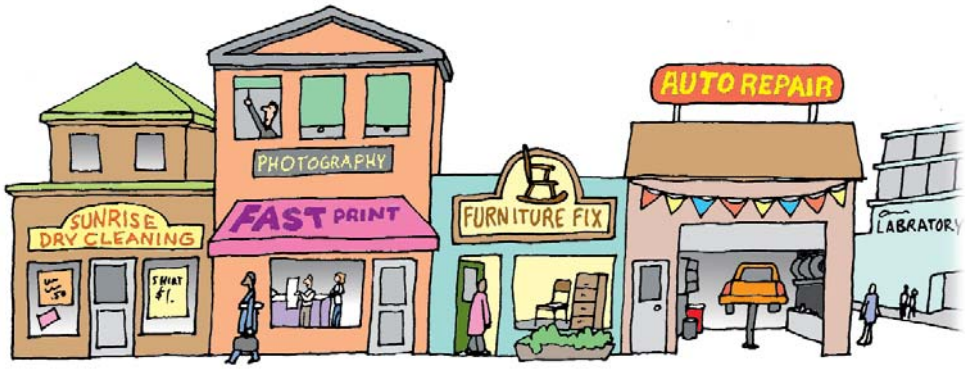
HAZARDOUS WASTE MANAGEMENT IN MONTGOMERY COUNTY

A GUIDE FOR BUSINESSES GENERATING SMALL QUANTITIES OF HAZARDOUS WASTE



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For Information About The ECOWISE Program— See PAGE14

OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Douglas M. Duncan
County Executive

Dear Environmentally Concerned Neighbor:

I am pleased to make available this Handbook for Businesses Generating Small Quantities of Hazardous Waste. Small businesses often lack the resources to fully understand the complex Federal and State rules and regulations pertaining to hazardous waste management. This handbook provides practical information for the small businessperson regarding the identification, storage and disposal of hazardous materials.

This handbook also introduces the newly established ECOWISE Program. The ECOWISE Program represents a partnership between the public and private sectors to lessen the financial burden on businesses wishing to protect the environment. This program is designed for businesses and institutions in Montgomery County which generate small quantities of hazardous waste. The ECOWISE Program provides these businesses and institutions with the opportunity to dispose of hazardous wastes in an environmentally responsible manner at a fraction of the cost of direct contracting with a private hazardous waste management firm.

I welcome this opportunity to provide you with information and services to better the financial and environmental well being of Montgomery County.

Sincerely,

Douglas M. Duncan
County Executive

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INTRODUCTION

Does your business generate hazardous waste? You probably want to answer "no" to this question. Most people think hazardous waste is generated only by large chemical or manufacturing companies. But in fact, many small businesses produce hazardous waste. This handbook will help you understand federal, state and county hazardous waste requirements and can be used as a general reference to help identify which wastes are hazardous and what reduction, storage and disposal methods are available. For complete copies of the regulations and more detailed information, contact the organizations mentioned within the booklet.

As a business owner or manager, your goal should always be to reduce the amount of hazardous waste your business produces to the lowest possible level. This approach is not only good for the environment but makes good business sense. If you generate less hazardous waste, you will spend less to manage it properly.

The U.S. Environmental Protection Agency (EPA) has established specific requirements for handling hazardous waste in ways that protect human health and the environment. These requirements control hazardous wastes from the moment they are generated until their ultimate disposal. Effective July 1991, the regulations were updated, making new wastes subject to federal hazardous waste rules. Many small businesses now must comply with federal hazardous waste laws.

Your business is likely to produce a hazardous waste if you:

- use dyes, paints, printing inks, thinners, solvents or cleaning fluids;
- use pesticides or other related chemicals;
- use materials that dissolve metals, wood, paper or clothing (acids and caustics);
- use flammable materials;
- use materials that burn or itch on contact with skin;
- use materials that bubble or fume on contact with water; or
- receive delivery of products accompanied by a shipping paper or label indicating that the product is hazardous.

WHAT IS A HAZARDOUS WASTE?

A waste is any solid, liquid or contained gaseous material that your business no longer uses and must either recycle, store, or dispose. A waste is considered hazardous if it causes injury, illness, or death or pollutes the land, air, or water.
For regulatory purposes, there are two categories of hazardous waste: "listed" and "characteristic" hazardous wastes.

Listed Hazardous Wastes

Listed hazardous wastes are substances that already have been determined to be hazardous and are listed as such in Federal Resource Conservation and Recovery Act (RCRA) regulations. There are more than 400 listed hazardous wastes. The most common listed hazardous wastes are included in Appendix B.

Characteristic Hazardous Wastes

Characteristic hazardous wastes have certain properties that make them harmful to human health and/or the environment. There are four properties of characteristic hazardous wastes.

IGNITABILITY
A liquid is considered ignitable if it has a "flash point" below 140 degrees Fahrenheit. Examples are paint thinners, degreasers or solvents. A solid is considered hazardous if it can spontaneously catch fire through friction, absorption of moisture or spontaneous chemical change. One example is shop rags saturated with solvents.

CORROSIVITY
Any water-based waste that is a strong acid (pH equal to or less than 2.0), such as battery acid, or a strong caustic (pH equal to or greater than 12.5), such as drain cleaner, is considered corrosive ("pH" is the unit used to describe the strength of an acid or caustic substance.)

REACTIVITY
Unstable or explosive wastes or wastes that react violently when brought in contact with water are reactive. Wastes that release toxic vapors, such as hydrogen cyanide or hydrogen sulfide, also are reactive. One example is cyanide plating waste.

TOXICITY
Wastes that release certain amounts of toxic metals, solvents or other materials when subjected to a specific laboratory procedure are known as toxicity characteristic (TC) wastes.

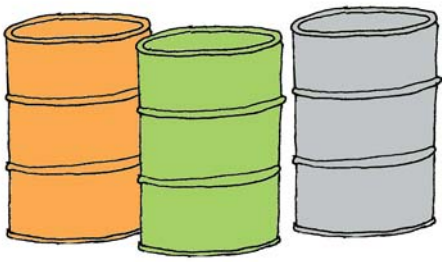
Other Ways to Characterize Hazardous Waste

In addition to being "listed" or "hazardous," a waste also may be designated "acute hazardous waste."

Acute Hazardous Wastes
Some wastes are so dangerous in small amounts that they are regulated the same as large amounts of other hazardous wastes. Wastes that appear in Appendix B with an asterisk (*) are acute hazardous wastes.

Note About Carcinogenic Wastes
Wastes that contain known cancer-causing agents, such as benzene, as identified by the International Agency for Research on Cancer, are designated carcinogenic wastes. Carcinogenicity does not necessarily mean that a waste is regulated as hazardous.

There are more than than 400 hazardous wastes. The most common are listed in Appendix B.



Exempted Wastes

Some wastes are exempted from hazardous waste regulatory compliance, even though they possess hazardous waste characteristics. The exemption depends on the type of material and how the wastes are managed.

Common wastes that are not excluded from regulation but are exempted from many hazardous waste requirements include:

- ✔ Universal Wastes
- ✔ Certain wastes from small businesses that are Maryland Small Quantity Generators (see Chapter 4)
- ✔ Household hazardous waste
- ✔ Lead-acid batteries that are intact and destined for off-site recycling
- ✔ Used oil that has not been mixed with a hazardous waste and is recycled properly
- ✔ Household sewage
- ✔ Residue in empty containers
- ✔ Materials recycled on-site in a closed loop process

Universal Wastes

Universal wastes are a special category of hazardous waste for which the U.S. Environmental Protection Agency (EPA) has developed special handling procedures that reduce administrative requirements. These methods are referred to as 'Alternative Management Standards' and encourage collection and recycling programs. Alternative management standards include consolidation and segregation of materials for the purpose of recycling and/or proper reclamation. The Maryland Department of the Environment (MDE) will adopt legislation that will mirror U.S. EPA regulations concerning Universal Waste, by the summer of 2002. For more information, contact MDE.

The EPA has identified four categories of universal waste: batteries, mercury-containing thermostats, agriculture pesticides (banned from use, recalled, or managed under a collection program), and lamps that would meet the definition of hazardous waste. MDE will propose to adopt these four categories in its regulation. In addition, the MDE will propose light ballasts that contain polychlorinated biphenyls as an additional category of universal waste.

Among the items that would qualify for as a universal waste are fluorescent light tubes, light bulbs with mercury, rechargeable batteries—which are usually any batteries with a mineral such as Nickel-Cadmium, Lithium ion batteries, lead acid batteries, i.e., car batteries and computer backup batteries, commonly referred to as uninterrupted power supply (UPS) batteries. Once MDE has adopted its version of the universal waste rule, you may **EXCLUDE** these items in your hazardous waste totals **PROVIDED** you manage them in compliance with the 'Alternative Management Standards.' For more information call MDE at 410-631-3345.

