Ohio EPA's Hazardous Waste Regulations: General Overview - includes Used Oil

Ohio EPA

Division of Hazardous Waste Management

What we will NOT Cover in Today's Presentation

- How to complete surface water and air forms and permits for wastewater treatment facilities
- How to complete surface water and air forms and permits for water treatment facilities
- How to complete surface water and air forms and permits for power plants

What we will Cover in Today's Presentation

- What is hazardous waste?
- Overview of the requirements for hazardous waste generators
- Hazardous waste inspections and common problems
- What is Used Oil?
- Resources

This presentation will not teach you everything you need to know about hazardous waste – this is just a starting point.

Waste Evaluation

- Any material that can no longer be used is a waste.
- Wastes are generally classified as either
  - hazardous
  - non-hazardous
- All wastes must be evaluated by the generator BEFORE the waste is disposed of.

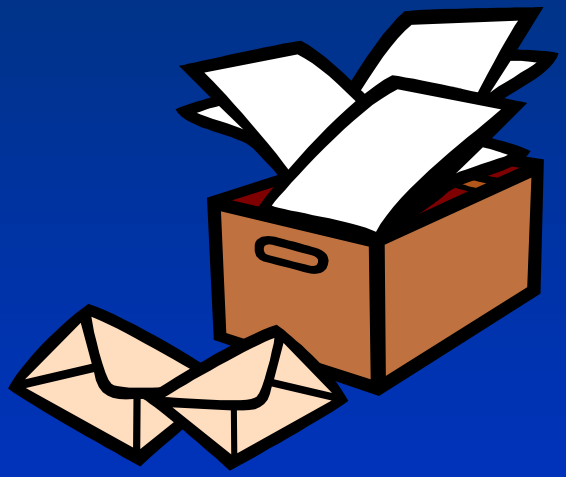
Waste Evaluation Requirement

Don’t throw any waste into the dumpster unless you have confirmed that it is NOT a hazardous waste.

Non-Hazardous Waste

Unwanted materials from a business, such as:

- garbage/trash
- paper, cardboard
- wood pallets



Does not include any material that is a hazardous or infectious waste.

Hazardous Waste

EPA considers a waste to be hazardous if:

- The waste is **listed**
- The waste has a toxic or dangerous **characteristic**

Listed Hazardous Wastes

- Specific lists published in the EPA regulations
- Each listed waste has its own unique waste code
- The waste codes begin with F, K, P, or U followed by three numbers

Listed Hazardous Waste

"F" List: includes hazardous waste from common industrial processes:

solvent degreasing
metal finishing waste

"K" List: includes hazardous waste from specific industrial processes:

chemical manufacturing
iron, steel production
explosives manufacturing

Listed Hazardous Waste

"U" List: Includes discarded commercial chemical products that are toxic.

"P" List: Discarded commercial chemical products that are acutely toxic.

Examples: expired lab chemicals, chemical products, off-spec products that can't be used.

Listed Hazardous Waste Examples

Spent Solvents:

methylene chloride	F001
methyl ethyl ketone (MEK)	F005
acetone	F003
toluene	F005

Spent clean-up solvents could be hazardous due to low flash point or could be listed (F or D wastes)

Listed Hazardous Waste Solvent Contaminated Wipers

- A wiper/rag used with a listed solvent to clean or degrease, becomes a listed hazardous waste.
- To avoid the hazardous waste regulations, have your shop rags cleaned/recycled by an industrial laundry or dry cleaner.
- You CANNOT throw shop rags in the solid waste dumpster if they were used with a listed solvent.

The Mixture Rule

- If you mix a listed hazardous waste with a non-hazardous waste, the entire mixture becomes a listed hazardous waste.

- listed solvents + antifreeze, oil, brake fluid

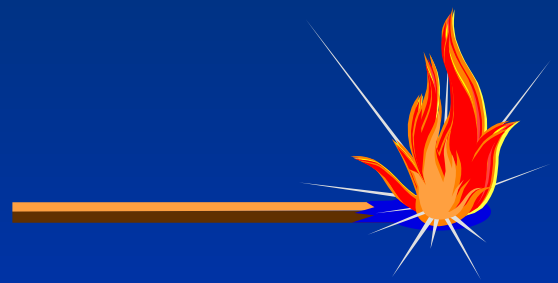
There are some exceptions to the mixture rule, but very few.

Characteristic Hazardous Waste

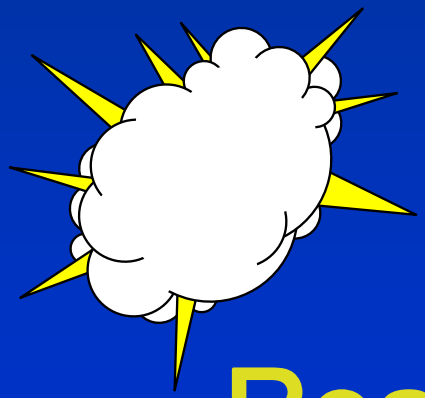
- Wastes with certain toxic/dangerous characteristics
- There are four hazardous waste characteristics
- A characteristic waste has its own unique EPA hazardous waste code, beginning with a “D” followed by three numbers.

Hazardous Waste Characteristics

Ignitability



Corrosivity



Reactivity

Toxicity

Ignitable Hazardous Waste D001

- A liquid waste with a flashpoint of less than 140° F
- Other wastes that can create a fire under certain situations (e.g., through friction)
- Ignitable compressed gases and oxidizers

Examples include solvents, paint waste and other materials that can easily catch fire.

Corrosive Hazardous Waste D002

Aqueous waste with a pH of:

- Less than or equal to 2
- 12.5 or higher

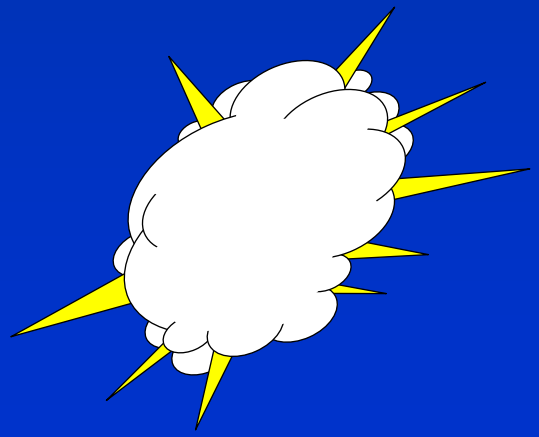
Examples include strong acids or alkaline (basic) wastes which easily corrode or dissolve metal or other materials.

