containers should be closed, except when adding or removing waste.
- **Container storage area(s)** –

- Hazardous waste should be stored in areas that provide secondary containment to prevent runoff of accumulated liquids. The base of the area should be impervious to the type of waste stored and free from cracks, gaps, chips, etc. If the container(s) is/are stored in a secondary containment system, the containment system should be able to contain the volume of the largest container or 10% of the volume of all containers in storage, whichever is greater.



- The area should be designed to prevent liquids from coming in contact with the containers. Placing the containers on raised platforms (pallets) may accomplish this.
- Adequate space should be maintained around the containers to allow unobstructed movement of personnel and emergency response equipment. A minimum of 30-inches of space around the container is recommended.
- The storage area(s) should be inspected for signs of leakage, corrosion, deterioration, etc. Inspections should be conducted at least weekly and each time waste is added to or removed from the area. Containers should be compatible with the waste and cannot contain residue that might be incompatible with the waste being stored. Examples of compatible containers for some waste types are nitric acid in stainless steel and flammable liquids in steel containers.
- Do not place containers near incompatible materials or wastes unless they are separated by a berm, dike, wall or other suitable device.
- Immediately replace or over-pack any damaged or leaking containers. Do not store hazardous waste within 50 feet of the facility property line, or immediately adjacent to rivers, streams, or shorelines.



## Managing Your Hazardous Waste in Tank(s)

A tank is a **stationary** device used to accumulate, store, and treat hazardous waste. Due to their size, tanks are usually not used by CESQGs to store hazardous waste. If you use a tank to accumulate hazardous waste make sure that you:

- ◆ Place the tank on an impervious base with secondary containment to capture any leaks or spills
- ◆ maintain the tanks to ensure they remain in good condition
- ◆ ensure that the fill opening for the tank is properly equipped to prevent spillage
- ◆ keep the fill opening closed at all times except when filling the tank
- ◆ be sure that the waste(s) that you place in the tank are compatible with the tank
- ◆ do not store wastes that are incompatible with one another in the same tank



## Conducting Inspections





Inspect all waste storage areas on a regular basis (e.g., weekly), looking for leaks, spills, damaged containers, and other hazardous conditions. Correct any problems as quickly as possible. Document your inspections in a written inspection log.

### Why Should I Perform Inspections?

You should inspect your facility for any deficiencies which may cause or lead to a release of hazardous waste to the environment or may pose a threat to human health. By performing routine inspections, you can monitor yourself to ensure that you are properly managing your wastes at your facility and you may reduce the potential for any problems to continue undetected and uncorrected posing a threat to human health and the environment, as well as the associated liability.

### How Do I Perform Inspections?

First, develop and follow a schedule (a description of how and when the inspection is to be conducted and a list of items of concern that require visual observation) for conducting inspections at your facility. The schedule should include instructions describing how to complete the inspection and inspection log, as well as the frequency of the inspections for the items in the schedule. It is suggested that the following items be included in the schedule:

-  Container condition
-  Containers labeled with the words “hazardous waste” and a description of the contents and the date of accumulation.
-  Quantity in storage
-  Containment area condition

After conducting inspections, remedy any problems that the inspection reveals. You should also record inspections in an inspection log or summary. For your assistance, a sample log format for container storage area is included in [Appendix 2](#). You may use these samples as a model in developing an inspection log specific to your facility or, if the Sample Log is consistent with your facility needs, you may simply photocopy it and use it to record your inspections.



## Planning for Emergencies

### How Can I Plan for Emergencies?

Planning for emergencies requires that you take actions to first **PREVENT** accidents from occurring and to also be **PREPARED** to act when accidents do occur. The hazardous waste regulations and the best management practices described in this handbook are intended to prevent or minimize emergencies.

One way to prepare for emergencies is to develop written emergency procedures to help you plan for accidents that could possibly occur at your facility. If there is an emergency, the emergency procedures must be carried out immediately and can be thought of as a set of answers to a series of "what if" questions. For example:

"What if there is a fire in the area where solvents are stored?" or




"What if I have a spill of hazardous waste or one of my containers leaks?"

Make your own list of "what if" questions and write down specific steps that you would take if such an emergency occurred. Review these with your employees so they are also informed about their responsibilities in the event of an emergency.

It is suggested that you implement the following measures:

**1. Designate an "Emergency Coordinator"** - At least one employee with the responsibility for coordinating emergency response measures specified below, should be either on the premises or on call (i.e., available to respond to an emergency by quickly reaching the facility) at all times. Having alternative coordinators available to cover when the emergency coordinator is not available (e.g. sick or on vacation) is recommended.