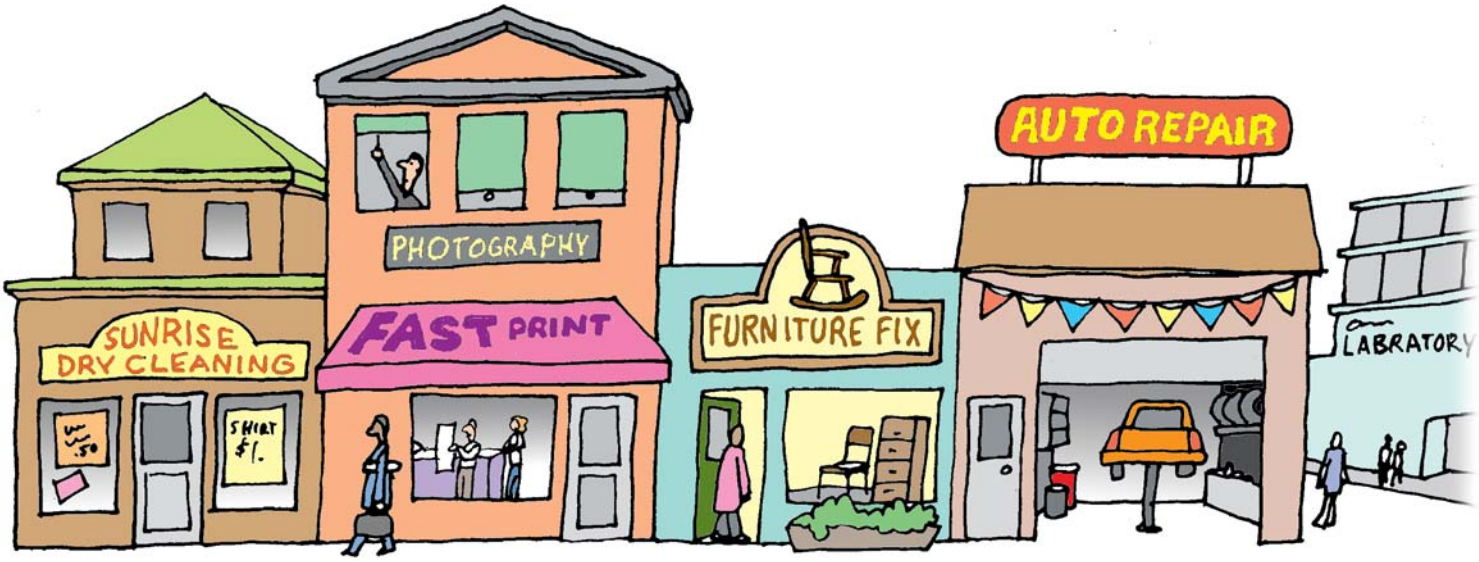
Special Wastes

These wastes are non-hazardous wastes that require special handling. Oil, antifreeze, non-flammable/water based paints (latex paint) and stains, non-flammable sealers and adhesives, fall into this category. These materials do not count towards your hazardous waste total, and may be excluded, however you should have a proper recycling or disposal process for them.

WHAT HAZARDOUS WASTE DOES YOUR BUSINESS GENERATE?

Hazardous waste is generated by many businesses and organizations, from small print shops, service stations, and dry cleaners to large, international chemical companies. To help you determine if your business generates a hazardous waste, review the list below.

Type of Business	Common Hazardous Wastes	Publication Number*
Building, Cleaning Maintenance	Acids/bases, solvents	
Construction	Acids/bases (cleaners, etching waste), ignitables (paint and pain sludge), solvents (degreasers, thinners).	-027j
Dry Cleaners, Laundries	Solvents (filtration residues, filter cartridges, cleaning solvents).	-027b
Educational and Vocational Shops	Acids/bases (cleaning solutions, lab waste), ignitables (cleaning solutions), reactives (lab waste), and solvents (degreasers, paint solvents).	-027l
Equipment Repair	Acids/bases (cleaners), heavy metals (anti-freeze, oils), ignitables (paint sludges, thinners), solvents (degreasers, cleaners).	-027d
Funeral Services	Solvents and formaldehyde	
Furniture Refinishing	Ignitables (paint, thinners, strippers), solvents (cleaners), acid/bases (stripper dip tanks).	-027c
Landscaping	Heavy metals, pesticides, solvents.	-027i



Home Improvement, Painting Contractors	Ignitables, (paint, thinners, strippers), solvents (cleaners), acids/bases.	
Laboratories	Solvents (chloroform, formaldehyde), acids/bases, oxidizers and corrosives.	-027m
Leather Manufacturing	Heavy metals, inorganics, and solvents.	-027r
Metal Manufacturing	Acids/bases (pickling baths, etching solutions), cyanide waste, heavy metals (plating baths, rinse waters), ignitable waste, solvents.	-027n
Photo-finishing	Heavy metals, solvents, ignitables.	-027g
Printing	Acids/bases (plate etching solutions), heavy metals (waste inks, sludges, plating waste), solvents (cleaning solutions, fountain solutions, blanket washes).	-027g
Vehicle Maintenance, Auto Body Work	Acids/bases (hot tank waste), lead-acid batteries, heavy metals (hot tank waste), antifreeze, solvents (degreasers, cleaners), ignitables.	-027a

*A more detailed list of hazardous waste by type is in Appendix B. The U.S. EPA has free industry fact sheets for each business category mentioned above. The fact sheets describe the hazardous waste typically generated by the business, and provide management instructions and waste minimization suggestions. To obtain your free copy, contact the EPA regional office at (215) 566-3000 or the RCRA Hotline at (800) 424-9346. For a full set of fact sheets, ask for publication number EPA/530-SW-90-027a through –027n, or specify the last four digits in the table above that apply to your business. Please note that Maryland state requirements are more stringent than the federal requirements. To ensure proper hazardous waste management, be sure to consult state regulations, as well as federal regulations. www.EPA.gov/EPAOSW/Hotline

WHAT REGULATIONS APPLY TO YOUR BUSINESS?

State Regulations

State of Maryland regulations classify businesses that produce hazardous waste into two categories.
The categories are determined by two important criteria:
(1) the amount of hazardous waste a business generates in one month
and
(2) the amount of hazardous waste stored on-site at any one time.

Note: The amount of waste for each category applies to all hazardous waste substances combined, not for each waste material.

According to the Code of Maryland (COMAR), Title 26, Subtitle 13, Section 02.05, you are a Maryland Small Quantity Generator

if, in one month, you generate…

✔ less than 100 kilograms (approximately 220 pounds or 30 gallons) of hazardous waste, or

✔ less than 100 kilograms (approximately 220 pounds or 30 gallons) of spill cleanup debris containing hazardous waste, or

✔ less than 1 kilogram (approximately 2.2 pounds) of acute hazardous waste, or

if, at any time, you do not store…

✔ 100 kilograms (approximately 220 pounds or 30 gallons) or more of hazardous waste on-site.

Any business that can minimize its hazardous waste to this level has fewer rules with which to comply. That saves both time and money.

Federal and State of Maryland laws require Maryland Small Quantity Generators to:

✔ identify all hazardous waste you generate; and

✔ never store more than 100 kilograms (approximately 220 pounds or 30 gallons) of hazardous waste on your property.

To find out how to manage hazardous waste if you are a Maryland Small Quantity Generator, see Chapter 6 for information about Montgomery County's ECOWISE program.

These regulations are required by federal and Maryland State law.
For more information about regulations applying to Fully Regulated Generators, contact the Maryland Department of Environment, (410) 631-3345.

Regulations for the next level of hazardous waste generation, Fully Regulated Generator, are much more extensive. You are a Fully Regulated Generator

if, in one month, you generate…

- ✔ 100 kilograms (approximately 220 pounds or 30 gallons) or more of hazardous waste, or
- ✔ 100 kilograms (approximately 220 pounds or 30 gallons) or more of spill cleanup debris containing hazardous waste, or
- ✔ 1 kilogram (approximately 2.2 pounds) or more of acute hazardous waste, or

if, at any time, you store…

- ✔ 100 kilograms (approximately 220 pounds or 30 gallons) or more of hazardous waste on-site.

Federal and State of Maryland laws require Fully Regulated Generators to:

- ✔ identify all hazardous wastes you generate;
- ✔ complete a Notification of Hazardous Waste Activity form and obtain a U.S. EPA Identification Number;
- ✔ store waste in a U.S. Department of Transportation (DOT) container, labeled and marked according to DOT regulations (see pages 17 and 18
- ✔ obtain a storage facility permit unless the generator stores hazardous waste for no more than 90 days (or 180 days if the generator has in storage no more than 500 kg of hazardous waste and no more than 1 kg of acute hazardous waste);
- ✔ use the Uniform Hazardous Waste Manifest Form to accompany the waste to a state-approved hazardous waste facility;
- ✔ comply with the accident prevention and preparation requirements outlined in Superfund Amendments and Reauthorization Act (SARA – Title III) of 1986;
- ✔ prepare a written emergency contingency plan and distribute it to state and local agencies (Maryland requirement);
- ✔ train personnel who handle hazardous waste to ensure compliance regulations (Maryland requirement); and
- ✔ file an annual report that summarizes hazardous waste activity (Maryland requirement)

Regulations

Federal

Federal regulations recognize three categories of businesses that produce hazardous waste. For more information, see RCRA and 40 CFR, Part 261, Code of Federal Regulations

Note: The State of Maryland operates the regulatory program governing Maryland businesses generating small quantities of hazardous waste. When consulting federal regulations, please note that state and federal regulations use different names and definitions for categories of hazardous waste generators.

