

*Important Note: The following text is excerpted directly from the New York State Department of Environmental Conservation's publication, Environmental Compliance, Pollution Prevention, and Self Assessment Guide for the Marina Industry. New York State Department of Environmental Conservation Pollution Prevention Unit. March 2003. The only changes that have been made are the addition of links to pertinent resources or regulations and Editor's Notes, where appropriate.*

The New York State hazardous waste regulations are covered under 6 NYCRR **Parts 370-374 and 376**. <http://www.dec.state.ny.us/website/regs/ch4.htm> and apply to any marina that generates hazardous waste. This includes, but is not limited to, facilities that conduct some type of degreasing, fueling operations, boat maintenance, or painting operations.

**Reminder** If you do not have a copy of the manual Environmental Compliance and Pollution Prevention Guide for Small Quantity Generators, you can get your copy by calling DEC at 1-800-462-6553 [Editor's Note: To download a copy, [http://www.seagrant.sunysb.edu/marinabmp/pdfs/Env\\_compliance\\_for\\_Small\\_quan\\_gen.pdf](http://www.seagrant.sunysb.edu/marinabmp/pdfs/Env_compliance_for_Small_quan_gen.pdf)]

No matter what waste you dispose of, it is your responsibility to determine the type and quantity of hazardous waste you generate and properly manage it. Since disposal fees for hazardous waste can be very expensive, it is in your best interest to practice good hazardous waste management. Call the DEC Pollution Prevention Hotline toll free at 1-800-462-6553 for assistance with managing your hazardous waste. Refer to Section V for more information on technical assistance providers.

Here are some hazardous wastes commonly generated by the marina industry:

- Heavy metal wastes
- Ignitable wastes
- Solvent wastes
- Toxic wastes
- Still bottoms
- Reactive wastes
- Acids/bases
- Sludges
- Rags

## **HAZARDOUS WASTE DETERMINATION**

If you generate wastes at your facility, you should determine which are hazardous. As a good management practice, always keep non-hazardous waste separate from your hazardous waste. This will reduce or eliminate the mixing and/or contamination of wastes, that could increase your disposal costs.

One way to make a hazardous waste determination is to see if your waste is listed in the New York State regulations, **6 NYCRR Part 371**. <http://www.dec.state.ny.us/website/regs/part371a.html> If your waste is listed, it is hazardous. If your waste is listed in **Part 371**, it is automatically hazardous waste. Even if your waste is not listed, it would still be a hazardous waste if it exhibits one of the hazardous waste characteristic of ignitability, corrosivity, reactivity, or toxicity found in **6 NYCRR Parts 371** <http://www.dec.state.ny.us/website/regs/part371a.html> and described further below.

You can also apply your knowledge of the waste to determine if it exhibits a hazardous characteristic. You must have a basis for making this determination, such as material safety data sheets (MSDSs) or past analytical results. MSDSs may contain important information, such as ignitability (flashpoint), corrosivity, or reactivity for substances or chemicals you may use at your facility. Please note that MSDSs only describe the new product. During use, a non-hazardous product could become hazardous, e.g., by mixing or contamination.

As mentioned previously, if your waste is listed in 6 NYCRR 371.4 (Hazardous Waste Regulations), then you know you must manage it as a hazardous waste. If, however, it is not listed, then your facility must make a hazardous waste determination on that waste. If your business generates hazardous waste, you should understand the term since it may apply to some of the waste streams mentioned in Section III. You should read the DEC manual, Environmental Compliance and Pollution Prevention Guide for Small Quantity Generators, to familiarize yourself with the requirements and conditions for hazardous waste generators.

If you generate a waste at your facility that is not listed in 6 NYCRR Section 371.4, you must still determine if that waste is hazardous by any of the following four characteristics: ignitability, corrosivity, reactivity, and toxicity.

### **Ignitability**

If your liquid waste has a flashpoint of less than 140 F, it is hazardous. Examples include: parts cleaners, paint solvents, waste kerosene, and waste gasoline.

### **Corrosivity**

If your waste has a pH of 2.0 or lower, or a pH of 12.5 or higher, it is hazardous. Examples include: lead-acid batteries, certain rust removers, caustic parts degreaser, and acid or alkaline baths or solutions.