**2. Post Emergency Information** - Post the following information next to all telephones located in waste handling areas (*an example is to the right*) and store emergency contact numbers in cell phones, when possible:

-  name and telephone number of the emergency coordinator
-  location of fire extinguishers and spill control material, and, if present, fire alarm
-  telephone number of the fire department, (unless the facility has a direct alarm) and DEP Emergency Response and other emergency response agencies.

A sample [emergency posting](#) is included in Appendix 3 (Page 38) for your reference.

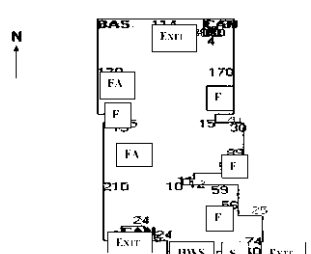
Generic College  
123 College Street  
Collegetown, CT






**EMERGENCY POSTING**  
LOCATION OF FIRE EXTINGUISHERS AND SPILL CONTROL MATERIAL, AND, FIRE ALARM

**Emergency Contacts:**  
Emergency Coordinator Name: **Jon Doe**  
Emergency Coordinator Phone: Home: **860-424-4059**  
Office: **860-808-5386**  
Emergency Coordinator Name: **Jon Doe**  
Emergency Coordinator Phone: Home: **860-424-4059**  
Office: **860-808-5386**

Fire Department: **9-1-1 or Phone: \_\_\_\_\_**  
Police Department: **9-1-1 or Phone: \_\_\_\_\_**  
Ambulance: **9-1-1 or Phone: \_\_\_\_\_**  
State Response/Hotline: **860-424-3338 or 866-377-7745**  
National Response Center: **1-800-424-8802**  
Other: \_\_\_\_\_

Code	Description
F	Fire Extinguisher
FA	Fire Alarm
S	Spill Control Material
Exit	Emergency Exit
HWSA	Hazardous Waste Storage Area



3. **Minimize the potential risks from fires, explosions or other accidents.** Your facility should be equipped with:
  -  A telephone, cell phone, or a hand-held, two way radio, capable of summoning emergency assistance from local police and fire departments or emergency response teams near the hazardous waste storage area.
  -  Portable fire extinguishers, fire control devices, spill control materials, and decontamination supplies. Look at the product Material Safety Data Sheet for suggested emergency response equipment for the materials you use and have that equipment available.
  -  Test and maintain all equipment to ensure proper operation.
  -  Water at adequate volume and pressure to supply water hose streams, foam-producing equipment, automatic sprinklers, or water spray systems.
  -  An internal communications or alarm system capable of providing immediate emergency instruction to all personnel, if applicable.
4. **Maintain adequate space** - Be sure to maintain sufficient space around your hazardous waste storage containers to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment in an emergency.
5. **Safely Handle Ignitable and Reactive Wastes** - Separate ignitable and reactive wastes from sources of ignition or reaction, such as open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), and radiant heat. Store ignitable or reactive wastes in securely closed containers and at least 50 feet from your property line, if possible.
6. **Post “No Smoking” Signs** - Post “No Smoking” signs in conspicuous places in all areas where ignitable and reactive wastes are stored.

### Know your Emergency Response Contacts

Share information about your facility with the local police and fire departments, etc. By doing this, you can familiarize police, fire departments, and emergency response teams with the layout of your facility, properties of hazardous waste handled at your facility and associated hazards, areas where facility personnel would normally be working, and possible evacuation routes. If there is an emergency, the emergency responders will have the information needed to keep their personnel safe, to use appropriate fire suppression equipment, etc.

## Responding to Emergencies

The emergency coordinator or his designee must respond to any emergencies that arise. For example:

### **Report Spills, Fires or other Environmental Emergencies to the CT DEP 24 hours per day at**

**860-424-3338**  
**or Toll Free at**  
**1-866-DEP-SPIL**  
**(1-866-337-7745)**

**FIRE** - In the event of a fire, call the fire department and, if you can do so safely, attempt to extinguish it using a fire extinguisher.

**SPILL** - In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil. The law requires that you **report uncontrolled petroleum and chemical discharges and emissions to the CTDEP Emergency Response and Spill Prevention Division immediately at the number above.**

In many cases, the spilled material and contaminated soil and absorbents may have to be managed and disposed of as a hazardous waste.