A Maryland Small Quantity Generator (SQG) is known as a Conditionally Exempt Small Quantity Generator (CSQG) in federal regulations.

A Maryland Fully Regulated Generator is recognized by the federal regulations as either a Small Quantity Generator or a Large Quantity Generator, depending on the quantity of hazardous waste generated.

Montgomery County

Montgomery County (Executive Regulation 19-93 AM, "Hazardous Materials Use Permit") requires any business that uses, Stores, treats or transfers 50 pounds (5 gallons) of more of any hazardous materials, including waste, at any time, to:

✔ Register annually with the Montgomery County Department of Fire and Rescue Services, Local Emergency Planning Council; and

✔ Obtain a Hazardous Materials Use Permit.

The permit application requires you to designate a corporate "responsible" officer as a primary contact, identify a facility emergency coordinator, "someone familiar with the hazardous material, and the processes in which it is used," provide 24-hour and other contact numbers, list the quantities and locations of the hazardous substances present, and the locations of Material Safety Data Sheets (MSDSs, see page 18).

Additional information is required from businesses that use 2000 pounds (220 gallons), or more of hazardous substances, including waste, at any time. Required information includes an inventory showing the quantity and locations of hazardous substances; a facility diagram showing the locations of hazardous materials and storage areas, building access points, any fire protection systems (e.g., sprinkler systems), and adjacent properties; and the submission of a contingency plan for accidental releases.

Once a *Hazardous Materials Use Permit* has been obtained, it must be renewed annually, with appropriate information updated. You must pay initial and renewal fees for the permit.

For more information on hazardous substances permit registration, write or call the Montgomery County Division of Emergency Management, Department of Fire and Rescue Services, (301) 217-2470.

Washington Suburban Sanitary District

Chapter 9 of the Washington Suburban Sanitary Commission Plumbing and Gas Fitting Regulations governs industrial waste discharges and prohibits the discharge, directly or indirectly, into the sanitary sewer of the following:

✔ Liquids or vapors having a temperature greater than 150 degrees Fahrenheit (65 degrees Celsius);

✔ Ignitable or explosive liquids, solids, or gases;

✔ Radioactive wastes in excess of limits established by applicable state or federal regulations;

✔ Malodorous or toxic gases, vapors, or fumes;
Liquids, solids or gases that cause excessive discoloration;

✔ Any materials capable of causing obstruction to the flow of sewers or other operations, including treatment processes, of the wastewater system;

✔ Any substances that may solidify or become viscous or that may cause obstruction and/or interference with the wastewater conveyance or treatment system;

✔ Any water or wastewater that contains certain polluting substances in excess of the limitations contained in the regulations (see Table 9.1 of Chapter 9 of the Plumbing and Gas Fitting Regulations); or

✔ Wastes containing petroleum oil, nonbiodegradable cutting oil or products of mineral oil origin in amounts that interfere with operations. Chapter 9 of the Plumbing and Gas Fitting Regulations contains additional information on prohibited discharges, including other wastes that may not be disposed in the sanitary sewer system. For more information, call the Code Enforcement Section, Washington Suburban Sanitary Commission, (301) 206-8526.

COUNTING AND REDUCING YOUR HAZARDOUS WASTE

The regulations regarding hazardous waste management are designed to encourage businesses to minimize the amount of hazardous waste produced. The less you produce, the fewer regulations you must comply with.

To qualify as a Maryland Small Quantity Generator—the category with the fewest reporting requirements —you must never exceed the limit of 100 kilograms (approximately 220 pounds or 30 gallons) per month, store 100 kilograms or more at any one time or generate 1 kg or more of acute hazardous waste. If you do, you automatically become a Fully Regulated Generator for reporting purposes for that year.

For example, a generator that produces less than 100 kilograms in 11 months of the year, but generates 100 kilograms or more in April will be considered a Fully Regulated Generator. The generator must manage the hazardous waste in May as a Fully Regulated Generator, comply with all regulations pertaining to Fully Regulated Generators and complete annual reports as a Fully Regulated Generator. In addition, the generator will be presumed to be fully regulated in subsequent months of that year unless the generator can demonstrate to a state inspector's satisfaction that he/she no longer generates waste in quantities above the limit.

Counting Waste

When you count your waste for each month, count all quantities of "Listed" and "Characteristic" hazardous wastes.

DO count waste that you:

✔ store on-site for any period of time prior to subsequent waste management;

✔ package and transport off-site;

✔ place directly in regulated on-site treatment or disposal units;

✔ generate as sludge and remove from bottoms of storage tanks; and/or

✔ discharge directly into the sanitary sewer system.

(Please see Chapters 6 and 7 for information about managing liquid waste.)

You DO NOT have to count waste that is:

✘ specifically exempted, as discussed earlier, such as spent lead-acid batteries that are sent off-site for reclamation;

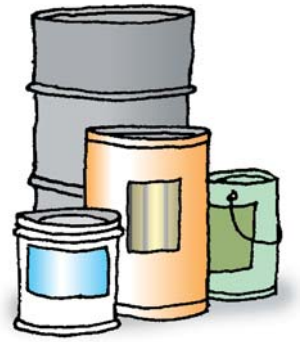
✘ left in the bottom of containers that have been emptied completely by pouring or dumping provided that less than 1" of residue remains and the residue is less than 3% by weight of total capacity for containers less than 110 gallons or 0.3% by weight of total capacity for containers greater than 110 gallons (Acute hazardous waste containers must be more thoroughly cleaned.);

✘ left as residue in the bottom of product storage tanks, if the residue is not removed from the product tank (Note: This residue must be counted once the tank is taken out of service.);

✘ reclaimed continuously on-site without storing the waste prior to reclamation, such as dry cleaning solvents (Do count any residue from the machine and spent cartridge filters.);

✘ managed on-site in a totally enclosed treatment unit or in an elementary neutralization unit which is designed to contain and neutralize corrosive waste; and/or

✘ already counted once during the calendar month, and treated on-site or reclaimed and used again.



dous Waste

No matter what hazardous waste you generate or what type of business you run, you can reduce the amount of waste with good operating practices. Here are some suggestions.

1. Carefully manage hazardous materials inventory.

If you carefully manage the hazardous materials that come in to your operation, it will help reduce the hazardous waste that must go out. **RECOMMENDATIONS:** Only order what you need, record all hazardous materials in stock, monitor the quantities of waste from expired stock, maintain Material Safety Data Sheets (MSDSs) for all materials in use and label all containers to indicate the name and type of substance, stock number, health hazards, handling requirements and first aid.

2. Preventive maintenance reduces on-site leaks and loss of hazardous fluids.

By regularly inspecting and cleaning equipment, including lubricating, testing, measuring and replacement of worn or broken parts, you can reduce leaks, fluid loss and off-specification, rejected products resulting from poor performing equipment. Don't "wait-until-it-breaks." Maintain equipment properly.

3. Keep hazardous and non-hazardous wastes segregated.

When hazardous and non-hazardous wastes are mixed, you increase the volume of hazardous waste generated. Segregating waste reduces your volume of hazardous waste.

4. Research the use of non-hazardous substitutes. Also called Pollution Prevention (P.2)

Concern about the effects of hazardous substances on workers, the public and the environment has created a demand for products that are not hazardous, but will do the same job. Consult your professional trade organizations and suppliers about new products that are less toxic or check out Montgomery County's website.

5. Learn more about recycling hazardous waste.

Recycling and purification technology also has improved in the last several years. Recycle and reuse waste whenever possible.

6. Exchange waste or surplus materials with other businesses.

Your hazardous waste may be able to be utilized by some other business. For more information, contact the Northeast Industrial Waste Exchange, (410) 280-2080.

7. Educating your employees is the most effective way to reduce your hazardous waste.

If your employees know both the proper procedures for hazardous waste handling and the consequences of improper handling—to them and the environment—they will be more careful. Make sure your employees are familiar with the toxic properties and health risks associated with hazardous substances; know the consequences of spills, fires and explosions; and learn what protective gear or clothing is required and how to use it.

8. Check askDEP.com for pollution prevention tips.

MARYLAND SMALL QUANTITY GENERATORS

This section of the handbook provides guidelines on proper handling of hazardous waste for Maryland Small Quantity Generators located in Montgomery County.

If you are a Maryland Small Quantity Generator, make sure you are complying with all of the rules in Chapter 4. You also may wish to refer to the safe handling recommendations for Fully Regulated Generators in Chapter 7. These recommendations are good guidelines for all businesses.

Montgomery County's ECOWISE Program

What is the ECOWISE program?
The Montgomery County ECOWISE program provides businesses and institutions the opportunity to dispose of small quantities of hazardous wastes in an environmentally responsible manner at a fraction of the cost of direct contracting with a hazardous waste management firm. Moreover, participants in the ECOWISE program will benefit from County-sponsored publicity promoting them as environmentally concerned members of the community.

Who is eligible to participate in the ECOWISE program?
Participation in the ECOWISE program is limited to Montgomery County hazardous waste generators that are considered small quantity generators under Maryland state hazardous waste regulations (Chapter 4).