Reactive Hazardous Waste D003

A reactive waste is:

- Unstable under normal conditions
- Can detonate or explode
- Reacts violently or creates toxic gases when mixed with water

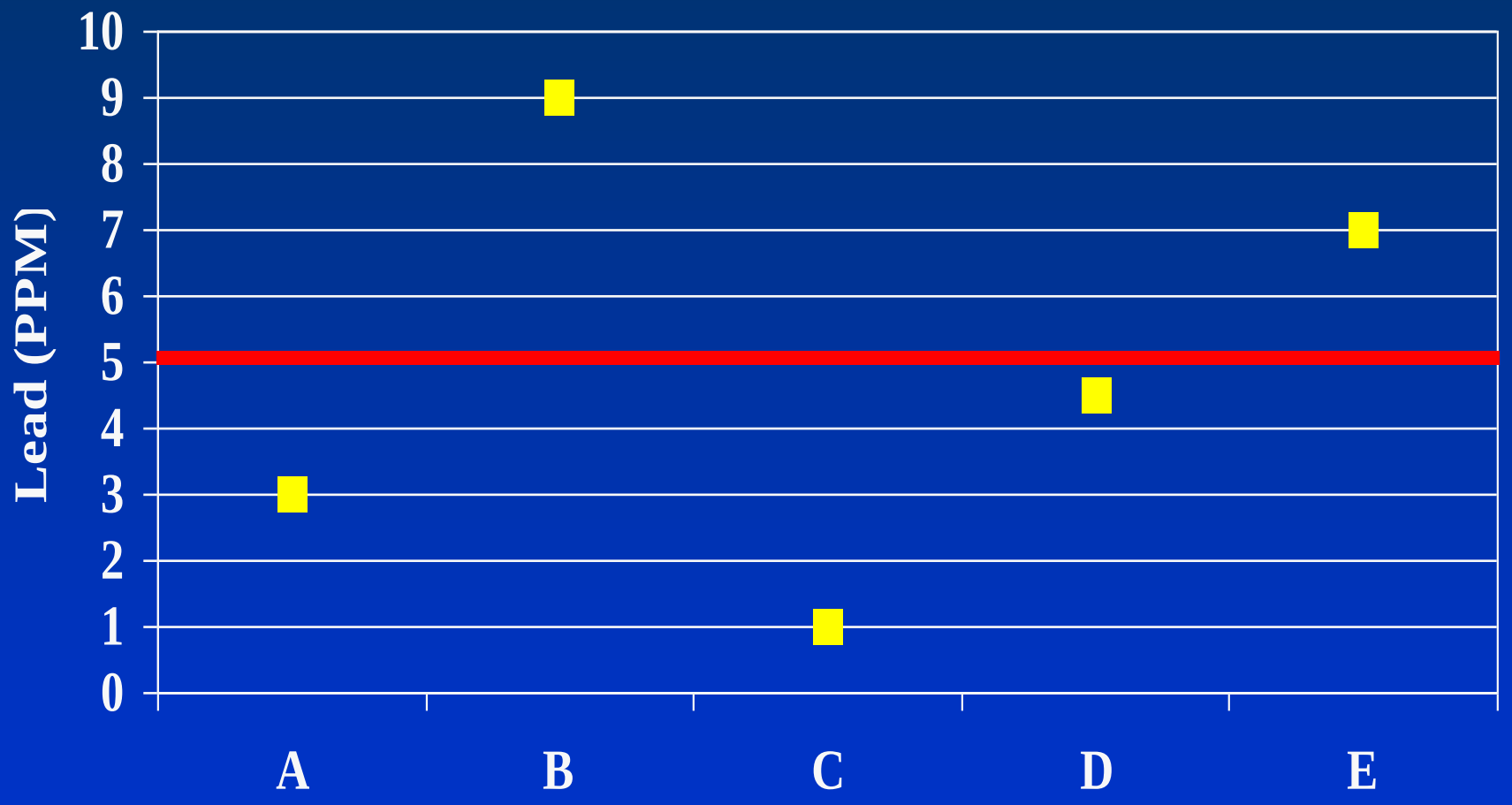
Examples include: peroxides, cyanides.



Toxic Hazardous Waste D004 - D043

- Wastes with toxic contaminants like organics or heavy metals above regulatory levels.
- Toxicity is identified through a lab test called the *toxicity characteristic leaching procedure*, or TCLP.
- Wastes carry different D-codes depending on the specific contaminants present.

TCLP Waste Example



Do you have a hazardous waste?

Toxic Hazardous Waste Examples

Methyl ethyl ketone	D035, F005, U159
Spent paints, filters could be hazardous due to heavy metals or low flash point	(D waste codes)
Lead	D008, U144
Silver	D011

Is Used Oil a Hazardous Waste?

- **U**sed oil is considered a hazardous waste if it is being disposed of and if evaluation determines it's hazardous.
- There are separate regulations for used oil:
  Ohio Administrative Code (OAC) Chapter 3745-279
- The used oil rules presume that used oil is to be recycled.
- If mixed with a spent material (e.g., spent solvent) or contaminated with heavy metals (e.g., lead, chromium) it can become a hazardous waste.

Do You Have a Hazardous Waste?

Is your business generating a waste?

If so, is the waste on Ohio EPA's F, K, P or U lists?

Yes → ***You have a listed hazardous waste***

Does the waste have any hazardous waste characteristics?

If so, you have a listed and characteristic hazardous waste

No

Does the waste have any hazardous waste characteristics?

No → ***Not a hazardous waste***

Yes → ***You have a characteristic hazardous waste***

NOTE: A waste may be listed and characteristic

Waste Evaluation Requirements

All generators need to evaluate wastes to determine if they are hazardous. Resources include:

- Lab analysis
- Generator knowledge
  - Information from vendor/supplier
  - Material Safety Data Sheet information
  - Process information

Need to keep information in file to show how you determined whether wastes are hazardous or non-hazardous.

Why Reduce the Hazardous Wastes You Generate?

- Reduce regulatory burden
- Save money
- Increase productivity
- Improve workers' health & safety

Reducing Solvent Related Hazardous Waste

- Purchase non-hazardous solvents
- Determine how clean something has to be
- Plan work jobs to minimize clean-up
- Use the minimum amount of solvent needed
- Reuse/recycle solvent

Mayco Auto Painting and Body Works Case Study

- Generated 90 gallons/month of spent solvent
  - Annual disposal costs - $2,520
- Purchased a solvent still and a gun washer
  - Capital costs (still $2,670 + washer $980= $3,650)
  - Generates 2 drums of still bottoms/year ($600)
  - Recover up to 85% of the spent solvent ($4,080)
  - Saves 360 hours of labor/year ($3,600)
  - Payback period – 0.4 years

Reduce Hazardous Waste Through Recycling

- Fluorescent bulbs
- Solvent wipers/rags
- Scrap metal
- Precious metals

Other Methods to Reduce Hazardous Waste

- Inventory control
- Waste segregation
- Good housekeeping
- Employee suggestions

Custom Print Case Study

- Chemical inventory of 80 different chemicals
- Established a team to reduce inventory
  - Eliminated duplicate chemicals
  - Selected multi-tasked chemicals
  - Returned samples to vendor
  - Reduced inventory to 24 chemicals
  - Saved $5,000/year in disposal and raw material costs

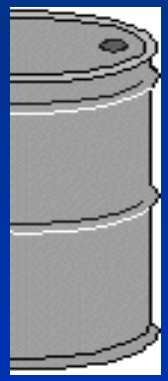
Hazardous Waste Generator Classifications

A generator's classification is based on the quantity of hazardous waste **generated** in a month.