**RELEASE TO THE ENVIRONMENT** - In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, immediately notify the

**National Response Center (24-hour toll free number 800-424-8802),**

**as well as DEP Emergency Response.** The report must include the following information:

- Name, address, and, if the CESQG has one, the EPA I.D. Number
- Date, time, and type of incident (e.g., spill or fire)
- Quantity and type of hazardous waste involved in the incident
- Extent of injuries, if any
- Estimated quantity and disposition of recovered materials, if any

## Personnel Training

Provide training for all personnel whose job responsibilities include hazardous waste management. Include training in proper waste handling and emergency response procedures.

### Why Should I Train My Personnel?

The purpose of training your employees is to reduce the potential for mistakes or mishandling of wastes which might threaten, and may possibly harm, human health and the environment. By reducing the potential for mistakes and mishandling of wastes, you are, in turn, reducing any potential liabilities you might incur as a result of any harm done to the environment or to human health.

### How Do I Train My Personnel?

- Inform your employees of the hazards associated with your waste.
- Instruct your employees about what to do should an emergency arise at your facility.
- Inform your employees of the locations and proper use of fire control and spill control equipment within your facility and how to operate any alarm systems at your facility.
- Instruct your employees about safe hazardous waste handling procedures.
- Inform your employees about the Hazardous Waste Management Regulations applicable to your company.

### Should I Keep a Record of the Training?

It is recommended that you keep a written record of all training that is provided. A sample of a "[Record of Employee Hazardous Waste Management Training](#)" is included in Appendix 5 (Page 40) for your reference. You may use it as guidance for preparing your own posting, or simply photocopy the sample, and keep it on file at your business.

## APPENDIX 1 – HAZARDOUS WASTE DETERMINATION

### Hazardous Waste Determination Summary Sheet

(See opposite side for instructions.)

**Based on the Information Below and Attached, this waste is:**

**Hazardous**     **Non-hazardous**     **Universal Waste**     **Used Oil**

**General Information**

Waste Stream:			
Process or Source of Waste:			
Waste Generation Rate (gal, lb, or kg per month):			
Flash Point (°F):	pH:	Specific Gravity:	Oxidizer? <input type="checkbox"/> Yes <input type="checkbox"/> No
Physical State at Room Temp: <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Semi-Solid <input type="checkbox"/> Gas			

**Hazardous Waste Classification**

Is this Waste:	Yes	No	Basis for Determination (attach documentation)	
			Analysis	Knowledge of Process
Ignitable (D001)	<input type="checkbox"/>	<input type="checkbox"/>		
Corrosive (D002)	<input type="checkbox"/>	<input type="checkbox"/>		
Reactive (D003)	<input type="checkbox"/>	<input type="checkbox"/>		
Toxic (TCLP)	<input type="checkbox"/>	<input type="checkbox"/>		
List all applicable codes:				
F-Listed	<input type="checkbox"/>	<input type="checkbox"/>		
List all applicable codes:				
K-Listed	<input type="checkbox"/>	<input type="checkbox"/>		
List all applicable codes:				
U-Listed	<input type="checkbox"/>	<input type="checkbox"/>		
List all applicable codes:				
P-Listed	<input type="checkbox"/>	<input type="checkbox"/>		
List all applicable codes:				
Universal Waste	<input type="checkbox"/>	<input type="checkbox"/>	If yes, which category: <input type="checkbox"/> Batteries <input type="checkbox"/> Pesticides <input type="checkbox"/> Mercury Lamps <input type="checkbox"/> Mercury-Containing Devices <input type="checkbox"/> Used Electronics	
Used Oil	<input type="checkbox"/>	<input type="checkbox"/>	If yes, has it been tested for total halogens? <input type="checkbox"/> Yes <input type="checkbox"/> No    Result (ppm):	
Is this waste exempt from regulation? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Basis for exemption (attach documentation):				

Name and Title of Reviewer: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Note:** This determination must be reviewed annually and whenever there are process or raw material changes that could affect the waste.

## Notes and Instructions for Completing the Summary Sheet

---

**1. Begin by entering information into the "General Information" section.** If you do not have some of the information (for example, flash point, pH, specific gravity, or whether or not a waste is an oxidizer), there are two ways to obtain this information. The first way is to use data on the virgin products that went into the waste, such as Material Safety Data Sheets ("MSDSs") or product data sheets, both of which are available from the product manufacturer. The second way is through laboratory analysis. To find a laboratory, look in the Yellow Pages under "Laboratories - Analytical" or go to [www.ct.gov/dph](http://www.ct.gov/dph) and enter "Environmental Laboratories" in the search box.