What are ECOWISE collection events?
The central feature of the ECOWISE program is a series of collection events during which eligible hazardous waste generators may deliver certain toxic, flammable, corrosive or reactive waste products for recycling, treatment or disposal.

What materials may I bring to ECOWISE collection events?
Eligible hazardous waste generators may dispose of up to 100 kilograms (approximately 220 pounds) of acids, bases, pesticides, fuels, solvents, oil-based paints, photographic chemicals, oxidizers, reactive materials and batteries. The program does not accept acute hazardous wastes, radioactive materials, explosives and medical waste
.

Where and when can I find an ECOWISE collection event?
All ECOWISE collections occur at the Montgomery County Solid Waste Transfer Station near the intersection of Maryland Route 355 and Shady Grove Road in Derwood, Maryland. Collections occur once a month for a four hour period on a weekday afternoon. The County will schedule more frequent collections as demand for the service increases.

Must I register or make an appointment for EcoWise collection events?
All ECOWISE participants pre-register with the County in advance of disposing of any materials. The County has established a toll-free telephone line for registered participants to make an appointment for any scheduled collection event. Appointments should be made at least one day prior to a collection date.

What will it cost me to participate in the ECOWISE program?
Participants pay a materials disposition fee based on the type and weight of materials delivered to an ECOWISE collection event. The County provides each registered participant with a list of per pound disposition fees that will remain in effect for at least two years. Participants may make payments by cash or business check. The County assumes the costs of all labor, supplies, licensing, transportation and program overhead. The cost to a typical ECOWISE participant will be approximately one quarter the cost of arranging for a hazardous waste management firm to pick up the identical materials at the participants business location.

How will Montgomery County promote my participation in the ECOWISE program?
The County provides ECOWISE participants with signs, posters and decals to alert your customers of your environmental concern. The County may also recognize one or more businesses for their environmental compliance.

What happens to hazardous materials delivered to an ECOWISE collection event?
The County has contracted with licensed and permitted hazardous waste management firm to accept and handle all hazardous materials received through the ECOWISE program. The contractor provides trained chemists and technicians at the collection site during all scheduled hours of operation. The contractor transports and disposes all materials in accordance with all federal and state hazardous waste laws and regulations. The contractor assumes title to all materials and is represented as the generator of record on all manifests.

How can I find out more about the Montgomery County ECOWISE program?
For more information or to register for the Montgomery County ECOWISE program, please write:

Montgomery County Division of Solid Waste Services
ECOWISE Program
16101 Frederick Rd.
Derwood, MD 20855
301-840-2370
www.mcrecycles.org click on Trash then ECOWISE

Other Options

For most Maryland Small Quantity Generators of hazardous waste, the Montgomery County ECOWISE program is the best option for disposing of hazardous waste in an environmentally responsible manner.

If you are a Maryland Small Quantity Generator and are not participating in the ECOWISE program, you have the following options for disposing your solidified or liquid hazardous waste:

✔ Contact a hazardous waste management firm to transport and dispose of your waste.

✔ Call the Maryland Department of Environment (410) 631-3344 and the Washington Suburban Sanitary Commission (301) 206-8526 for information about any remaining treatment and disposal options and to ensure that you are in compliance with all regulations.

FULLY REGULATED GENERATORS

This section of the handbook provides guidelines on proper handling of hazardous waste for Fully Regulated Generators. If you are a Fully Regulated Generator, make sure you are complying with all the rules in Chapter 4.

Obtaining an EPA Identification Number

All Fully Regulated Generators must have an EPA Identification Number. An EPA Identification Number may be obtained by calling the Maryland Department of the Environment, Waste Management Administration, 2500 Broening Highway, Baltimore, MD 21224, (410) 631-3344, and requesting EPA Form 8700-12, Notification of Hazardous Waste Activity. Complete one form for each business site where wastes are generated. Instructions for filling out the form are provided with the form. See Appendix A for a sample Notification of Hazardous Waste Activity.

You may store hazardous waste in 55-gallon drums, tanks, or other containers. Applying the following common sense rules reduces the likelihood of injuries from leaks or spills of hazardous waste.

✔ Practice the "In not on" rule. Liquid belongs "in" the drum. It should not be "on" the container, ie: BE NEAT!

If you store hazardous waste in CONTAINERS:

✔ Clearly mark each container with the words "HAZARDOUS WASTE," and the date you began to collect waste in that container.

✔ Keep containers in good condition, handle them carefully, replace those that leak, and do not store waste in containers that may rupture from the waste.

✔ Keep containers closed except to fill or empty them and inspect them for leaks or corrosion every week.

✔ Containers of ignitable or reactive waste must be placed at least 50 feet from the facility's property line to create a buffer zone.

✔ Never store wastes that could react together to cause fires, leaks or other releases.

✔ Store containers in areas where, if leaks occur, they will be contained.

✔ Maintain two feet of aisle space for hazardous waste containers.

If you store hazardous waste in TANKS:

✔ Use tanks that fully enclose the waste.

✔ If your tanks allow waste to flow into them continuously, provide cutoff or by-pass systems to stop the flow in case of problems.

✔ Inspect tank monitoring or guaging systems every operating day and inspect the tanks for leaks every week. Above-ground portions of tanks must be inspected daily.

✔ Use the buffer zone requirements from the National Fire Protection Association (NFPA, see page 23) for tanks containing ignitable or reactive waste. These requirements specify distances considered safe buffer zones for various liquids based on their combustible and flammable characteristics.

✔ Provide for secondary containment in case of leaks.

On-Site...

Permit

If you store, treat or dispose of hazardous wastes on-site in any manner other than those described above, you must obtain a permit from the Maryland Department of the Environment which has the primary authority over hazardous waste activity.

To obtain a permit, you must request and complete a permit application from the Maryland Department of the Environment, (410) 631-3345. Businesses may not engage in any activity which requires a permit until a permit is issued.

In addition to obtaining a permit from the state, in some instances, you must also notify the EPA and comply with federal and county standards as outlined in 40 CFR, Parts 270 and 271.1; Sections 301-304, 311 and 312 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA); and the Montgomery County, Maryland Department of Fire and Rescue Services, Executive Regulation (19-93 AM). Please call the Maryland Department of the Environment, (410) 631-3345, for information on which standards apply.

Storage

According to state regulations (see COMAR 26.13.03.05E), generators may store hazardous wastes for no more than 90 days. Generators may accumulate hazardous waste for a maximum of an additional 90 days only if the generator stores no more than 500 kilograms (approximately 1,100 pounds) of hazardous waste or one kilogram of acute hazardous waste on-site. If you exceed these time and quantity limits, you must obtain a special storage permit from the Maryland Department of the Environment and meet all the RCRA storage requirements.

Treatment

Maryland regulations require that you obtain a permit to treat hazardous waste on-site. (Note: The state exempts treatment to neutralize corrosive wastes under certain circumstances, and treatment regulated under the Clean Water Act.)

For information on applying for a permit, contact the Maryland Department of the Environment, (410) 631-3345.

Disposal

You **may not** dispose your hazardous waste on your site unless you have obtained a disposal permit. Under certain circumstances, it may be legal to dispose certain types of hazardous waste on-site without a permit. Farmers, for example, may dispose waste pesticides on their own farms if they follow the instructions on the pesticide label. To find out who may be exempted, contact the Maryland Department of the Environment at (410) 631-3345.

The Code of Federal Regulations (49 CFR 403.12) requires that certain generators who discharge any waste into the sanitary sewer, which if otherwise disposed of would be classified as hazardous waste under 40 CFR, Part 261, to make a one-time written notification to the Washington Suburban Sanitary Commission (WSSC), the Maryland Department of the Environment, and the EPA Region 3 office.

Off-Site...

Shipping

The limits on storing hazardous wastes on-site are set to enable small businesses to accumulate enough waste to make shipping and disposal more economical.

Using the Uniform Hazardous Waste Manifest

If you are a Fully Regulated Generator, every shipment of your hazardous waste off-site must be accompanied by an EPA Uniform Hazardous Waste Manifest, Form 8700-22. The purpose of the manifest form is to allow tracking of hazardous waste from its point of origination to its final destination— so-called "cradle-to-grave" system. The hazardous waste generator, the waste service firm and the designated waste facility must each sign this document and keep a copy.

The designated waste facility must send a copy of the manifest back to you so that you can be sure your shipment was delivered. You must keep this copy of the manifest for three years.

If you do not receive the signed manifest back in 20 days, you must find out why. If you do not receive the manifest in 30 days of shipment, you are required to file an exception form with the Maryland Department of the Environment (see COMAR 26.13.03.06c).

REMEMBER: **You are ultimately responsible** for the management of your hazardous waste. Just because you have shipped the hazardous waste off-site, **your liability has not ended**. You are potentially liable for any mismanagement of your hazardous waste.

Choosing a Hazardous Waste Service Firm and Designated Waste Management Facility

The careful choice of a waste collection firm and designated waste facility is important because they will be handling and storing your waste beyond your control, while you are still responsible.
Before choosing a waste collection firm or designated facility, check with the following sources:

- Chapter 8 provides a list by material of several waste collection, storage and treatment firms.
- The EPA Region 3 office at 1-800-438-2474 will be able to tell you if a company has an EPA Identification Number, and may know if the company has had any problems.

