



A  
Guide  
on  
Hazardous  
Waste  
Management  
for Florida's  
**Auto Repair  
Shops**

## Florida Department of Environmental Protection Hazardous Waste Compliance Assistance Program



This document was published to help educate businesses on hazardous waste management issues affecting them. The suggested options may help businesses to operate in an environmentally appropriate manner. Some of the options may go beyond what is required to remain in compliance with regulations. Business owners are responsible for obtaining complete information about applicable regulations. Misrepresentations or omissions by the Florida Department of Environmental Protection or the Florida Center for Solid and Hazardous Waste Management do not relieve any person from any requirement of federal regulations or Florida law.

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These regulations are available at many public libraries. In addition, the Florida Department of Environmental Protection and the United States Environmental Protection Agency have posted links to copies of these regulations on the agencies' Internet sites:

<http://www.dep.state.fl.us>  
<http://www.epa.gov>

These sites also provide links to agency forms, fact sheets, checklists, rule summaries, answers to frequently asked questions and reports from our public information databases. Individuals who do not have Internet access may obtain copies of department publications through the contact information listed on page 16 of this document.

Revised 6/2002

## Why should I care about hazardous wastes?

As a business owner, operator or employee, you may be producing materials that can harm people and the environment. This booklet offers helpful tips on how to:

- Comply with federal and state hazardous waste regulations.
- Avoid penalties by properly managing hazardous wastes.
- Save money on disposal costs by reducing hazardous wastes.



### Health and Environment

Hazardous wastes spilled or dumped on the ground or disposed in dumpsters may seep into the groundwater and contaminate drinking water supplies.

Hazardous wastes may run off into the nearest body of water where they may poison or kill fish and other wildlife.

Hazardous wastes pose a risk to you, your employees and your community.



### Cost Savings

State and county inspectors may visit your business to ensure that hazardous wastes are being managed properly. State penalties range from \$100 to \$50,000 **per violation per day**.

Reducing hazardous wastes can reduce your production and disposal costs and reduce your risk of future liability.



### Public Image

Your customers will appreciate your efforts to prevent pollution.

Your community will recognize your business as a good neighbor.

# What is a hazardous waste?

A waste is hazardous if:

- It is listed as a hazardous waste in the Title 40 Code of Federal Regulations (CFR) Part 261, Subpart D.
- It has any of the characteristics described below:

## Characteristic Wastes

### Ignitable

Ignitable wastes are flammable or spontaneously combustible. If they have a flashpoint of less than 140 degrees Fahrenheit or an alcohol content of 24% or more, they are hazardous wastes. Examples include some paints, paint solvents, other solvents and degreasers.



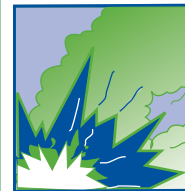
### Corrosive

Corrosive wastes can burn the skin or corrode metals. Liquids with a pH of 2 or lower or 12.5 or higher are corrosive. Examples include rust removers, acidic or alkaline fluids and battery acid.



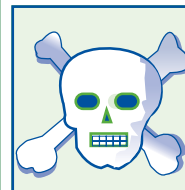
### Reactive

Reactive wastes are unstable and may explode or react violently with water or other materials. Examples include explosives such as detonators for air bags, cyanides and reactive peroxides including some catalysts.



### Toxic

Wastes are toxic if they contain certain heavy metals above specific concentrations, such as chromium, lead or cadmium, or toxic organic chemicals. Examples include some parts cleaners, mercury switches, chromium-bearing paints and spray booth filters.



## Listed Wastes

Some industrial processes and chemical wastes are listed specifically as hazardous in the federal regulations under 40 CFR 261, Subpart D. Copies of the rule can be found at many public libraries, on the Internet or may be purchased from the Government Printing Office.

## Acutely Hazardous Wastes

Small amounts of very dangerous wastes, such as arsenic and cyanide compounds, are regulated in the same way as large amounts of other wastes. A business that generates 2.2 pounds (1 kilogram) or more of these acutely hazardous wastes per month is subject to full regulation under the hazardous waste rules.