**2. Next enter the information in the "Hazardous Waste Classification" section.** To help you figure out if your wastes are ignitable, corrosive, reactive, or toxic, go to [www.ct.gov/dep/hazardouswaste](http://www.ct.gov/dep/hazardouswaste) and see the DEP's Hazardous Waste Determination/Knowledge of Process Fact Sheet. For more information on these wastes, and on which wastes are listed hazardous wastes (i.e., F, K, U, or P), go to the EPA Website at <http://www.epa.gov/epawaste/hazard/wastetypes/index.htm>. As you determine whether or not your waste is hazardous for each of the above categories, check off either "yes" or "no" and indicate whether the basis for your determination is laboratory testing or "knowledge of process" information. For the four "characteristic" hazardous wastes (ignitable, corrosive, reactive, toxic), you may be able to use "knowledge of process" to eliminate some or all hazardous constituents, if you have accurate information about the materials that go into your process. For the four types of listed hazardous wastes (F, K, U, and P), it may only be necessary to note in the "knowledge of process" section that a review of the waste and the process that generated it confirms that the listings do not apply to the waste.

**3. For guidance on what kind of information can be used as "knowledge of process"** see the Hazardous Waste Determination/Knowledge of Process" fact sheet referenced above. Regardless of whether you use laboratory testing or "knowledge of process," attach all the documentation that you used for your determination to this Summary Sheet.

**4. Caution!** Be careful when using MSDSs as "knowledge of process" information. First, these sheets are not always accurate and do not always list all the toxic or hazardous ingredients in a particular virgin material. Second, MSDSs cannot account for any contaminants that may be introduced to the material as it is used (example: a degreasing solvent MSDS will not include the chemicals that might contaminate the solvent during use).

**5. For more information on Universal Waste,** go to [www.ct.gov/dep/hazardouswaste](http://www.ct.gov/dep/hazardouswaste) and see the Universal Waste Fact Sheet.

**6. For more information on used oil,** go to [www.ct.gov/dep/hazardouswaste](http://www.ct.gov/dep/hazardouswaste) and click on the "Used Oil" link in the left-hand column. In particular, see Used Oil Fact Sheet #7 or #8 for a step-by-step description of used oil testing.

**7. Exemptions from regulation.** The last line in the classification section is used to document if the waste is subject to any of several exemptions that exist for certain wastes (these are mostly wastes that are recycled in certain special ways). These exemptions are detailed in the federal hazardous waste regulations at 40 CFR 261.2, 261.4, and 261.6, and may be accessed by going to [www.ct.gov/dep/hazardouswaste](http://www.ct.gov/dep/hazardouswaste) and clicking on "Hazardous Waste Management Regulations."

**8. Important!** DEP regulations require that hazardous waste determinations be repeated annually, or whenever there are process changes that could affect a waste. As a result, this sheet should be regularly reviewed and updated with a new signature and date whenever either of these events occurs.

## Toxic Characteristic Waste Codes

Metals and Volatile Organic Compounds, Pesticides, Semi-Volatile Organic Compounds and Herbicides

Metals			Pesticides		
Contaminant	EPA HW #	Regulatory Level (mg/L)	Contaminant	EPA HW #	Regulatory Level (mg/L)
Arsenic	D004	5.0	Chlordane	D020	0.03
Barium	D005	100.0	Endrin	D012	0.02
Cadmium	D006	1.0	Heptachlor (and its epoxide)	D031	0.008
Chromium	D007	5.0	Lindane	D013	0.4
Lead	D008	5.0	Methoxychlor	D014	10.0
Mercury	D009	0.2	Toxaphene	D015	0.5
Selenium	D010	1.0			
Silver	D011	5.0			
Volatile Organic Compounds			Herbicides		
Contaminant	EPA HW #	Regulatory Level (mg/L)	Contaminant	EPA HW #	Regulatory Level (mg/L)
Benzene	D018	0.5	2,4-D	D016	10.0 mg/L
Carbon tetrachloride	D019	0.5	2,4,5-TP (Silvex)	D017	1.0 mg/L
Chlorobenzene	D021	100.0			
Chloroform	D022	6.0	Semi-Volatile Organic Compounds		
1,2-Dichloroethane	D028	0.5	Contaminant	EPA HW #	Regulatory Level (mg/L)
1,1-Dichloroethylene	D029	0.7	o-Cresol	D023	200.0
Methyl ethyl ketone	D035	200.0	m-Cresol	D024	200.0
Tetrachloroethylene	D039	0.7	p-Cresol	D025	200.0
Trichloroethylene	D040	0.5	Cresol	D026	200.0
Vinyl chloride	D043	0.2	1,4-Dichlorobenzene	D027	7.5
			2,4-Dinitrotoluene	D030	0.13
			Hexachlorobenzene	D032	0.13
			Hexachlorobutadiene	D033	0.5
			Hexachloroethane	D034	3.0
			Nitrobenzene	D036	2.0
			Pentachlorophenol	D037	100.0
			Pyridine	D038	5.0
			2,4,5-Trichlorophenol	D041	400.0
			2,4,6-Trichlorophenol	D042	2.0