After checking these sources, contact the waste collection firm or designated facility directly to confirm they can handle your waste and verify their EPA Identification Numbers. Also make sure they have the necessary permits and insurance and that their vehicles are in good condition. Try to begin your checking well ahead of the time you will need to ship your waste. Careful selection is very important.

Preparing Your Hazardous Waste for Shipment

When you prepare your hazardous waste for shipment, you must put the waste in containers acceptable for transportation and make sure the containers are properly labeled. Your waste collection firm should be able to assist you with information on the proper packaging and labeling of your particular waste.

Packaging
Before transporting hazardous waste off-site, businesses must package the waste in accordance with U.S. Department of Transportation regulations. The requirements for packaging hazardous waste are listed in Department of Transportation (DOT) regulations (49 CFR, Parts 172, 173, 178 and 179). You can find out the packaging requirements for your waste by calling the Maryland Department of the Environment at (410) 333-2950 or consulting with your waste collection firm.

Labeling
Before transporting hazardous waste off-site, businesses must label each container of waste with its contents in accordance with the U.S. Department of Transportation regulations (49 CFR, Part 172). Each container must also be marked with the following words and information:

HAZARDOUS WASTE— Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency, or Maryland Department of the Environment. Generator's Name and Address. EPA Manifest Number.

Placarding
Before transporting hazardous waste, businesses must placard the shipment with appropriate hazardous materials placards according to U.S. Department of Transportation regulations (49 CFR, Part 172, Subpart F). Your waste collection firm should have the appropriate placards required.

Preparing for and Preventing Accidents

Whenever you use a hazardous material or generate hazardous waste and store it on-site, you must take precautions and steps to prevent any accidental release to the environment. The following are recommended.

✔ Maintain a file of Material Safety Data Sheets (MSDSs) on the hazardous products you use. The MSDS provides important health and safety information on hazardous products. For example, it will tell you whether water or chemicals should be used to put out a fire of certain products. To receive an MSDS, write to the manufacturer or distributor of the product.

✔ Develop a written contingency plan for accidents and spills, making sure that all employees know proper hazardous waste emergency procedures.

✔ Post emergency phone numbers and the location of emergency equipment.

✔ Appoint an emergency coordinator. For most small businesses, the owner or operator usually is the emergency coordinator.

✔ Install and maintain emergency equipment, such as an alarm, a telephone or two-way radio, fire extinguishers (using water, foam, inert gas or dry chemicals as appropriate to your waste type), hoses, automatic sprinklers or spray equipment in your plant. Make sure this equipment is immediately available to your employees if there is an emergency.

✔ Provide enough room for emergency equipment and response teams to get into any area in your facility in the event of an emergency.

If you have a hazardous waste emergency at your business:

✔ In the event of fire, call 911, then attempt to extinguish the fire using the appropriate type of fire extinguisher.

✔ In the event of a spill, first call 911 for an immediate response, contain the flow of the hazardous waste as much as possible and notify the EPA National Response Center a (800) 424-8802. Then call the Maryland Department of the Environment 24-Hour Spill Response at (410) 974-3551. Clean up the hazardous waste and any contaminated materials as soon as possible.

Business users of WSSC's sanitary sewer system are required to notify the WSSC and any outside jurisdiction of any spill or other accident that could violate a pretreatment standard, damage the collection system or interfere with treatment processes. Call the WSSC at (301) 206 – 8526 (Monday-Friday, 8:15 am – 5:00 pm) or (301) 206-4002 at all other times.

✔ In the event of an explosion or other release, first call 911, then notify the EPA National Response Center immediately, (800) 424-8802, as required by federal regulation. You must also notify the Maryland Department of the Environment Emergency Response Division at (410) 974 – 3551.

If you have an emergency that requires the local fire department or you have a spill that extends outside your facility or could reach surface water, it is important to call the EPA National Response Center and advise them of the situation.

If it was not necessary to call them, they will so advise you. **But, anyone who was supposed to call and does not is subject to a $10,000 fine, a year in jail, or both.** An owner or manager of a business who fails to report a release may also have to pay for the entire cost of repairing any damage.

SERVICES DIRECTORY AND ADDITIONAL RESOURCES

Service Providers

The following are providers of hazardous waste services in the Montgomery County area. A company's presence on this list does not constitute a recommendation. These businesses can help you identify and quantify hazardous waste you generate and provide services for waste as listed.

Clean Harbors Environmental Services, Inc
(410) 685-3910
1604 Bush Street
Baltimore, MD 21230
Provides collection, treatment, storage and disposal for most hazardous waste materials.

Safety-Kleen
(301) 953 9583
3527 Whiskey Bottom Road
Laurel, MD 20724
Provides collection, treatment, storage and disposal for most hazardous waste materials.

Safety-Kleen Corporation
(703) 331-0516
11520 Ballsford Road
Manassas, VA 22110
Provides solvent collection, recycling and storage.

National Trade and Professional Organizations

The following are national trade and professional organizations that can provide your business with additional information about hazardous waste management techniques specific to your industry.

Adhesive Manufacturers Association
(847) 490-5377

Agricultural Retailers Association
(314) 567-6655
11701 Borman Drive
Suite 110
St. Louis, MO 63146

Air and Waste Management Association
(412) 232-3444
1 Gateway Center, Third Floor
Pittsburgh, PA 15222

American Academy of Environmental Engineers
(410) 266-3311
130 Holiday Court, Suite 100
Annapolis, MD 21401

American Ceramic Society
(614) 890-4700
735 Ceramic Place
Westerville, OH 43081-8720

American Electroplaters and Surface Finishers Society (AESF)
(407) 281-6441
12644 Research Parkway
Orlando, FL 32826

American Foundrymen's Society
(708) 824-0181
(800) 537-4237
505 State Street
Des Plaines, IL 60016-8399

American Supply & Machinery Manufacturers Association
(216) 241-7333
1300 Sumner Avenue
Cleveland, OH 44115-2180

Chemical Coaters Association International
(513) 624-6767
(800) 926-2848
PO Box 54316
Cincinnati, OH 45254

American Chemistry Council
(703) 741-5000
1300 Wilson Boulevard
Arlington, VA 22209

Environmental Industry Associations
(202)244-4700
4301 Connecticut Avenue, NW
Suite 300
Washington, DC 20008

The Environmental Technology Council
(202) 783-0870
734 15th Street, NW
Suite 720
Washington, DC 20005

Federation of Societies for Coatings Technology
(610) 940-0777
492 Norristown Road
Blue Bell, PA 19422-2360

The Fertilizer Institute
(202) 675-8250
501 2nd Street, NE
Washington, DC 20002

Halogenated Solvents Industry Alliance
(202) 775-0232
2001 L Street, NW
Suite 506-A
Washington, DC 20036

Institute of Makers of Explosives
(202) 429-9280
1120 19th Street, NW
Suite 310
Washington, DC 20036

Municipal Waste Management Association
(202) 637- 3000
1331 Pennsylvania Avenue, NW
Suite 1500 North
Washington, DC 20004

National Fire Protection Association
(617) 770-3000
1 Batterymarch Park
Quincy, MA 02269

National Lubricating Grease Institute
(816) 931-9480
4635 Wyandotte Street
Kansas City, MO 64112

National Paint & Coatings Association
(202) 462-6272
1500 Rhode Island Avenue, NW
Washington, DC 20005

SAMPLE FORMS & HOW TO COMPLETE THEM

EPA Notification of Hazardous Waste Activity, Form 8700-12

All Fully Regulated Generators, waste service firms, and storage and disposal facilities that store, treat or dispose of hazardous waste must have an EPA Identification Number. An EPA Identification Number may be obtained by calling the Maryland Department of the Environment (MDE) at (410) 631-3344 and requesting EPA Form 8700-12, *Notification of Hazardous Waste Activity*. You will be sent a booklet containing the two-page form and instructions for filling it out.

Figure 1 is a sample copy of a notification form to show you the kind of information required. This information

Figure 1: (Front)

EPA Notification of Hazardous Waste Activity Form

SAMPLE

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved, OMB No. 2050-0028 Expires 12/31/02
GSA No. 0246-EPA-OT

Please refer to Section V. Line-by-Line Instructions for Completing EPA Form 8700-12 before completing this form. The information requested here is required by law (Section 3010 of the *Resource Conservation and Recovery Act*).