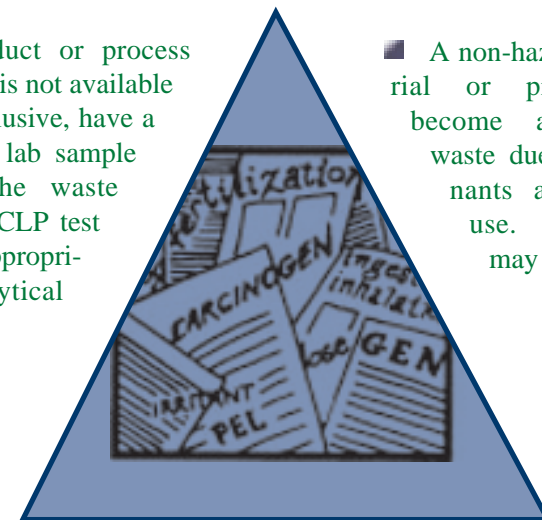
## Identifying Your Hazardous Wastes

It is very important to determine whether a waste is hazardous or non-hazardous. There are several ways to identify hazardous wastes.

- Always ask for a Material Safety Data Sheet (MSDS) before ordering any new product. The MSDS will give you valuable information about the product.
- Talk to product suppliers and manufacturers.
- Read product labels.
- Compare product and process information to hazardous waste characteristics and to wastes listed in federal regulations.

■ If product or process information is not available or is inconclusive, have a commercial lab sample and test the waste using the TCLP test or other appropriate analytical tests.

■ A non-hazardous material or product may become a hazardous waste due to contaminants added during use. Lab testing may be necessary.



## Sources of Hazardous Waste

### Used Oil

Used oil that is not recycled or is rendered unrecyclable may be regulated as a hazardous waste. If oil is spilled on the ground and not cleaned up immediately, the oil and soil possibly are hazardous and may cause a groundwater contamination problem.

### Lead Acid Batteries

Lead acid batteries that are not recycled or are managed in a manner to allow a discharge are possible hazardous wastes.

### Engine Coolant

Engine coolant that is not recycled must be tested prior to disposal. It often is a hazardous waste because of lead or solvent content. It may not be discharged directly to the environment.

### Parts Cleaners and Parts Washers

Spent parts cleaners and washers are considered hazardous wastes because they have a low flashpoint (less than 140 degrees Fahrenheit) or may be toxic. Common solvents include mineral spirits, MEK, 1,1,1-trichloroethane and toluene. Solvents become hazardous wastes because they are contaminated with heavy metals such as lead, cadmium, chromium or barium. Do not mix spent solvents with used oil. Mixing a hazardous cleaner with another substance may make the mixture hazardous.

### Shop Rags

Rags contaminated with used oil or solvents may be a hazardous waste. If your shop washes rags, water must be discharged to a publicly-owned sanitary sewer, not a storm sewer, septic tank or cesspool. If you use a towel service, make sure the company discharges its water to a publicly-owned sewer system.

### Mercury-Containing Devices

Mercury-containing devices may not be incinerated or landfilled in any quantity, not even one. They either must be recycled or handled as hazardous waste. Recycling is easier and costs less. The department recommends recycling of all mercury-containing devices. Examples of these devices include fluorescent and high-density discharge lamps, thermostats, and trunk and hood light switches.

## Who needs to know if my business generates hazardous waste?

### Post Emergency Information

Post the following information near every telephone:

- \* Fire department phone number.
- \* Emergency coordinator's name and phone number.
- \* Locations of fire alarms and extinguishers.
- \* Locations of spill control materials.

### Notify FDEP

If your business is a small or large quantity generator, notify FDEP to obtain an EPA identification number. Local environmental agencies also should be notified.

### Notify local authorities

Police and fire departments and local hospitals that would respond to an emergency need to know that there are hazardous wastes on your property.

### Designate an emergency coordinator

This person must know what to do in case of fire, spill or other emergency and must be on the premises or on call 24 hours a day.