## F-Listed Wastes

EPA F-Listed wastes are wastes from manufacturing and industrial processes (non-specific sources) such as solvents that have been used in cleaning or degreasing operations. F-Listed wastes must be disposed as hazardous waste. Make sure containers are properly labeled "Hazardous Waste".

### "F" Listed Solvents

<u>Contaminant</u>	<u>EPA HW#</u>
Acetone	F003
Benzene	F005
iso-Butanol	F005
n-Butyl alcohol	F003
Carbon disulfide	F005
Carbon tetrachloride	F001
Chlorobenzene	F002
Chlorinated fluorocarbons	F001
Cresols	F004
Cresylic acid	F004
Cyclohexanone	F003
2-Ethoxyethanol	F005
Ethyl acetate	F003
Ethyl benzene	F003
Ethyl ether	F003
Methanol	F003
Methylene chloride	F001, F002
Methyl ethyl ketone	F005
Methyl isobutyl ketone	F003
Nitrobenzene	F004
2-Nitropropane	F005
Orthodichlorobenzene	F002
Pyridine	F005
Tetrachloroethylene	F001, F002
Toluene	F005
1,1,1-Trichloroethane	F001, F002
1,1,2-Trichloroethane	F002
1,1,2-Trichloro-1,2,2-trifluoroethane	F002
Trichloroethylene	F001, F002
Trichlorofluoromethane	F002
Xylene	F003

**"F" Listed Solvents** *Solvent blends containing more than 10 percent by volume of one or more of these solvents and distillation bottoms from the recovery of these spent solvents and solvent mixtures are also often "listed."*



## APPENDIX 2 – HAZARDOUS WASTE INSPECTIONS

---

### Why Is It a Good Idea to Conduct Inspections?

Even if you very carefully place your hazardous waste into proper containers, and store them in a well-designed, secure storage area, it is possible things can go wrong that might result in spills, fires, or other emergencies. In addition, important identifying items such as markers or labels can fade or fall off. As a result, DEP strongly recommends that CESQGs perform regular inspections of hazardous waste storage and handling areas, and safety and emergency equipment, and record these inspections in an inspection log.

### How Often Should I Perform Inspections?

<u>Recommended Items to Be Inspected</u>	<u>Recommended Frequency of Inspection</u>
Containers and Container Storage Areas	Weekly
Containment Systems	Weekly
Tanks and Ancillary Equipment	Daily
Loading and Unloading Areas (when in use)	Daily
Safety and Emergency Equipment	Monthly
Battery Storage Areas	Weekly

### How Should Inspections Be Conducted?

Inspections should be conducted only by designated personnel that have been instructed in how to do them properly and properly fill out the inspection log forms (see following page). Think carefully about which areas and items should be inspected. As noted above, container and/or tank storage areas should be inspected regularly, while other area, such as loading/unloading areas need only be inspected when in use. The last of these includes things like security systems, alarm systems, fire extinguishers, spill cleanup equipment, etc., that could be important in a hazardous waste emergency. In order to ensure that inspections are effective, DEP recommends that CESQGs prepare a brief “inspection schedule” or plan that includes instructions on how to perform the inspection and complete the inspection log, identify how often inspections should occur, and provides needed details for the inspection of certain items. For example, details should be provided regarding which safety and emergency equipment needs to be checked, and what this equipment should be checked for (e.g., number of items, missing or broken items, uncharged extinguishers, etc.).

## Inspection Log for Hazardous Waste Storage Areas

Instructions: Please use ink. Results of weekly inspections of hazardous waste containers and container storage areas should be recorded in this log. If any deficiencies are found, a description of the deficiencies should be recorded in the "Observation" column. Prompt and immediate action should be taken to correct any deficiencies observed. The date and the nature of all corrective actions should be recorded in the "Corrective Actions" column. Once this log is completed, it should be maintained in binder and should be kept for at least three years from the date of the inspection. These inspection logs should be made available for inspection by State DEP inspectors.