- CESQG Conditionally Exempt Small Quantity Generator
- SQG Small Quantity Generator
- LQG Large Quantity Generator

Conditionally Exempt Small Quantity Generator "CESQG"

Generates less than 100 kilograms (220 lbs.) of hazardous waste in a month.

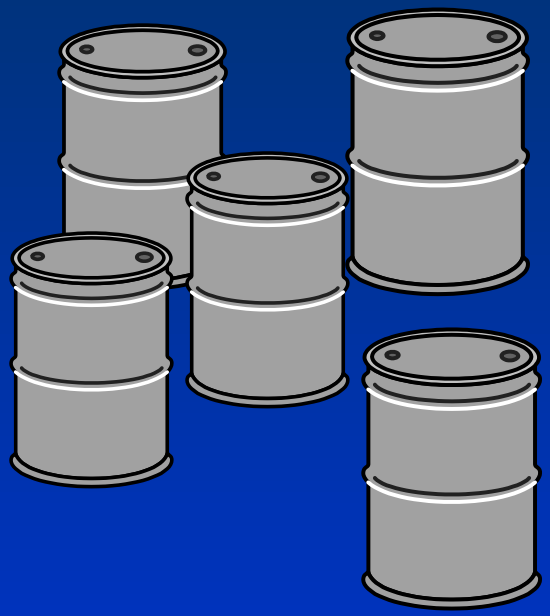


100 kgs. = about 25 gallons.

A CESQG cannot have more than a total of 1,000 kgs. (2,200 lbs.) of hazardous waste on-site. If so, becomes a SQG.

Small Quantity Generator "SQG"

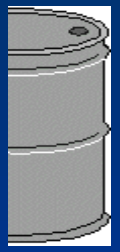
Generates between 100-1000 kgs. (220-2,200 lbs.) of hazardous waste in a month.



This is equal to about 25-265 gallons

SQG cannot have more than 6,000 kgs. (13,228 lbs) on site.

Monthly Hazardous Waste Generation



CESQG:

less than 100 kgs. (220 lbs.) about 25 gallons

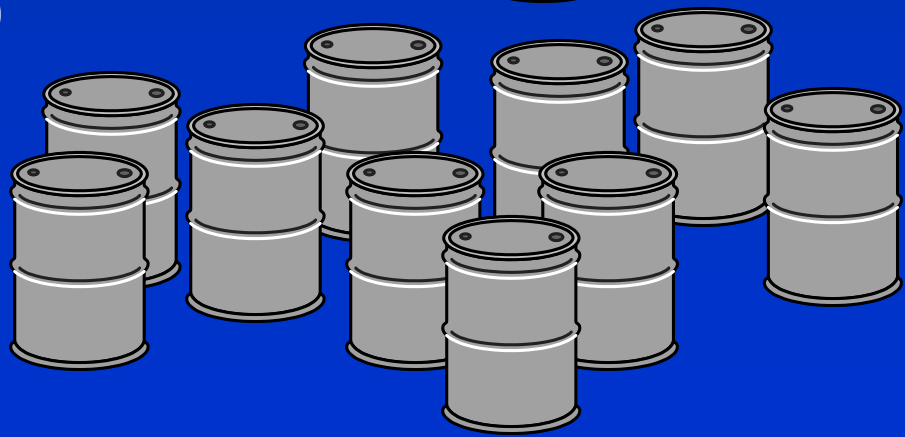
SQG:

100-1,000 kgs. (220-2,200 lbs.) about 25-265 gallons

LQG:

more than 1,000 kgs. (2,200 lbs.)

more than about 265 gallons



Hazardous Waste Generators Ohio's Regulations

- The more waste a company generates, the greater the number of requirements there are to comply with.
- Today we will be covering CESQG and SQG requirements.

Hazardous Waste Regulations CESQGs

- All wastes need to be evaluated and information kept on file.
- Must send waste off-site to a permitted hazardous waste facility.
- Don’t need to have generator i.d., but many CESQGs do because transporters or disposal companies may require generators to have one.

Hazardous Waste Regulations CESQGs

- Can mix hazardous waste with used oil if the used oil will be burned for energy recovery (on-site or off-site).
- In this case, the mixture is regulated as used oil. OAC 3745-51-05(J)
- Only applies to CESQGs, not SQGs or LQGs.

SQG Requirements

Waste Evaluation and I.D. Number

- Evaluate all waste
- Keep waste evaluations on file
- Get a generator identification number from Ohio EPA: www.epa.state.oh.us/dhwm/notiform.html

MAIL THE COMPLETED FORM TO: Ohio EPA, DHWM, P.O. Box 1049, Columbus, OH 43216-1049	Ohio Environmental Protection Agency **RCRA SUBTITLE C SITE IDENTIFICATION**	For Ohio EPA Use Only

1. Reason for Submittal	**Reason for Submittal:** ☑ To provide initial notification (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities). ☐ To provide subsequent notification (to update site identification information). ☐ As a component of a First RCRA Hazardous Waste Part A Permit Application. ☐ As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment #_____) ☐ As a component of the Hazardous Waste Report for the year _____.