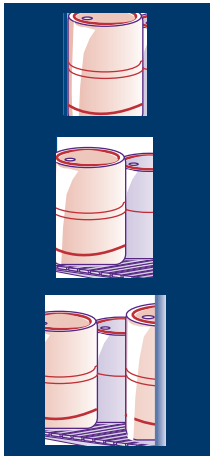
### Develop a contingency plan

Guidance on contingency plans is available from FDEP. Large quantity generators must have a written plan that includes:

- \* Emergency response arrangements with police, fire, hospitals and emergency response contractors.
- \* Emergency coordinator's address and phone number.
- \* On-site emergency equipment descriptions and locations.
- \* Evacuation plan and routes, including a site diagram.
- \* Spill reporting procedures.

## How should I manage hazardous wastes?

First, determine how much hazardous waste you generate **each month**. The rules you must follow depend on how much you generate, how much you store and how long you store it.



**Less than 220 pounds** (100 kilograms or about half a drum): you are a “Conditionally Exempt Small Quantity Generator.”

**220 - 2,200 pounds** (100-1,000 kilograms or about half a drum to 5 drums): you are a “Small Quantity Generator.”

**More than 2,200 pounds** (1,000 kilograms or more than about 5 drums): you are a “Large Quantity Generator.”

The following practices may be required for your business. Even if they are not required, they are good waste management practices. Additional information is available from FDEP.

### Containers

- Maintain containers in good condition. Prevent leaks, ruptures and accumulation of rainwater on tops of drums.
- If a container leaks, transfer waste to a new container.
- Keep containers closed. Use self-closing funnels when adding waste. Do not allow wastes to evaporate.
- Wastes must be compatible with the container. For example, use HDPE plastic containers for corrosive wastes.
- Never place incompatible wastes such as wastes that react with each other (e.g., acids and bases) in the same container.

### Storage

- Maintain adequate aisle space between container rows to allow inspection for leaks and damages.
- Store ignitable and reactive wastes at least 50 feet from property boundaries.
- Store containers with incompatible wastes in separate areas.
- Time limit for SQGs is 180 days. It is 90 days for LQGs.

### Labels



- The above label represents proper wording for a hazardous waste label. You must also comply with DOT.
- Label every container with the type of waste and whether it is hazardous or non-hazardous or used oil.
- Include the accumulation start date (the date when waste was first placed in the drum).

### Transport and Disposal

- Make sure your transporter and disposal facility have EPA identification numbers.
- Use manifests for all hazardous wastes shipped off-site. Keep the manifests on-site.

### Inspections and Recordkeeping

- Inspect containers at least once a week and keep a written log of container inspections.
- Keep a record of larger spills and use this information to identify the spill prevention options that might help your shop.
- Keep training and inspection records for three years.
- Keep manifests and shipping receipts for three years.
- Keep records of tests for three years.
- Keep land disposal restriction forms for three years from the date the waste was last shipped.

### Training

- Train all employees to identify, reduce and properly handle wastes.
- Train new employees before they handle hazardous wastes.

## How can I reduce hazardous wastes?

Reducing hazardous wastes makes good business sense. Benefits include:

- Saving money on waste management costs.
- Reducing concerns about penalties and liability.
- Creating a safer, healthier workplace.
- Promoting positive public relations with clients, customers and the local community.

## How do I begin?

- The shop owner or manager must be committed to waste minimization and pass that commitment on to the employees.
- Evaluate your shop's wastes and identify areas where changes can be made.
- Involve employees in designing and implementing pollution prevention measures.

## Solvents

- Reduce or eliminate solvent use by determining whether cleaning is really necessary.
- Use a multi-purpose solvent to reduce the types of hazardous waste that need to be managed.
- Substitute detergent-based solution for caustic solution when cleaning; substitute water-based cleaners for solvent cleaners.
- Consider switching to a water-based cleaner instead of using chlorinated spray cans of brake cleaner or carburetor cleaner.
- Use solvent sinks properly: use drip trays, allow more drainage time, use filters to prolong solvent life and keep lids closed when not in use.
- Replace solvent only when necessary.
- Use dedicated equipment to minimize cross-contamination.

## Automotive Fluids

- Keep used oil and other vehicle fluids segregated from solvent wastes and carburetor cleaner.
- Store large quantities of batteries in an isolated area with no floor drains. Storage areas should be sealed with an acid-resistant material.
- Label waste containers clearly to prevent contamination of non-hazardous wastes.