Notification of Regulated Waste Activity

EPA United States Environmental Protection Agency

Date Received (For Official Use Only)

I. Installation's EPA ID Number *(Mark 'X' in the appropriate box)*

☐ A. Initial Notification ☐ B. Subsequent Notification *(Complete item C)*

C. Installation's EPA ID Number

II. Name of Installation *(Include company and specific site name)*

III. Location of Installation *(Physical address not P.O. Box or Route Number)*

Street

Street *(Continued)*

City or Town | State | Zip Code

County Code | County Name

IV. Installation Mailing Address *(See instructions)*

Street or P.O. Box

City or Town | State | Zip Code

V. Installation Contact *(Person to be contacted regarding waste activities at site)*

Name *(Last)* | *(First)*

Job Title | Phone Number *(Area Code and Number)*

VI. Installation Contact Address *(See instructions)*

A. Contact Address Location ☐ Mailing ☐ | B. Street or P.O. Box

City or Town | State | Zip Code

VII. Ownership *(See instructions)*

A. Name of Installation's Legal Owner

Street, P.O. Box, or Route Number

City or Town | State | Zip Code

Phone Number *(Area Code and Number)* | B. Land Type | C. Owner Type | D. Change of Owner Indicator Yes ☐ No ☐ | Date Changed Month Day Year

EPA Form 8700-12 (Rev. 12/99) - 1 of 2 -

Check Online For Current Form:
www.EPA.gov/EPAoswer/hazwaste/data/form8700/form.htm

covers your "installation" (your business site) and your hazardous waste. To complete item IX on page two of the form, you need to identify your hazardous waste by EPA Hazardous Waste Number. Appendix B contains some common wastes generated by small quantity generators along with their EPA Hazardous Waste Numbers. If you do not understand the information in Appendix B, or you cannot match your waste with those listed, you may get assistance from one of the resources listed on the inside front cover.

Complete one form for each business site where wastes are generated and return it to MDE. Each business site will receive a unique EPA Identification Number.

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved, OMB No. 2050-0028 Expires 12/31/02
GSA No. 0246-EPA-OT

ID - For Official Use Only

VIII. Type of Regulated Waste Activity *(Mark 'X' in the appropriate boxes. Refer to Instructions)*

A. Hazardous Waste Activities

1. Generator (See Instructions)
   - ☐ a. Greater than 1000kg/mo (2,200 lbs.)
   - ☐ b. 100 to 1000 kg/mo (220-2,200 lbs.)
   - ☐ c. Less than 100 kg/mo (220 lbs)
2. Transporter (Indicate Mode in boxes 1-5 below)
   - ☐ a. For own waste only
   - ☐ b. For commercial purposes

Mode of Transportation
- ☐ 1. Air
- ☐ 2. Rail
- ☐ 3. Highway
- ☐ 4. Water
- ☐ *5. Other - specify*

☐ 3. Treater, Storer, Disposer (at installation) Note: A permit is required for this activity, see instructions.

4. Exempt Boiler and/or Industrial Furnace
   - ☐ a. Smelting, Melting, and Refining Furnace Exemption
   - ☐ b. Small Quantity On-Site Burner Exemption

☐ 5. Underground Injection Control

B. Universal Waste Activity

☐ Large Quantity Handler of Universal Waste

C. Used Oil Management Activities

1. Used Oil Transporter/Transfer Facility - Indicate Type(s) of Activity(ies)
   - ☐ a. Transporter
   - ☐ b. Transfer Facility
2. Used Oil Processor/Re-refiner - Indicate Type(s) of Activity(ies)
   - ☐ a. Processor
   - ☐ b. Re-refiner
3. ☐ Off-Specification Used Oil Burner
4. Used Oil Fuel Marketer
   - ☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Used Oil Burner
   - ☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

IX. Description of Hazardous Wastes *(Use additional sheets if necessary)*

A. Listed Hazardous Wastes. *(See 40 CFR 261.31 - 33; See instructions if you need to list more than 12 waste codes.)*

1	2	3	4	5	6
7	8	9	10	11	12

B. Characteristics of Nonlisted Hazardous Wastes. *(Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles; See 40 CFR Parts 261.20 - 261.24; See instructions if you need to list more than 4 toxicity characteristic waste codes.)*

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic	(List specific EPA hazardous waste number(s) for the Toxicity Characteristic contaminant(s)) 1	2	3	4

C. Other Wastes. *(State-regulated or other wastes requiring a handler to have an I.D. number; See instructions.)*

1	2	3	4	5	6

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature	Name and Official Title *(Type or print)*	Date Signed

XI. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. *(See Section IV of the booklet for addresses.)*

EPA Form 8700-12 (Rev. 12/99) - 2 of 2

SAMPLE

Figure 1: (Back)

EPA Notification of Hazardous Waste Activity Form

Maryland Uniform Hazardous Waste Manifest, EPA Form 8700-22

Every shipment of your hazardous waste off-site must be accompanied by an EPA *Uniform Hazardous Waste Manifest, Form* 8700-22. If the destination facility is located in a state other than Maryland, that state may require their own manifest to be used. The hazardous waste generator, the waste collection firm and the designated waste facility must each sign this document and keep a copy. The designated waste facility must send a copy of the manifest back to you so that you can be sure your shipment was delivered. You must keep this copy of the manifest for three years. If you do not receive the signed manifest back in 30 days, you should find out why and notify the state and the EPA.

REMEMBER:
You are ultimately responsible for the management of your hazardous waste. Just because you have shipped the hazardous waste off-site, **your liability has not ended**. You are potentially liable for any mismanagement of your hazardous waste.

You can obtain blank copies of the manifest from your waste collection firm, the designated waste facility you intend to use or from the Maryland Department of the Environment (see inside front cover). Your hazardous waste collection firm will often be your best resource for packaging and shipping information and will help in completing the manifest.

A sample copy of a *Uniform Hazardous Waste Manifest Form* is shown in **Figure 2**. When you sign the certification in Item 16, you are confirming that: the manifest is complete and accurately describes the shipment, the shipment is ready for transport, and you have considered all your waste management options to reduce your hazardous waste given your budget.

Call MDE For Current Form:
410-631-3345

MARYLAND DEPARTMENT OF THE ENVIRONMENT
2500 Broening Highway Baltimore, Maryland 21224
(410) 631-3344 1-800-633-6101 (within Maryland) http://www.mde.state.md.us
HAZARDOUS WASTE PROGRAM
HAZARDOUS WASTE 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's US EPA ID No. | Manifest Document No.
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
4. Generator's Phone ( )
5. Transporter 1 Company Name | 6. US EPA ID Number
7. Transporter 2 Company Name | 8. US EPA ID Number
9. Designated Facility Name and Site Address | 10. US EPA ID Number

A. State Manifest Document Number MDC 0899661
B. State Generator's ID
C. State Transporter's ID HWH DC
D. Transporter's Phone
E. State Transporter's ID HWH DC
F. Transporter's Phone
G. State Facility ID
H. Facility's Phone

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above

	Haz. Code	Physical State	Specific Gravity	Percentage		Haz. Code	Physical State	Specific Gravity	Percentage
a.					c.				
b.					d.				

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information

16. GENERATORS CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and natio government regulations, and Maryland Statutes or Regulation.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Month Day Year

MDC 0899661

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials | Date
Printed/Typed Name | Signature | Month Day

18. Transporter 2 Acknowledgement of Receipt of Materials | Date
Printed/Typed Name | Signature | Month Day

TRANSPORTER

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. | Date
Printed/Typed Name | Signature | Month Day

FACILITY

ase of an emergency or spill, immediately call the National Response Center at (800) 424-8802 and the MDE at (410) 631-3400. Nights and Holidays at (410) 974-3551.

EPA Form 8700-22
Previous editions are obsolete.

COPY 1 — FACILITY: DETACH & RETURN THIS COPY TO DISPOSAL STATE

Figure 2:

Maryland Uniform Hazardous Waste Manifest, EPA Form 8700-22

Maryland Department of the Environment Hazardous Waste Annual Reports, EPA Form IC and EPA Form GM

Two forms are required to be filed annually with the state.

The Maryland Department of the Environment automatically mails these two annual report forms to hazardous waste generators each year.

For more information or to obtain these forms if you did not receive them by late January, call the Maryland Department of the Environment at (410) 631-3344.

Hazardous Waste Report – Identification and Certification (Form IC)

Hazardous Waste Report – Identification and Certification (Form IC) is divided into eight sections. Sections I through IV identify the site. Section V certifies the accuracy and completeness of the information provided. Sections VI and VII update the site's EPA notification of hazardous waste activities. Finally, Section VIII records information on waste minimization activities during the reporting year and previous year.
A sample copy of *Form IC* is in **Figure 3**.

Hazardous Waste Report – Generation and Management (Form GM)

Hazardous Waste Report – Generation and Management (Form GM) is divided into four sections. Section I documents the source, characteristics and quantity of hazardous waste generated on-site. Section II documents the quantity of hazardous waste managed on-site and the management methods. Section III documents the quantity of hazardous waste shipped off-site and the off-site management methods. Section IV documents the waste minimization activities on-site. A sample of *Form GM* is in **Figure 4**.

Check Online For Current Form:
www.EPA.gov/EPAoswer/hazwaste/data/form8700/form.htm

FORM IC — OMB#: 2050-0024 Expires 11/30/2000

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: _____

EPA ID NO: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

FORM IC

U.S. ENVIRONMENTAL PROTECTION AGENCY

1999 Hazardous Waste Report

IDENTIFICATION AND CERTIFICATION

Instructions: Please see the detailed instructions beginning on page 7 of the instructions and forms booklet before completing this form. In addition, the page number for instructions specific to each section is provided below.

Sec. I Site name and location address. Check the box ☐ in items A, B, C, E, F, G, and H if same as label; if different, enter corrections. If label is absent, enter information. Instructions page 7.