2. Site EPA ID No.	**EPA ID Number:**		
3. Site Name	**Name:** General Metal Processing Co		
4. Site Location Information	**Street Address:** 501 Main St		
	City, Town, or Village: Small Town	**State:** OH	
	County Name: Buckeye	**Zip Code:** 45000	
5. Site Land Type	**Site Land Type:** ☑ Private ☐ County ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other		
6. North American Industry Class. System (NAICS) Code(s) for the Site	**A.** 332813	**B.**	
	C.	**D.**	
7. Site Contact Person:	**First Name:** William	**MI:** A	**Last Name:** Jones
	Phone Number: 614-555-5555	**Phone Number Extension:**	
	E-Mail Address:		
	Fax Number: 614-555-5556	**Fax Number Extension:**	
	Street or P.O. Box: Same as location		
	City, Town or Village:		
	State:	**Country:**	**Zip Code:**
8. Legal Owner and Operator of the Site List Additional Owners and/or Operators in the Comment Section or on another copy of this form page.	**A. Name of Site's Legal Owner:** Same as contact	**Date Became Owner (mm/dd/yyyy):** 01/ 01 /2001	
	Owner Type: ☑ Private ☐ County ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other		
	Street or P.O. Box: Same as location		
	City, Town, or Village:		
	State:	**Country:**	**Zip Code:**
	B. Name of Site's Operator: Same as contact	**Date Became Operator (mm/dd/yyyy):** / /	
	Operator Type: ☑ Private ☐ County ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other		
	Street or P.O. Box: Same as location		
	City, Town, or Village:		
	State:	**Country:**	**Zip Code:**

9. Type of Regulated Waste Activity (Mark "X" in the appropriate boxes.)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste
(choose only one of the following three categories)

- ☐ a. **Large Quantity Generator (LQG):** Greater than 1,000 kg/mo (2,200 lbs.) of non-acute hazardous waste; or
- ☑ b. **Small Quantity Generator (SQG)** 100 to 1,000 kg/mo (220-2,200 lbs.) of non-acute hazardous waste; or
- ☐ c. **Conditionally Exempt Small Quantity Generator (CESQG):** Less than 100 kg/mo of non-acute hazardous waste

In addition, indicate other generator activities (check all that apply)

- ☐ d. United States Importer of Hazardous Waste
- ☐ e. Mixed Waste (hazardous and radioactive) Generator

2. Hazardous Waste Report Generator Status
(choose one if a Reason for Submittal is the Hazardous Waste Report)

- ☐ a. **Large Quantity Generator (LQG):** Greater than 1,000 kg/mo (2,200 lbs.) of non-acute hazardous waste was generated at the site in any one month. or
- ☐ b. **Small Quantity Generator (SQG)** In one or more months the site generated greater than 100kg (220 lbs) but in no month did it generate more than 1,000 kg/mo (220-2,200 lbs) of non-acute hazardous waste, or
- ☐ c. **Conditionally Exempt Small Quantity Generator (CESQG):** The site generated no more than 100 kg (220 lbs) of non-acute hazardous waste in any one month.
- ☐ d. **Non-Generator** The site did not generate any hazardous waste during the calendar year.

For Items 3 through 7, check all that apply:

- ☐ **3. Transporter of Hazardous Waste**
- ☐ **4. Treater, Storer or Disposer of Hazardous Waste (at your site)** Note: A hazardous waste permit is required for this activity.
- ☐ **5. Recycler of Hazardous Waste (at your site)** Note: A hazardous waste permit may be required for this activity.
- **6. Exempt Boiler and/or Industrial Furnace**
  - ☐ a. Small Quantity On-site Burner Exemption
  - ☐ b. Smelting, Melting, Refining Furnace Exemption
- ☐ **7. Underground Injection Control**

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste (accumulate 5,000 kg or more at any time). Indicate types of universal waste generated and/or accumulated at your site. (check all boxes that apply):

	Generated	Accumulated
1. Batteries	☐	☐
2. Pesticides	☐	☐
3. Thermostats	☐	☐
4. Lamps	☐	☐
5. Other (specify) _____	☐	☐
6. Other (specify) _____	☐	☐
7. Other (specify) _____	☐	☐

☐ **2. Destination Facility for Universal Waste**
Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities

1. Used Oil Transporter
Indicate Type(s) of Activity(ies)
- ☐ a. Transporter
- ☐ b. Transfer Facility

2. Used Oil Processor and/or Re-refiner
Indicate Type(s) of Activity(ies)
- ☐ a. Processor
- ☐ b. Re-refiner

☐ **3. Off-Specification Used Oil Burner**

4. Used Oil Fuel Marketer -
Indicate Type(s) of Activity(ies)
- ☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- ☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

10. Waste Codes for Federally Regulated Hazardous Wastes. Please list the codes for the federally regulated hazardous waste handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more space is needed.

F008	F011	F009				

11. Comments

12. 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 of owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm-dd-yyyy)
William A Jones	William A Jones	01/02/2003

SQG Requirements
Hazardous Waste Shipments

- Shipments of waste are sent out under a manifest.
- Manifest needs to include the specific information outlined in the regulations.
- Shipment must include Land Disposal Restriction (LDR) paperwork; one-time notification.
- SQGs can use other shipping paper if sending waste out under recycling contract or tolling agreement.

SQG Requirements
Hazardous Waste Shipments

- Need to get a signed copy of manifest back from disposal facility and keep in file.
- If signed manifest not received within 60 days of shipment, contact Ohio EPA. Reporting this is required.
- Need to keep shipping records on-site for 3 years.

Please print or type (Form designed for use on elite (12 - pitch) typewriter)

Form Approved. OMB No. 2050 - 0039 Expires 9 - 30 - 91

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No. OHD123456789 Manifest Document No. 001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address LJ2 100 Main Somewhere, OH

4. Generator's Phone (614-555-1212)

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name Ken's Transportation

6. US EPA ID Number OHD121212121

C. State Transporter's ID

D. Transporter's Phone 513-555-2121

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address IMD 800 Park Somewhere, Texas

10. US EPA ID Number TXD232323232

G. State Facility's ID

H. Facility's Phone 214-555-2323

GENERATOR

	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.	Waste Flammable Liquid, n.o.s., 3, UN 1993, II	001	DM	00055	G	D001
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above D001

15. Special Handling Instructions and Additional Information

waste flammable liquids, n.o.s. - flash point 76°F

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

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 Ida Knough Signature I Knough Month 5 Day 7 Year 98

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name Ben Driver Signature B Driver Month 5 Day 7 Year 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name Signature Month Day Year

FACILITY

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.

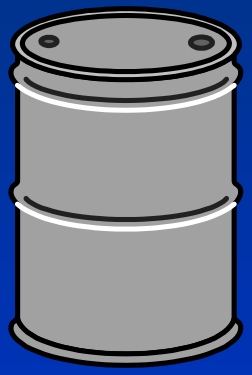
Printed/Typed Name I.W. Good Signature I W Good Month 5 Day 7 Year 98

EPA Form 8700 - 22 (Rev. 9 - 88) Previous editions are obsolete.

SQG Requirements
Container Management

Containers holding hazardous waste must be:

- Closed and in good condition



- Labeled with words “Hazardous Waste” (unless in a satellite accumulation)

- Labeled with the date the company started to collect the waste (called accumulation start date) (unless in a satellite accumulation)

Satellite Accumulation

Where hazardous waste is collected near the point of generation. It also needs to be under the control of the process operator.