Date of Inspection: \_\_\_\_\_ Time of Inspection: \_\_\_\_\_ a.m./p.m. Full Name of Inspector: \_\_\_\_\_

Item/Condition to be checked	Yes	No	Observation/ Deficiency	Corrective Actions and Date
Are all containers closed?				
Are all containers in GOOD condition (NOT leaking, rusted, bulging or otherwise in poor condition)?				
Are all containers marked?				
Does the marker include the words "Hazardous Waste" and a description of the contents?				
Are all markers legible and visible for inspection?				
Are all containers marked with accumulation dates (recommended)?				
Are dates less than 1 year (recommended)?				
Amount of waste on site no more than 1,000 kg (2200 lbs)?				
Is there adequate space around containers?				
Are the container stored on an impermeable base that is bermed?				
Are the base and berm free of gaps, cracks and damage?				
Is the base free of spills, leaks, or other accumulation?				
Are incompatible materials separated by a wall or a berm?				
Are all safety & emergency equipment present and in usable condition?				

Note: If the "NO" column is checked, corrective action should be taken and the "Observation" and "Corrective Action" Columns should be completed.

**Comments or Discrepancies:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## APPENDIX 3 – EMERGENCY POSTING

Company: \_\_\_\_\_

### Emergency Posting

Location of Fire Extinguishers and Spill Control Material, and, Fire Alarm

**Emergency Contacts:**

Emergency Coordinator Name: \_\_\_\_\_

Emergency Coordinator Phone: Home: \_\_\_\_\_  
Office: \_\_\_\_\_

Emergency Coordinator Name: \_\_\_\_\_

Emergency Coordinator Phone: Home: \_\_\_\_\_  
Office: \_\_\_\_\_

Fire Department: **9-1-1** or Phone: \_\_\_\_\_




Police Department: **9-1-1** or Phone: \_\_\_\_\_

Ambulance: **9-1-1** or Phone: \_\_\_\_\_

State Response/Hotline: **860-424-3338 or 866-DEP-SPIL**

National Response Center: **1-800-424-8802**

Other: \_\_\_\_\_

<u>Code</u>	<u>Description</u>	<b>FACILITY DIAGRAM</b>
<b>F</b>	Fire Extinguisher	<div style="border: 1px solid black; height: 150px; width: 100%;"></div>
<b>FA</b>	Fire Alarm	
<b>S</b>	Spill Control Material	
<b>Exit</b>	Emergency Exit	
<b>HWSA</b>	Hazardous Waste Storage Area	
☆	Evacuation Rally Point	
	Telephones	
	Evacuation Route	<p><b>Compass Pointing North:</b> </p>

## APPENDIX 4 – GENERATOR CATEGORY COMPARISON

Generator Category Comparison Chart			
	CESQGs	SQGs	LQGs
Quantity Limits	≤220 lbs/month ≤2.2 lbs/month of acute hazardous waste ≤220 lbs/month of acute spill residue or soil	>220 to 2,200 lbs/month ≤2.2 lbs /month of acute hazardous waste ≤220 lbs/month of acute spill residue or soil	≥2,200 lbs/month >2.2 lbs /month of acute hazardous waste >220 lbs/month of acute spill residue or soil
EPA ID Number	Not required	Required	Required
On-Site Accumulation Quantity	≤2,200 lbs	≤2,200 lbs	No limit
Accumulation Time Limits	None	≤180 days	≤90 days
Storage Requirements	None	Basic requirements with technical standards for tanks and/or containers	Full compliance for management of tanks, containers, drip pads, or containment buildings
Sent To:	State-approved or RCRA permitted/interim status facility	RCRA permitted/interim status facility	RCRA permitted/interim status facility
Manifest	Not required	Required	Required
Biennial Report	Not required	Not required	Required
Personnel Training	Not required	Basic training required	Required
Contingency Plan	Not required	Basic plan/Posting of Emergency Information	Full plan required
Emergency Procedures	Not required	Required	Full plan required
Inspection Program	Not required	Required	Required
Universal Waste Program	All categories have the option of managing as universal waste or hazardous waste		
Used Oil Program	Required	Required	Required
Recycling Program	Required	Required	Required
DOT Transport Requirements	If required by DOT	Yes	Yes