A. EPA ID No. Same as label ☐ or → ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___	B. County Same as label ☐ or →
C. Site/company name Same as label ☐ or →	D. Has the site name associated with this EPA ID changed since 1997? ☐ 1 Yes ☐ 2 No
E. Street name and number. If not applicable, enter industrial park, building name, or other physical location description. Same as label ☐ or →	

F. City, town, village Same as label ☐ or →	G. State Same as label ☐ or → ___ ___	H. Zip Code Same as label ☐ or → ___ ___ ___ ___ ___ - ___ ___ ___ ___

Sec. II Mailing address of site. Instructions page 7.

A. Is the mailing address the same as the location address? ☐ 1 Yes (SKIP TO SEC. III) ☐ 2 No (CONTINUE TO BOX B)

B. Number and street name of mailing address

C. City, town, village	D. State ___ ___	E. Zip Code ___ ___ ___ ___ ___ - ___ ___ ___ ___

Sec. III Name, title, and telephone number of the person who should be contacted if questions arise regarding this report. Instructions page 7.

A. Last Name First name M.I.	B. Title	C. Telephone Number ___ ___ ___ ___ ___ ___ - ___ ___ ___ ___ Extension ___ ___ ___ ___

Sec. IV "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties under Section 3008 of the Resource Conservation and Recovery Act for submitting false information, including the possibility of fine and imprisonment for knowing violations." Instructions page 8.

A. Last Name First name M.I.	B. Title
C. Signature	D. Date of signature ___ ___ ___ ___ ___ ___ Month Day Year

Over →

EPA Form 8700-13A/B (Revised (8/99)) Page 1 of ___

SAMPLE

Figure 3: (Front)

Hazardous Waste Report—Identification and Certification (Form IC)

Figure 3: (Back)

Hazardous Waste Report—Identification and Certification (Form IC)

FORM IC OMB#: 2050-0024 Expires 11/30/2000

EPA ID NO. ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

Sec. V	Generator status. Instructions begin on page 8.	
A. 1999 RCRA generator status (CHECK ONE BOX BELOW) ☐ 1 LQG ☐ 2 SQG ☐ 3 CESQG SKIP TO SEC. VI ☐ 4 Non-generator (CONTINUE TO BOX B)	B. Reason for not generating (CHECK ALL THAT APPLY) ☐ 1 Never generated ☐ 2 Out of business ☐ 3 Only excluded or delisted waste ☐ 4 Only non-hazardous waste	☐ 5 Periodic or occasional generator ☐ 6 Waste minimization activity ☐ 7 Other (SPECIFY IN COMMENTS BOX BELOW)

Sec. VI	On-site waste management status. Instructions page 10.
A. Storage subject to RCRA permitting requirements ☐	B. Treatment, disposal, or recycling subject to RCRA permitting requirements ☐

Comments:

SAMPLE

EPA Form 8700-13A/B (Revised (8/99)) Page ___ of ___

Check Online For Current Form:
www.EPA.gov/EPAoswer/hazwaste/data/form8700/form.htm

FORM GM — OMB#: 2050-0024 Expires 11/30/2002

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME:

EPA ID NO:

FORM GM

U.S. ENVIRONMENTAL PROTECTION AGENCY

2001 Hazardous Waste Report

WASTE GENERATION AND MANAGEMENT

Instructions: Please see the detailed instructions beginning on page 19 of the instructions and forms booklet before completing this form. In addition, the page number for instructions specific to each box is provided in parentheses.

Sec. 1 A. Waste description (page 22)

B. EPA hazardous waste code (page 22)

C. State hazardous waste code (page 22)

D. Source code (page 23) G Management Method code for Source code G25 H

E. Form code (page 23) W

F. RCRA radioactive mixed (page 23) ☐ Yes

G. Quantity generated in 2001 (page 23)

H. UOM (page 23) Density ☐ lbs/gal ☐ sg

Sec. 2 Was any of this waste managed on site? (page 24)
☐ 1 Yes (CONTINUE TO ON-SITE PROCESS SYSTEM 1)
☐ 2 No (SKIP TO SEC. 3)

ON-SITE PROCESS SYSTEM 1
On-site Management Method code (page 24) H
Quantity treated, disposed, or recycled on site in 2001 (page 25)

ON-SITE PROCESS SYSTEM 2
On-site Management Method code (page 24) H
Quantity treated, disposed, or recycled on site in 2001 (page 25)

Sec. 3 A. Was any of this waste shipped off site in 2001 for treatment, disposal, or recycling? (pages 25 and 26)
☐ 1 Yes (CONTINUE TO BOX B) ☐ 2 No (FORM IS COMPLETE)

	B. EPA ID No. of facility to which waste was shipped (page 26)	C. Off-site Management Method code Shipped to (page 26)	D. Total quantity shipped in 2001 (page 26)
Site 1		H	
Site 2		H	
Site 3		H	

Comments:

Over →

EPA Form 8700-13A/B (Revised (11/00)) — Page __ of __

SAMPLE

Figure 4: (Front)

Hazardous Waste Report— Waste Generation and Management (Form GM)

Figure 4: (Back)

Hazardous Waste Report—Waste Generation and Management (Form GM)

(Continued)

FORM GM

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: Waste Disposal, Inc.

EPA ID NO: ABD 586 810 349

U.S. ENVIRONMENTAL PROTECTION AGENCY

1995 Hazardous Waste Report

FORM GM

WASTE GENERATION AND MANAGEMENT

INSTRUCTIONS: Read the detailed instructions beginning on page 16 of the 1995 Hazardous Waste Report booklet before completing this form.

Sec. I

A. Waste description Instruction page 18. Stabilized solid generated from stabilizing wastewater treatment sludge.

B. EPA hazardous waste code Page 19. F006 NA NA NA NA

C. State hazardous waste code Page 19.

D. SIC code Page 19. 4953

E. Origin code 5 Page 19 System Type M 111

F. Source code Page 20. A 77

G. Point of measurement Page 20.

H. Form code Page 20. B 305

I. RCRA - radioactive mixed Page 20. 2

Sec. II

A. Quantity generated in 1994 Instruction Page 21. 90.0

B. Quantity generated in 1995 Page 21. 100.0

C. UOM Page 21. 2 ☐ 1 lb/gal ☐ 2 sg

Density

D. Did this site do any of the following to this waste: treat on site, dispose on site, recycle on site, or discharge to a sewer/POTW? Page 21.
☒ 1 Yes (CONTINUE TO SYSTEM 1)
☐ 2 No (SKIP TO SEC. III)

ON-SITE PROCESS SYSTEM 1

On-site process system type Page 22. M 132

Quantity treated, disposed, or recycled on site in 1995 100.0

ON-SITE PROCESS SYSTEM 2

On-site process system type Page 22. M NA

Quantity treated, disposed, or recycled on site in 1995

Sec. III

A. Was any of this waste shipped off-site in 1995 Instruction page 22.
☐ 1 Yes (CONTINUE TO BOX B)
☒ 2 No (SKIP TO SEC IV)

	B. EPA ID No. of facility waste was shipped to Page 23.	C. System type shipped to Page 23.	D. Off-site availability code Page 23.	E. Total quantity shipped in 1995 Page 23.
Site 1		M		
Site 2		M		

SAMPLE

Sec. IV

A. Did new activities in 1995 result in minimization of this waste? Instruction page 24.
☒ 1 Yes (CONTINUE TO BOX B)
☐ 2 No (THIS FORM IS COMPLETE)

B. Activity Page 24.	C. Other effects Page 25.	D. Quantity recycled in 1995 due to new activities Page 25.	E. Activity/production index Page 25.	F. 1995 source reduction quantity Page 26.
M 42 M NA M NA M NA	☐ 1 Yes ☒ 2 No	NA	1.6	44.0

Comments:

Page 4 of 11

COMMON LISTED HAZARDOUS WASTES & THEIR EPA HAZARDOUS WASTE NUMBERS

The U.S. Environmental Protection Agency (EPA) recognizes that many generators of small quantities of hazardous waste are small businesses that may not be familiar with the way that hazardous wastes are identified. The following appendix will help small quantity generators determine the EPA Hazardous Waste Numbers for their wastes. These numbers are needed to complete the Notification of Hazardous Waste Activity, Form 8700-12.

To use this appendix:

- Locate your type of business in the listings in Chapter 3.
- In this appendix, find each of the waste streams identified for your type of business. Review the descriptions to help you determine if your activities actually result in particular waste streams.
- If you determine you actually do generate a particular waste stream, report the four-digit EPA Hazardous Waste Number (for each waste stream) in Item IX of Form 8700-12.

The industries and waste streams described in this handbook are not a comprehensive list, but do serve as a guide to help you determine which of your wastes, if any, are hazardous. A complete listing of waste numbers are found in Title 40 of the Code of Federal Regulations (40 CFR), Part 261. Note that acute hazardous wastes are identified with an asterisk (*).