Examples:

Drum of used shop rags next to a spray booth
Spent ink or solvent drum next to a printing press

Satellite Accumulation

- Can collect up to 55 gallons in satellite accumulation.
- Containers must be closed unless adding waste.
- Drums need to be labeled with description of contents (“hazardous waste” or other words).
- Don’t need to put accumulate start date on drum until you’ve collected 55 gallons.
- After reaching 55 gallons, need to move drum to central storage area within 3 days.

Accumulation Start Date Storing Hazardous Waste On-Site

A Small Quantity Generator (SQG) can only store hazardous waste on-site for 180 days from the accumulation start date.

If the SQG is shipping hazardous waste off-site to a disposal company that is more than 200 miles away, the waste can be stored for 270 days.

Hazardous Waste Drum Label

While hazardous waste is being accumulated on-site each container is labeled with the words “hazardous waste.”

SQG Requirements
Container Area Inspection Logs

Hazardous waste containers need to be inspected <u>weekly</u> and inspections recorded in a log or summary.

Ohio EPA does not require that a specific inspection form be used. A company can create its own form.

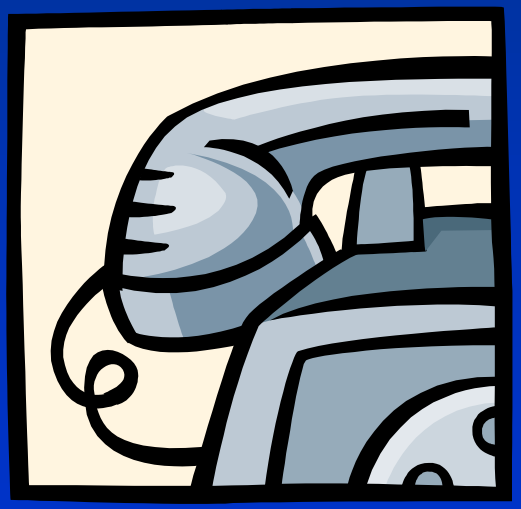
SQG Requirements
Emergency Preparedness and Prevention

- Company contact who can respond to hazardous waste related problems (emergency coordinator).
- Employees must be familiar with emergency procedures for company.
- Company must have adequate aisle space where hazardous waste is accumulated.

SQG Requirements
Emergency Preparedness and Prevention

Emergency information must be posted by the telephone:

- Name/phone number of emergency coordinator
- Location of emergency equipment
- Telephone number of local fire department



SQG Requirements
Emergency Equipment

Where needed, emergency equipment must be kept at the company. Examples include:

- internal alarm/communication device
- fire control equipment
- spill control equipment

SQG Requirements
Emergency Equipment Inspections

Emergency equipment must be inspected and tested as needed to maintain proper operation.

Inspections must be recorded in a log.

SQG Requirements
Accumulating Hazardous Waste On-site

Can't have more than a total of 6,000 kgs. of hazardous waste on-site. *about 1,580 gallons (about 29 55-gallon drums)

Can only keep hazardous waste on-site for 180 days (270 days if shipping +200 miles).

A company exceeding the above limits becomes a hazardous waste storage facility -- subject to MANY regulations, including permitting.

Statutory Requirements for Generators

CANNOT keep hazardous waste on-site longer than the regulations allow.

CANNOT dispose of any hazardous waste on-site (e.g., dumpster, outside, down a septic tank). Hazardous wastes must be sent off-site to a permitted hazardous waste facility.

CANNOT send hazardous waste to a non-permitted facility.

CANNOT accept hazardous waste from other generators (even if they are the same company)

What Happens During an Ohio EPA Hazardous Waste Inspection?

Site entry/opening meeting

- purpose of inspection
- agenda for inspection
- what documents will be reviewed
- health/safety considerations

What Happens During an Ohio EPA Hazardous Waste Inspection?

Facility walk through

- process operations
- hazardous waste generation areas
- hazardous waste storage areas
- emergency equipment
- pollution prevention opportunities

What Happens During an Ohio EPA Hazardous Waste Inspection?

Records review

- waste evaluation information
- manifests/LDR papers
- inspection logs
- phone posting

What Happens During an Ohio EPA Hazardous Waste Inspection?

Closing meeting

- what violations were found
- measures to correct immediate violations
- areas requiring further investigation
- procedures following inspection (receiving NOV, NOC, checklists)

Frequently Found Hazardous Waste Violations

- Failure to evaluate all waste streams

  Some examples include:

  shop rags
  paint booth filters
  fluorescent bulbs

- Unknown drum(s) of material on-site.

Preventing Hazardous Waste Violations

Make sure you have evaluated all your waste streams to see if they are hazardous. DO NOT dispose of waste in your trash dumpster unless you can confirm that it is not hazardous waste.

Preventing Hazardous Waste Violations

To avoid expensive sampling and lab analysis, make sure you don't have any "mystery drums" around your shop. Make sure employees know where hazardous waste goes. Keep waste streams segregated.

Preventing Hazardous Waste Violations

Keep waste evaluation information on file.

This information may include:

- Material Safety Data Sheets
- Information from a lab or vendor
- Other information

Frequently Found Hazardous Waste Violations

- Failure to label containers with the words "Hazardous Waste"
- Failure to put accumulation start date on hazardous waste containers
- Failure to keep containers in good condition.

Preventing Hazardous Waste Violations

Make sure that drums are in good condition and properly labeled as "Hazardous Waste."

Preventing Hazardous Waste Violations

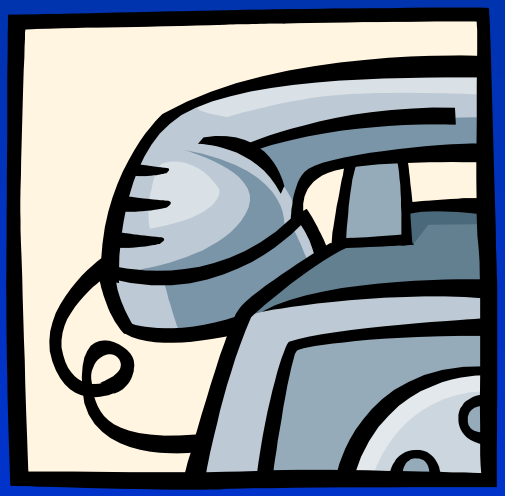
- Pay attention to length of time containers are being kept on-site.

  If SQG, make sure you are not exceeding the 180 (or 270 day if transporting +200 mi.) storage time limit.

- If you have a hazardous waste spill, take quick action to clean it up. And, keep a record in your files on how you addressed or cleaned up the spill.

Frequently Found Hazardous Waste Violations

- Failure to conduct inspections of containers and emergency equipment.
- Failure to post emergency information by phone:
  - Emergency coordinator's name and phone number
  - Emergency equipment location
  - Number of fire department



Preventing Hazardous Waste Violations

- Make sure you have completed all your hazardous waste paperwork and that you know where it is:

  shipping papers, manifests
  inspection logs, etc.