## APPENDIX 5 – TRAINING RECORD FORM

### Record of Employee Hazardous Waste Management Training

Employee Name: \_\_\_\_\_ Job Title: \_\_\_\_\_

Employee's Hazardous Waste Management and/or Emergency Response Duties:

\_\_\_\_\_

\_\_\_\_\_

#### Summary of Hazardous Waste Training:

Date of training: \_\_\_\_\_ †Type of training: \_\_\_ introductory \_\_\_ refresher

Instructor Name: \_\_\_\_\_ Employee Signature: \_\_\_\_\_

**Check** the areas covered during hazardous waste training:

Accumulation of Wastes		Manifests		Emergency Response	
	Hazards of each waste		Proper completion		Evacuation Routes
	Quantity limits		Copy distribution		Telephone Posting
	Storage time limits		Land Disposal restriction notice		Local authority arrangement
Containers		Recordkeeping			Equipment location
	Keeping containers closed		Hazardous waste determinations		Available emergency equipment
	Labeling and marking		Manifest/shipping papers		Use of Equipment
	Aisle space		Personnel Training		Response to Spills
	Weekly Inspections	Waste Minimization			Response to fires
	Condition of Storage area		Reduce / reuse / recycle		Response to explosions
Tanks		Other (specify)			
	Labeling				
	Daily inspections				
	Containment System				

†CESQGs are not required to conduct hazardous waste training. However, it is always a good practice to keep employees informed. It is also important to provide additional training sessions for situations such as:

- Hiring a new employee with hazardous waste management and/or emergency response duties.
- Change in employee's hazardous waste duties (e.g., change in emergency coordinator).
- Change in hazardous wastes generated by the company.

# APPENDIX 6 – EXAMPLE OF A COMPLETED MANIFEST

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>CVS024248900</b>	2. Page 1 of <b>1 of 1</b>	3. Emergency Response Phone <b>(800) 424-9300</b>	4. Manifest Tracking Number <b>123456789ABC</b>			
5. Generator's Name and Mailing Address <b>Generic College 123 College Street Collegetown, CT 06032</b>				Generator's Site Address (if different than mailing address)				
Generator's Phone: <b>(800) 555-4567</b>								
6. Transporter 1 Company Name <b>The Transporter Company</b>				U.S. EPA ID Number <b>CT999999999</b>				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address <b>The Destination Facility 123 TSDF Road Hazardoustown, CT 06033</b>				U.S. EPA ID Number <b>CT199999999</b>				
Facility's Phone: <b>(800) 555-1234</b>								
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		1. <b>Waste Corrosive Liquids, n.o.s., 8, UN1760, III (Sulfuric Acid, Hydrochloric Acid)</b>		2 DF		110	G	D002
		2. <b>Hazardous Waste, Solid, n.o.s., 9, NA3077, III (Lead)</b>		1 DF		55	G	D005 D008
		3.						
		4.						
14. Special Handling Instructions and Additional Information <b>1. Emergency Response Guide # 154</b> <b>2. Emergency Response Guide # 171</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name <b>Jon Doe</b>				Signature <i>Jon Doe</i>		Month <b>03</b>	Day <b>09</b>	Year <b>09</b>
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name <b>Hal Retropsnart</b>				Signature <i>Hal Retropsnart</i>		Month <b>03</b>	Day <b>09</b>	Year <b>09</b>
Transporter 2 Printed/Typed Name				Signature		Month	Day	Year
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
Manifest Reference Number: _____								
18b. Alternate Facility (or Generator)				U.S. EPA ID Number				
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator)				Signature		Month	Day	Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. _____		2. _____		3. _____		4. _____		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name <b>Mary Ytilicaf</b>				Signature <i>Mary Ytilicaf</i>		Month <b>03</b>	Day <b>09</b>	Year <b>09</b>

EPA Form 8700-22 (Rev 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

**Berm/Dike:** An embankment or ridge used to prevent the movement of liquids and/or sludges.

**Contaminated Media:** Contaminated environmental media are actively managed (excavated, dredged, pumped, or otherwise collected) rocks, soil, sediments, groundwater, or surface water that have been affected by a release of a hazardous substance.

**EPA:** U.S. Environmental Protection Agency

**EPA ID:** An identification number required for Large and Small Quantity Generators, but not required for CESQGs.

**Episodic Generator:** A generator that on rare occasion generates more hazardous waste than is permitted under their generators status.

**HHW:** Household Hazardous Waste

**Manifest:** The shipping document used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of treatment or disposal (not required for CESQGs, but sometimes used by transporters for CESQG waste).