## Reactivity

If your waste is unstable and undergoes violent chemical reaction spontaneously or reacts violently with air or water, it is hazardous.

## Toxicity

If your waste is not ignitable, corrosive or reactive, then it might have to be tested for toxicity according to the methods explained in 6 NYCRR 371.3(e), [http://www.dec.state.ny.us/website/regs/subpart373\\_01a.html](http://www.dec.state.ny.us/website/regs/subpart373_01a.html) or in the federal regulations, **40 CFR Part 261**. Examples include: certain painting wastes, paint booth filters, used shop towels or rags, oily wastes other than used oil, oil absorbents, wastewater treatment sludges, and rinse water.

A toxicity test is done by having a representative sample of the waste tested by a certified lab, where it is analyzed using a toxicity characteristic leaching procedure (TCLP). If the test exceeds any of the allowable standards listed in Table 1, page 33, then the waste is hazardous. For a copy of certified labs in New York State, call 1-800462-6553.

A waste that exhibits one or more of the above traits is a hazardous.

### Did You Know?

As a CESQG, you can transport up to 220 pounds per month of your own waste to a State approved facility.

## HAZARDOUS WASTE CATEGORIES

Once you have determined that your business generates hazardous waste, then it is necessary to determine your hazardous waste category status. Depending on the quantity and type of waste generated, and the amount of waste stored, you will be in one of the following categories: Conditionally Exempt Small Quantity Generator (CESQG), Small Quantity Generator (SQG), or Large Quantity Generator (LQG).

This section does not discuss in detail the requirements for the LQGs. Large Quantity Generators are fully regulated under **6 NYCRR Parts 370-374 and 376**. <http://www.dec.state.ny.us/website/regs/ch4.htm> Large Quantity Generators can obtain a copy of the regulations by calling (518) 402-8730.

## **Conditionally Exempt Small Quantity Generator**

A conditionally exempt small quantity generator (CESQG):

- Generates no more than 220 pounds (approximately 26 gallons) of hazardous waste per calendar month,
- Generates no more than 2.2 pounds of acute hazardous waste per calendar month, and
- Stores no more than 2,200 pounds of hazardous waste or 2.2 pounds of acute hazardous waste on site at any time.

### **If You Qualify as a CESQG, You Must:**

- Identify your hazardous waste.
- Comply with storage quantity limits.
- Ensure proper treatment and/or disposal of your waste.

CESQG-s can deliver up to 220 pounds (per month) of their hazardous waste to an offsite treatment or disposal facility as long as they transport it to:

- A state or federally regulated hazardous waste management treatment, storage or disposal facility.
- A facility permitted by NYS to manage municipal or industrial solid waste and authorized to receive CESQG hazardous waste.
- A facility that uses, reuses or legitimately recycles the waste.
- A permitted household hazardous waste collection facility that accepts CESQG waste. See resource guide section of this manual for a list of participating municipalities.
- If you elect not to deliver your own hazardous waste, you must use a 6 NYCRR part 364 permitted transporter.

## **Small Quantity Generator**

A small quantity generator (SQG):

- Generates between 220 pounds and 2,200 pounds of hazardous waste per calendar month,

· Generates less than 2.2 pounds of acute hazardous waste per calendar month, and

· Stores less than 13,200 pounds of hazardous waste or 2.2 pounds of acute hazardous waste on site at any time.

### Toxicity Characteristic Leaching Procedure (TCLP)

The following are substances covered by the TCLP. The concentrations are not total amounts of the chemical in the waste, but concentrations in the TCLP leachate after the specific test is carried out.

Waste Code	Substance	CAS Number	TCLP Concentration Limit (mg/l)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D006	Cadmium	7440-43-9	1.0
D007	Chromium	7440-47-3	5.0
D008	Lead	7439-92-1	5.0
D009	Mercury	7439-97-6	0.2
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D012	Endrin	72-20-8	0.02
D013	Lindane	58-89-9	0.4
D014	Methoxychlor	72-43-5	10.0
D015	Toxaphene	8001-35-2	0.5
D016	2,4-Dichlorophenoxyacetic acid	94-75-7	10.0
D017	2,4,5-Trichlorophenoxypro pionic acid	93-72-1	1.0
D018	Benzene	71-43-2	0.50
D019	Carbon Tetrachloride	56-23-5	0.50
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D023	o-Cresol	95-48-7	200.0*
D024	m-Cresol	108-39-4	200.0*

D025	p-Cresol	106-44-5	200.0*
D026	Cresol	-----	200.0*
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.50
D029	1,1-Dichloroethylene	75-35-4	0.70
D030	2,4-Dinitrotoluene	121-14-2	0.13**
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	0.13**
D033	Hexachloro-1,3-Butadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	5.0**
D039	Tetrachloroethylene	127-18-4	0.7
D040	Trichloroethylene	79-01-06	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D043	Vinyl Chloride	75-01-4	0.20

\* If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200.0 mg/l.