- Contract with approved recycling services for used antifreeze, lead-acid batteries, used oil and oil filters.
- Use separate receptacles for draining used oil and antifreeze.
- Educate customers about recommended maintenance schedules and replacing fluids only when necessary.

## Shop Practices

- Minimize inventory and use a "first-in, first-out" system to prevent the need for disposal of unused materials.
- Do not discharge shop wastes to the ground surface or to septic tanks. Plug floor drains.
- Manage wastes in an appropriate manner to prevent discharges to the environment. Keep containment structure valves closed.
- Keep soiled shop towels in a clearly labeled, closed container.
- Store partially used absorbents in closed, labeled containers for reuse.
- Use drip pans under leaking cars, machinery and pipes or under removed parts rather than cleaning them up with absorbents. The liquids could be reused or recycled if separate drip pans are used.
- Pre-clean parts with a squeegee, rag or wire brush. This approach helps minimize or possibly eliminate the use of hazardous solvents and prolongs the life of cleaning solutions.



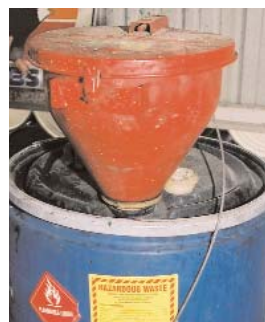
## Checklist

This checklist will help you prevent the most common hazardous waste violations. For more detailed information on hazardous waste management requirements, contact FDEP.

- Identify and record quantities of hazardous waste monthly.
- Obtain an EPA identification number, if needed.
- Use proper containers to collect and store wastes or products.
- Label all containers whether product or waste as to their contents.
- Keep all hazardous waste or products containing regulated solvents closed at all times unless actively removing from or adding to it.
- Inspect all regulated management areas.
- Designate an emergency coordinator.
- Post emergency information near each phone.
- Develop a contingency plan for emergencies.
- Use manifests for all waste transported for disposal.
- Keep all records for at least three years.



## Dos and Don'ts



**DO**  
Keep containers closed



**DON'T**  
Leave containers open



**DO**  
Keep accurate inspection logs



**DO**  
Label all containers



**DON'T**  
Leave containers unlabeled

## Tips from Inspectors

### Drums

- You cannot have any mystery drums. All drums must be labeled and have a “birthdate” on them.
- Evaporation of hazardous waste is a serious violation. Do not allow the hazardous wastes to evaporate. You must keep the drum closed when you are not in the process of putting waste into the drum. You also are required to keep the top of the drum clean.
- Do not store old drums outside. If they get stormwater inside them, you will have to sample the stormwater and determine whether or not the water in the drum is hazardous. Insist that the person who sold you the drum and its contents takes the drum back when you are done with it.
- Inspectors go into dumpsters and walk the entire property line of a business. They go back into trees looking for orphan drums and distressed/dead vegetation.

### Oil

- You cannot use used motor oil for weed control. Used oil containers must not leak and be in good shape. You must retain your used oil filter records for three years. The inspectors spend a lot of time on used oil inspections.

### Spills

- You must clean up your spills at the time of the spill.
- Be sure to store old automotive batteries on a floor that is under a roof. Do not stack batteries. If they fall over, they will leak acid and create a spill problem.

### Transport

- The only generators who are allowed to transport their own waste are conditionally exempt small quantity generators. All other generators must use a hazardous waste hauler who has a permit from the FDEP and the US EPA.

### Waste

- The most common violation is the non-determination of whether or not something is a waste.
- Abandoned products are a waste.
- If you throw away containers, make sure the container is completely empty before you place it in a waste receptacle. If you throw away aerosol cans, make sure the can has a hole in it, and that you have drained the liquids out of the can. If you are throwing away paint containers, be sure to drain all the paint out of the container.