- Ensure paperwork is up-to-date.

A central file for hazardous waste paperwork might be helpful.

The hazardous waste (RCRA) program was established to prevent situations like this!

And this . . .

And this . . .

The plant manager claimed some of these drums contained product.

Keep product and waste drums separated.

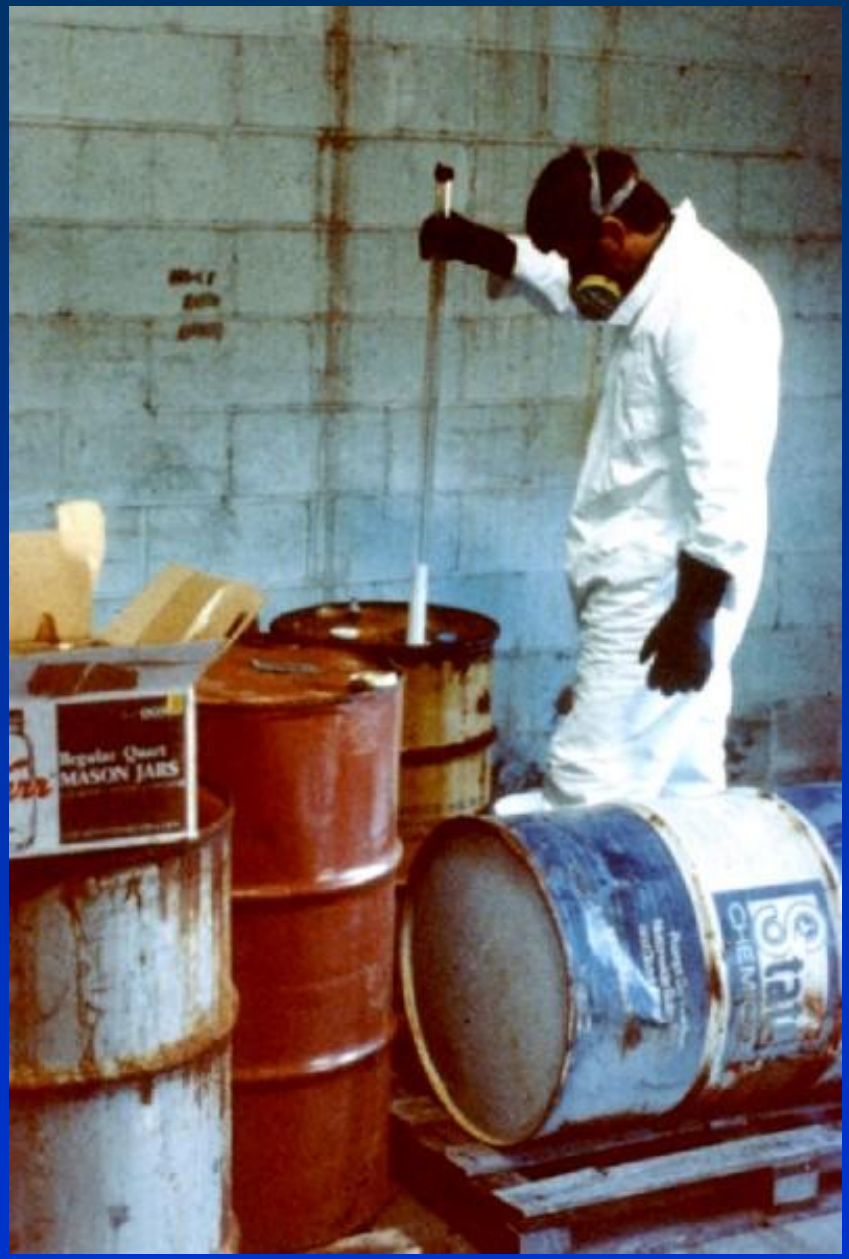
Drum storage areas must have adequate aisle space.

Containers must be in good condition.

Waste material is leaking from these waste drums into a floor drain. Don’t let this happen at your business.

Having a well equipped spill cabinet and taking quick action to address spills will save you a costly cleanup.

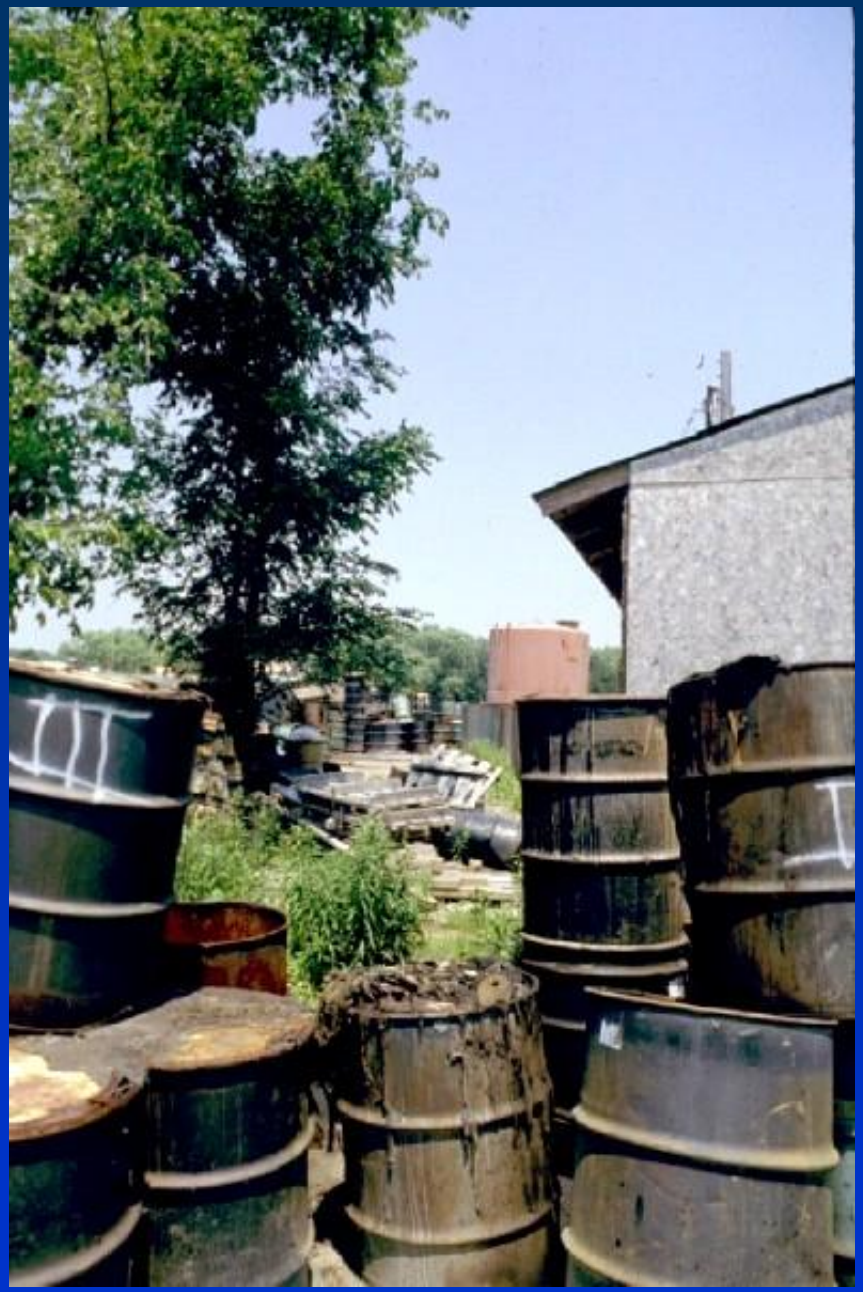
Do you know what is in your drums?