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. All corrosive materials and solutions have the EPA Hazardous Waste Number D002. For a complete listing see 40 CFR 261.22 characteristics of corrosivity. The following are some of the more commonly used corrosives:

Acetic Acid
Ammonium Hydroxide
Chromic Acid
Hydrobromic Acid
Hydrochloric Acid
Hydrofluoric Acid
Lye
Muriatic Acid
Nitric Acid
Oleum
Perchloric Acid
Phosphoric Acid
Potassium Hydroxide
Sodium Hydroxide
Sulfuric Acid

Dry Cleaning Filtration Residues

Cooked powder residue, still residues and spent cartridge filters containing perchloroethylene or valclene are hazardous and have the EPA Hazardous Waste Number F002. Still residues containing petroleum solvents with a flash-point less than 140 degrees Fahrenheit are considered hazardous and have the EPA Hazardous Waste Number D001.

Heavy Metals/ Inorganics

Heavy metals and other inorganic waste materials exhibit the Toxicity Characteristic (see page 3) and are considered hazardous in certain concentrations. Heavy metals and inorganics may be present in dusts, solutions, wastewater treatment sludges, paint wastes, waste inks or other materials. The following metals are regulated under the Toxicity Characteristic:

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

Ignitable Waste

Ignitable wastes include any liquids that have a flashpoint less than 140 degrees Fahrenheit, any non-liquids that are capable of causing a fire through friction, absorption of moisture, spontaneous chemical change or any ignitable compressed gas. Examples are spent solvents, solvent still bottoms, ignitable paint wastes (paint removers, brush cleaners and stripping agents), epoxy resins and adhesives (epoxies, rubber cements and marine glues), and waste inks containing flammable solvents. Unless otherwise specified, all ignitable wastes have the EPA Hazardous Waste Number of D001. If the waste has more than one code, all codes should be assigned to the waste. Some commonly used ignitable compounds are:

Acetone	F003
Benzene	F005
n-Butyl Alcohol	F003
Chlorobenzene	F002
Cyclohexanone	F003
Ethyl Acetate	F003
Ethylbenzene	F003
Ethyl Ether	F003
Ethylene Dichloride	D001
Methanol	F003
Methyl Isobutyl Ketone	F003
Petroleum Distillates	D001
Xylene	F003

Ink Sludges Containing Chromium and Lead

This includes solvent washes and sludges, caustic washes and sludges, or 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. Wastes associated with the formulation of inks have the EPA Hazardous Waste Number K086.

Lead-Acid Batteries

Used lead-acid batteries should be considered hazardous waste **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, nor do they require a hazardous waste manifest when shipped off your premises. (Special requirements do apply if you recycle your batteries on your own premises—see COMAR 26.13.10.04.)

Lead Dross	D008
Spent Acids	D002
Lead-Acid Batteries	D008

Pesticides

The pesticides listed on the next page are hazardous. Wastes marked with an asterisk (*) have been designated acutely hazardous. For a more complete listing, see COMAR 26.13.02.14 and 26.13.02.19 for specific listed pesticides and other waste and byproducts from pesticide formulators.
(Note: Some of these pesticides are no longer in common use. They may be found in storage.)

Aldicarb*	P070
Aldrin*	P004
Amitrol	U011
Arsenic Pentoxide*	P011
Arsenic Trioxide*	P012
Cacodylic Acid	U136
Carbamic Acid, Methylinitroso-Ethyl Ester	U178
Chlordane	U036
Copper Cyanides*	P029
1,2-Dibromo-3- chloropropane	U066
1,2-Dichloropropane	U083
1,3- Dichloropropane	U084
2,4-Dichlorophenoxy Acetic Acid	U240
DDT	U061
Dieldrin*	P037
Dimethylcarbamoyl Chloride	U097
Dinitrocresol*	P047
Dinoseb*	P020
Disodium Monomethane-arsenate	D004
Disulfoton*	P039
Endosulfan*	P050
Endrin*	P051
Ethylmercuric Chloride	D009
Famphur*	P097
Heptachlor*	P059
Hexachlorobenzene	U127
Kepone	U142
Lindane	U129
2-Methoxymercuric-Chloride	D009
Methoxychlor	D014
Methyl Parathion*	P071
Monosodium Methanearsanate	D004
Nicotine*	P075
Parathion*	P089
Pentachloronitrobenzene	U185
Pentachlorophenol	U242
Phenylmercuric Acetate	D009
Phorate*	P094
Strychnine*	P108
2,4,5-Trichlorophenoxy Acetic Acid	U232
2-(2,4,5- Trichlorophenoxy)-Propionic Acid	U233
Thallium Sulfate*	P115
Thiram	U244
Toxaphene*	P123
Warfarin	U248

Reactives

Reactive wastes include reactive materials or mixtures which are unstable, react violently with or form explosive mixtures with water, generate toxic gases when mixed with water, or are capable of detonation when heated or subjected to shock. For the regulatory definition of reactive waste, see COMAR 26.13.02.13. Unless otherwise specified, all reactive wastes have the EPA Hazardous Waste Number D003. The following materials are commonly considered to be reactive:

Acetyl Chloride
Chromic Acid
Cyanides
Hypochlorites
Organic Peroxides
Perchlorates
Permanganates
Sulfides

Solvents

Solvents, spent solvents, solvent mixtures or solvent still bottoms are often hazardous. This includes solvents used in degreasing and paintbrush cleaning. The following are some commonly used hazardous solvents:

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

Spent Plating and Cyanide Wastes

Spent plating wastes contain cleaning solutions and plating solutions with caustics, solvents, heavy metals and cyanides. Cyanide waste may also be generated from heat treatment operations, pigment production and manufacturing of anti-caking agents. Plating wastes are generally Hazardous Waste Numbers F006-F009, with those wastes containing cyanide being F007-F009. Cyanide heat treating wastes are generally Hazardous Waste Numbers F010-F012. See COMAR 26.13.02.16 for a more complete description of plating wastes.

Wood Preserving Agents

The wastewater treatment sludges from wastewater treatment operations are considered hazardous. Bottom sediment sludges from the treatment of wastewater processes that use creosote and pentachlorophenol are Hazardous Waste Number K001. Specific wood preserving compounds are:

Chromated Copper Arsenate	D004
Creosote	U051
Pentachlorophenol	F027

For more information or assistance, contact the Hazardous Waste Program, Maryland Department of the Environment, at (410) 631-3345

Important Contacts for Businesses Generating Small Quantities of Hazardous Waste

Federal Regulations

Throughout this handbook, you will find references to these important federal regulations. **Please note that the State of Maryland operates the regulatory program governing Maryland businesses generating small quantities of hazardous waste. Consult state regulations first.**

RCRA. The Resource Conservation and Recovery Act (RCRA) of 1976 legislated requirements to protect human health and the environment from improper hazardous waste management practices. RCRA has been updated several times since then. Regulations adopted in July 1991 brought many small quantity waste generators into the regulatory system for the first time.

SARA – Title III. The Superfund Amendments and Reauthorization Act (SARA) of 1986 contains federal requirements for emergency response planning and community right-to-know.

40 CFR, Part 261, Code of Federal Regulations. Contains the federal requirements for generators of small quantities of hazardous waste.

40 CFR, Part 270, Code of Federal Regulations. Contains the federal requirements for obtaining permits to store hazardous waste.

40 CFR, Part 172, Code of Federal Regulations. Contains the federal requirements for packaging and labeling hazardous waste for transport.

To obtain copies and more information contact:
U.S. Government Printing Office
(202) 512-1800
P.O. Box 371954
Pittsburgh, Pennsylvania 15250-7954

State Regulations

Code of Maryland (COMAR), Title 26, Subtitle 13 "Disposal of Controlled Hazardous Substances." Contains the state requirements for hazardous waste treatment, storage, and disposal in Maryland.

Maryland Department of the Environment, Hazardous Waste Report, Instructions & Forms. Contains the hazardous waste requirements for the State of Maryland and instructions on how to complete the appropriate forms.

The annual report forms are mailed to generators each year. If you do not receive a copy by late January of each year, contact:

Maryland Department of the Environment
Waste Management Administration
Hazardous Waste Program
(410) 631-3344
2500 Broening Highway
Baltimore, Maryland 21224

County Regulations

Montgomery County Executive Regulation, 19-93 AM. Contains the County requirements for registration of facilities using, storing, processing and transferring hazardous substances.

Montgomery County Department of Fire and Rescue Services
Division of Emergency Management
100 Maryland Avenue
Room 220
Rockville, Maryland 20850
(240) 777-0744
(240) 777-2300

Other Important Contacts

Montgomery County Division of Solid Waste Services
(240) 777-6400
101 Monroe Street, 6th Floor
Rockville, Maryland 20850-2589
ECOWISE
(301) 840-2370

Maryland Department of the Environment Emergency Response Division
Spill Response – 24 hours
(410) 974-3551

EPA Region 3
1-800-438-2474
1650 Arch Street (3CGOO)
Philadelphia, Pennsylvania 19103-2024

EPA RCRA Hotline
(703) 412-9810
(800) 424-9346

EPA National Response Center
(800) 424-8802

Washington Suburban Sanitary Commission (WSSC)
Code Enforcement Section
14501 Sweitzer Lane, 4th Floor
Laurel, Maryland 20707
Monday – Friday, 8:15 am – 5:00 pm,
(301) 206-8526 (spill response, permit information, discharge limitations/prohibitions, etc.)
At all other times, (301) 206-4002 (spill response only).