\*\* Quantitation limit is greater than the calculated regulatory level. The quantitation limit, therefore, becomes the regulatory level.

A SQG Must Do The Following:

- Obtain an EPA Identification Number by calling EPA at (212) 637-4106.
- Submit a completed hazardous waste manifest form.
- Use a 6 NYCRR Part 364 permitted hazardous waste transporter.
- Limit on-site storage.
- Waste must be shipped within 180 days of accumulation (or 270 days, if the treatment, storage, or disposal facility is greater than 200 miles away).

- Follow emergency preparedness and response requirements.
- Adhere to land disposal restrictions.

**Did You Know?**

As a Small Quantity Generator, you cannot transport your own waste. You must use a 6 NYCRR Part 364 permitted transporter.

### **Storing Your Hazardous Waste**

- Keep the waste in a separate storage area which is labeled Hazardous Waste Storage Area.
- Label all containers.
- Mark each container with the date you began collecting waste in that container.
- Use proper containment (pallets with built-in spill containment or berms) in case of leaks.
- Keep containers closed when not in use.
- Keep containers in good condition and periodically inspect for leaks, cracks or rust.

For more information on small quantity generators, request a copy of the manual, Environmental Compliance and Pollution Prevention Guide for Small Quantity Generators by calling 1-800-462-6553. [Editor-s Note. To download a copy, [http://www.seagrant.sunysb.edu/marinabmp/pdfs/Env\\_compliance\\_for\\_Small\\_quan\\_gen.pdf](http://www.seagrant.sunysb.edu/marinabmp/pdfs/Env_compliance_for_Small_quan_gen.pdf)]

### **Large Quantity Generator**

If you meet any of the following conditions, you are a large quantity generator:

- Generate more than 2,200 pounds of hazardous waste per calendar month.
- Generate more than 2.2 pounds of acute hazardous waste per calendar month.

- Store more than 13,200 pounds of hazardous waste on site at any time.
- Store more than 2.2 pounds of acute hazardous waste at any time.

By using good waste management and pollution prevention methods mentioned in this manual, most marinas should not be a large quantity generator. However, if your marina is a large quantity generator, you should call the Division of Solid and Hazardous Materials at (518) 402-8730 to obtain a copy of the regulations, or go the DEC website at: <http://www.dec.state.ny.us/website/dshm/regs/370parts.htm>

Large quantity generators must obtain an EPA ID number, store hazardous waste no more than 90 days on site, manifest their waste, submit biennial reports to DEC, keep records at your site for 3 years, comply with land disposal restrictions, and comply with export/import requirements when shipping waste out of the country.

## **UNIVERSAL WASTE**

To streamline the hazardous waste regulations for wastes that are generated by large numbers of sources in relatively small quantities, USEPA issued the Universal Waste Rule in 1995. The universal waste regulations govern the collection and management of widely generated wastes. In NYS, these currently include hazardous batteries, pesticides, thermostats, and lamps. These regulations were designed to reduce the amount of hazardous waste items in the municipal solid waste stream; encourage the recycling and proper disposal of some common hazardous wastes; and reduce the regulatory burden on the regulated community. Universal wastes are generated in a wide variety of settings including households, schools, office buildings, and medical facilities, in addition to the industrial settings usually associated with hazardous wastes. Universal wastes include such items as hazardous batteries, hazardous mercury-containing thermostats, certain pesticides, and hazardous lamps. Although handlers of universal wastes must meet less stringent standards for storing, transporting, and collecting wastes, the wastes must comply with full hazardous waste requirements for final recycling, treatment, or disposal. This approach removes these wastes from municipal landfills and incinerators, which provides stronger safeguards for public health and the environment.