Unknown drums at your business can lead to expensive sampling and laboratory analysis.

Be careful about storing hazardous waste drums outside. Spills and leaks can create a big problem.

This company had to pay for an expensive cleanup, because it did not address leaks and spills.



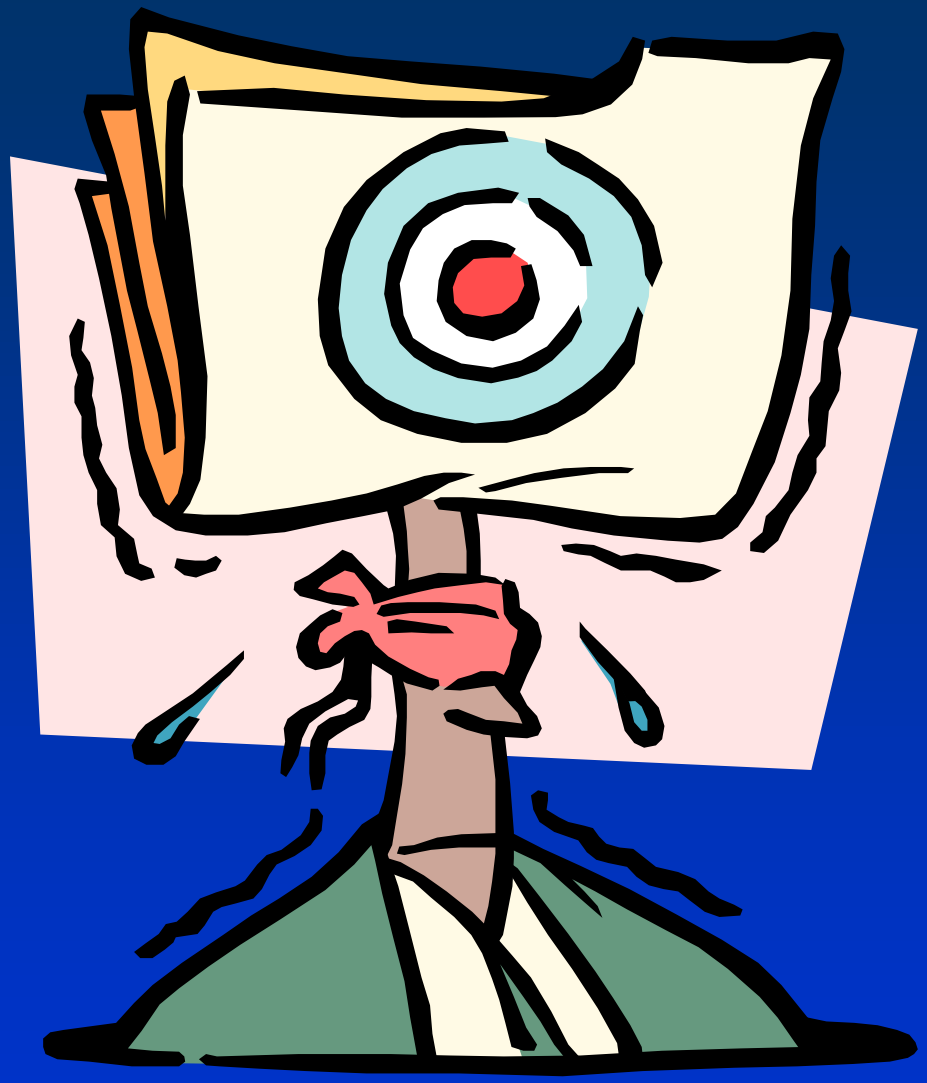
The hazardous waste inspection includes a walk around the outside of buildings to make sure waste is not being improperly stored or disposed of.

This company was disposing of waste and oil at the back of the property.

DO NOT dispose of any hazardous waste on the ground at your business.

Some hazardous waste violations may also be a violation of other regulations such as water or air pollution control requirements. This company was burning shop rags in burn barrel, a waste and air violation.

This parts washer is right next to a floor drain which leads directly to a waterway. Discharges can lead to waste and water violations.



Many hazardous waste violations are paperwork-related. Avoid these violations. Make sure you have all your paperwork completed.

What is Used Oil?

- Petroleum-based or synthetic oils
  - that have been used and
  - contaminated with physical/chemical impurities
- Used oil is not defined as a hazardous waste on its own (unless mixed with materials such as solvents or other chemicals).
- Ohio regulations presume that used oil is being recycled.
- Used oil is subject to its own set of regulations

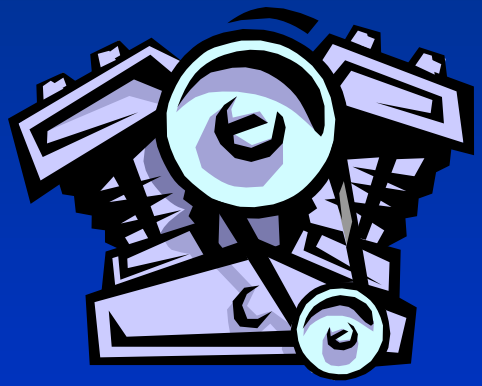
Used Oil Activities

Used oil regulations apply to each of these activities

- Generation
- Transportation
- Collecting
- Burning
- Marketing
- Processing, re-refining

Examples of Used Oil

- Engine oils from vehicles and equipment
- Lubricating oil
- Brake/transmission fluid
- Hydraulic fluid
- Insulating oil
- Metal cutting fluid
- Compressor or refrigerant oil



Used Oil Does Not Include

- Oil products (unused/new)
- Contaminated oil products
- Cleanup material from oil product spills
- Sludge from virgin oil storage tanks
- Animal/vegetable oil
- Antifreeze
- Kerosene, petroleum based solvents

Used Oil Generator

A person whose action first causes used oil to become subject to regulation. Examples:

- Manufacturers
- Machine shops
- Metal working shops
- Quick lube, auto service shops
- Equipment servicing (compressors, forklifts, field vehicles, other large equipment)

Used Oil Generator Standards

- The regulations encourage used oil to be recycled by reconditioning, reusing, re-refining or energy recovery.
- Regulations relate to good housekeeping, container and tank standards.
- Some paperwork requirements, more for other used oil handlers than generators.