**MSDS:** Material Safety Data Sheets include data on the toxicity and safe handling of products.

**Non-RCRA Hazardous Waste:** hazardous wastes that are not regulated by the EPA, but are regulated by the State of Connecticut, also called Connecticut Regulated Waste.

**RCRA:** Resources Conservation and Recovery Act. Subtitle C regulates hazardous waste.

**Schedule:** A document that describes what needs to be inspected and instructions on how to perform the inspection.

**TCLP:** Toxicity Characteristic Leaching Procedure. Laboratory method for analyzing the mobility of both organic and inorganic substances and is required to determine if a waste exhibits toxicity characteristic.

**Transporter:** A permitted hazardous waste hauler.

**TSDF:** A permitted hazardous waste Treatment, Storage, or Disposal Facility.

**Universal Waste:** waste streams including batteries, lamps, mercury containing equipment, electronics, and recalled pesticides that may be managed under universal waste regulations or as hazardous waste.

## ADDITIONAL RESOURCES

---

**Connecticut Business and Industry Association** (CBIA) website includes information on hazardous waste laws, as well as other environmental issues, links to training resources, recycling and a green business link [CBIA Home](#)

### Connecticut DEP links:

[DEP: Emergency Response and Spill Prevention](#)

[DEP Hazardous Waste](#)

[DEP: Pollution Prevention for Business](#) contains links to other websites, energy efficiency, and case studies.

[DEP: Pollution Prevention Resources](#) includes occupation-specific information about how to use less or less hazardous products, recycling, and energy use.

[DEP: How Do I Dispose Of...](#) contains proper disposal information on numerous perplexing items

[DEP: Local Municipal Recycling Coordinators](#)

[Household Hazardous Waste Collection Schedule](#)

[DEP: Reduce/Reuse/Recycle at Work](#)

[Vehicle Environmental Preferable Products](#)

[DEP: Waste Transporters and Facilities](#)

**Connecticut Dept. of Public Health** [DPH: Certified Testing Laboratories](#)

### Electronics donation and recycling links:

[National Cristina Foundation](#)

[The Freecycle Network](#)

[Global Harmony Institute - Computer Initiative](#)

[Green Monster e-Cycling](#)

[The Computer Recycler](#)

General information about electronics recycling:

[CBIA Green Home Page](#)

[eCycling | US EPA-Donate or Recycle Used Computers and Other Electronics](#)

[Electronics - Earth911.com](#)

[NERC | Northeast Recycling Council | Business Assistance](#)

### EPA links:

[At the Office | What You Can Do | Wastes | US EPA](#) contains recycling information for small businesses and food service companies.

[EPA Design for the Environment](#) contains numerous **cleaner technology fact sheets** for many different kinds of **businesses** (from auto body shops to dry cleaners and nail salons).

[EPA List of Listed Hazardous Wastes](#)



Green **Restaurant** Association has information on recycling [www.dinegreen.com](http://www.dinegreen.com)

Material Safety Data Sheets: [MSDSSEARCH - The National MSDS Repository](#)

**Metropolitan District Commission links:**

[CESQG Household Hazardous Waste Collection](#) procedures for small businesses.

Includes advice about **proper packaging for transport**.

The [MDC HHW page](#) contains easily understandable information about common hazardous wastes, universal wastes, and waste minimization.

National Clothesline **Garment Care** organization website includes environmental information and links to other organizations <http://www.natclo.com/>

Occupational Health and Safety Administration small business page contains readable health and safety information [OSHA's Small Business Page](#)

**Recycling links:**

[Commercial and Office Recycling Fact Sheet](#) (Massachusetts)

[How to Conduct a Waste Audit](#) (Honolulu)

[NERC Co-op Booklet](#)

[NERC Recycling Makes Sen\\$e](#)

[Paper Recycling at Work » Earth 911](#)

Small Business website with readable environmental information and **best management practices** for a number of industries. <http://www.smallbiz-enviroweb.org/>

**Universal Waste links:**

[RBRC: Rechargeable Battery Recycling Corporation](#)

[Lamp Recycle](#) contains general information on lamp recycling, how to handle broken bulbs, and links to recyclers.

[NEWMOA Lamp Recycle](#) contains links to lamp recyclers in the northeast, information on how to identify mercury-containing lamps, and resources for businesses, in particular tanning salons.

[NEWMOA - Mercury Reduction Program](#) contains information on handling of mercury containing products from thermometers to dental amalgam and a database of products to which mercury has been added.

**Used oil testing kits** [www.dexsil.com](http://www.dexsil.com)