### **Batteries**

Batteries included are nickel-cadmium (Ni-Cd), lithium, small sealed lead-acid batteries, and batteries that exhibit hazardous waste characteristics. These may be found in many common items in the business and home, including electronic



equipment, mobile telephones, portable computers, and emergency backup lighting.

### **Mercury Thermostats**

Mercury thermostats are located in many buildings including offices, schools, industrial facilities, and homes.

### **Pesticides**

Agricultural pesticides that are recalled under certain conditions and unused pesticides that are collected and managed as part of a waste pesticide collection program. Pesticides may be unwanted for a number of reasons, such as being banned, obsolete, damaged or no longer needed due to changes in cropping patterns or other factors.

### **Hazardous Lamps**

Examples of common universal waste hazardous lamps include, but are not limited to, fluorescent lights, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps. Many used lamps are considered hazardous wastes under the Resource Conservation and Recovery Act (RCRA) because of the presence of mercury or occasionally lead.

## **REQUIREMENTS**

If your waste includes hazardous batteries, pesticides, thermostats, or lamps, you must decide whether or not you will manage them as universal waste. You may choose between traditional hazardous waste regulations or universal waste rule standards. However, flip-flopping between the two sets in order to avoid meeting requirements of one or both sets of regulations is not allowed. For example, storage time limits exist for both management scenarios. Flip-flopping between regulations will not extend storage time.

If you decide to manage these wastes under the traditional hazardous waste regulations, you must count them in determining whether you are a conditionally exempt small quantity generator (CESQG), a small quantity generator (SQG) or a large quantity generator (LQG). They must also be reported on the generator annual report if you are required to file an annual report. Universal wastes are not counted for the purpose of determining generator category, and need not be reported on your hazardous waste report.

## **PROPER HANDLING AND STORAGE**

If your facility manages any of the above mentioned universal wastes at your site, then you are either a small quantity handler or a large quantity handler of

universal waste. A small quantity handler of universal waste is any facility that handles less than 5,000 kg (11,000 lbs) of total universal wastes on site at any time. Requirements include packaging in a way to minimize breakage; immediately cleaning up any leaks or spills; employee training, and properly labeling containers. A large quantity handler of universal waste handles 5,000 kg (11,000 lbs) or more of total universal wastes on site at any time. Requirements include EPA notification; packaging in a way to minimize breakage; immediately cleaning up any leaks or spills; employee training, and properly labeling containers; and complying with record keeping and reporting requirements. Both handlers can store universal waste up to one year on site.

Universal waste transporters must meet applicable DOT standards; comply with record keeping and reporting requirements; and comply with applicable requirements of **6 NYCRR Part 364** <http://www.dec.state.ny.us/website/regs/part364.html> if transporting more than 500 lbs of total universal waste in any shipment. Common carriers can transport up to 500 lbs of universal waste in any shipment.

Destination facilities must comply with all applicable requirements of **6 NYCRR Parts 370 through 374-3 and 376**, <http://www.dec.state.ny.us/website/regs/ch4.htm> including notification of hazardous waste activity and obtaining a Part 373 hazardous waste permit, if applicable.

## **LAMP CRUSHERS**

Lamps being managed under the universal waste rule may not be crushed. If you wish to crush your lamps, you will need to manage the lamps under the traditional hazardous waste regulations. This will require that you count the weight of the lamps toward determining hazardous waste generator category, and you will be required to meet applicable generator, transporter and transfer facility standards. Crushing is considered a form of hazardous waste treatment, and under ordinary hazardous waste generator regulations, hazardous waste lamps may only be crushed if the process is exempt from hazardous waste treatment regulations (**6 NYCRR 373-1.1(d)(1)**). [http://www.dec.state.ny.us/website/regs/subpart373\\_01a.html](http://www.dec.state.ny.us/website/regs/subpart373_01a.html) The common exemptions that might be used are the on-site treatment by a conditionally exempt small quantity generator; the first step of a recycling process, if the lamps will be directed to a mercury recycler; or the treatment in the tank or container in which the lamps are being stored. Generators who wish to use one of the latter two exemptions should seek specific guidance from the Technical Determination Section at (518) 402-8633. The crushed lamps are usually considered hazardous waste for mercury, and sometimes for lead, and must be handled and disposed of via normal hazardous waste requirements.