### Water

- If you discharge any waste that could be construed as a hazardous waste into a city sewer, you must have the written permission of the city sewer system. The city sewer system must be a Publicly Owned Treatment Works (POTW). It cannot be a privately owned package plant.
- If you use rags, you should send the rags to a linen service that is served by a publicly owned sewage treatment plant. If you use paper towels, you must make a determination as to whether the used paper towels are a hazardous waste.
- Know where your drains go. All drains that lead from a hazardous materials area to a stormwater area should be sealed shut



## Where can I get more information?

Additional information on hazardous waste reduction and regulations is available from many sources.

### Florida Department of Environmental Protection

District offices and the Tallahassee office offer technical assistance, fact sheets and other publications on hazardous waste regulations.

Hazardous Waste Compliance Assistance Program

Phone: (800) 741-4DEP  
(850) 245-8707  
Fax: (850) 245-8810

Information about the Universal Waste rule can be found at:  
<http://www.dep.state.fl.us/waste/categories/mercury/pages/laws.htm>  
or by calling (800) 741-4DEP

Available publications include:

- Summary of Hazardous Waste Regulations
- Requirements for Conditionally Exempt Small Quantity Generators
- Requirements for Small Quantity Generators
- Handbook for Small Quantity Generators of Hazardous Waste



## U.S. Environmental Protection Agency

The EPA has published a series of industry-specific guidelines and handbooks on preventing pollution and complying with hazardous waste regulations.

RCRA Hotline: (800) 424-9346

### Your Trade Associations

Many trade associations have published guides to help you find solutions to your hazardous waste management problems.

### Florida Small Business Assistance Program

The Small Business Assistance Program helps businesses with environmental concerns and problems related to compliance with air regulations. Assistance is confidential and staff experts have business experience.

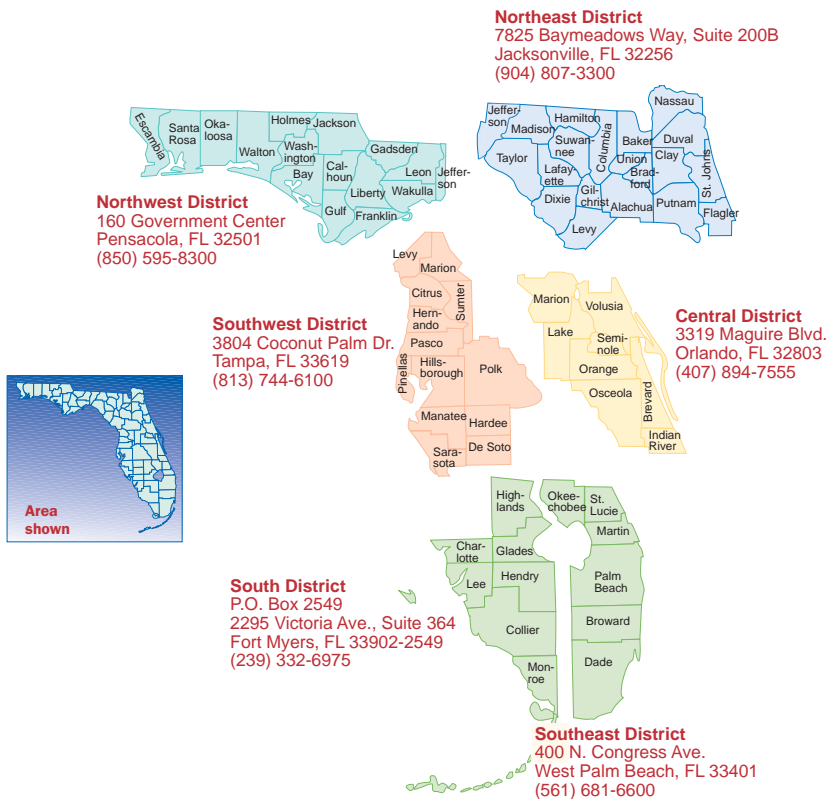
Phone: (800) 722-7457



# Offices of the Florida Department of Environmental Protection



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This project and the preparation of this brochure was funded in part by a Section 3011 Hazardous Waste Management State Program grant from the U.S. Environmental Protection Agency (US EPA) through a contract with the Hazardous Waste Management Section of the Florida Department of Environmental Protection. The total cost of the project was \$60,000, of which \$45,000 or 75 percent was provided by the US EPA.

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