Used Oil Containers

- Label used oil containers with the words “Used Oil” (NOT “Waste Oil”)
- Containers must be in good condition (no rust, leaks)
- As a generator, there’s no time limit on storing used oil at your business

Although these drums are labeled, they are being stored in a poor location outside. DON’T do this at your business!

•Used Oil Storage Tanks

- Tanks must be in good condition and labeled "Used Oil."

- For underground tanks, fill pipes must be labeled "Used Oil."

- Underground tanks are also subject to the State Fire Marshal's Office, Bureau of Underground Storage Tanks regulations.

http://www.com.state.oh.us/odoc/sfm/bustr/

Used Oil Regulations
Spill Prevention

- Depending on how much oil you can store on-site, you may need to develop a spill response plan (SPCC plan) and have secondary containment.

Spill Prevention Control and Countermeasures Plan (SPCC)

You Need to Comply with the SPCC Rules if you have any of the Following Oil <u>Storage Capacities</u>:

- > 1,320 gallons of above ground storage
- > 42,000 gallons of underground storage

These regulations are based on the storage capacity of your tanks or containers, not how much you actually store.

Secondary Containment for Used Oil Containers and Tanks

- The used oil rules do not require used oil generators to have secondary containment.
- It's still a good idea to protect you from a costly cleanup.
- Other used oil handlers such as transporters, burners and processors/re-refiners must have secondary containment.

Make Sure You Don’t Pour Used Oil or Any Other Chemical Wastes Into Your Floor Drains or Septic System!

DON’T pour your used oil into a sewer or down a storm drain!

Not only does this cause environmental damage, it can also lead to violations or penalties.

Managing Used Oil

- Generators must send their used oil off-site to a disposal or recycling company.
- Ohio EPA has a list of companies that recycle used oil: www.epa.state.oh.us/opp/recyc/oilmark.html
- Used oil CANNOT go into the dumpster, a septic system or on the ground!

DON’T dispose of used oil outside onto the ground or use it as a dust suppressant!

Ohio EPA, DAPC has a list of dust suppression alternatives.

Used Oil Shipments Off-site

- The transporter picking up your used oil must have an identification number from Ohio EPA.
- You can check on a transporter's number by calling the Division of Hazardous Waste Management at (614) 644-2917.

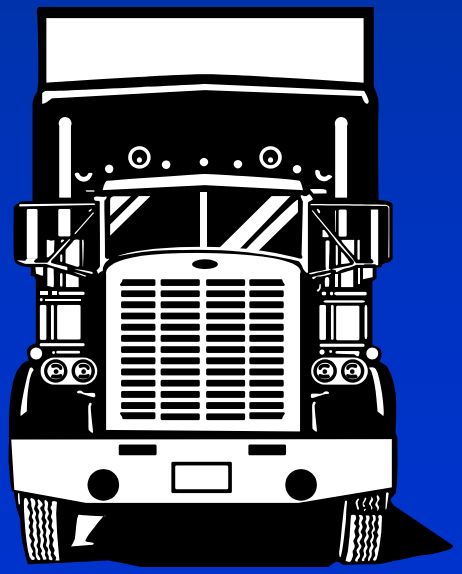
Used Oil Shipments Off-Site

- Your transporter must keep a shipping record for the used oil they take.
- Under the regulations, the generator does not need to keep records of used oil shipments. It's a good idea to do so, though.

Used Oil Transportation

A used oil generator may self-transport up to 55 gallons of used oil to the following locations without registering with Ohio EPA as a transporter:

- Collection center
- Aggregation point



Used Oil Collection Center

A site that is registered with Ohio EPA and accepts used oil from other businesses. This site can also accept used oil from homeowners.

Used Oil Aggregation Point

A site that accepts used oil from other sites that it owns or operates.

Remember, you can only self-transport up to 55 gallons of used oil.

Can I Burn Used Oil in My Space Heater?

Many small businesses burn used oil in space heaters to heat their shops.

This is acceptable, if the following three conditions are met:

Burning Used Oil in Space Heaters

- You only burn oil that you've generated or received from a household oil changer ("do-it-yourselfer")
- The space heater has a burning capacity of no more than .5 million BTUs per hour
- The combustion gases are vented outside

Burning Used Oil

- Need to comply with the air pollution regulations

- Open burning of used oil, shop rags or any other waste is strictly prohibited under Ohio's air rules

What About Used Oil Filters?

- Used oil filters need to be properly drained
- EPA has guidelines on how to “hot drain” filters
- Used oil generated from draining filters must be managed properly

Handling Used Oil Filters

Acceptable “hot draining” methods include:

- Puncture back valve or dome end and hot drain
- Hot drain and crush
- Dismantle and hot drain

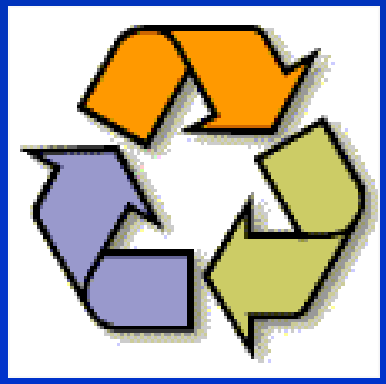
Hot draining is when the filter is:

- Brought to normal engine operating temp. (60 F)
- Allowed to drain for 12 (minimum) to 24 hours

Used Oil Filters

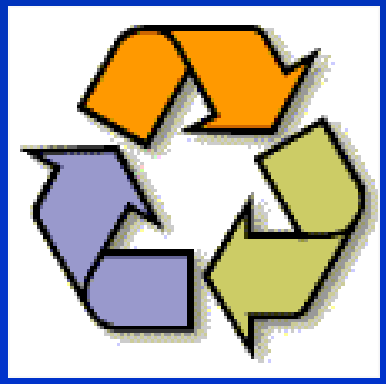
- Once hot drained, filters can be thrown in the dumpster with your other solid waste, provided they are <u>not</u> terne-plated filters.

- You're encouraged to send the filters to a scrap metal company for recycling.



Terne Plated Filters

- Terne is an alloy of lead and tin
- Lead in terne plating can make a used oil filter hazardous
- Terne plated filters were used more commonly with heavy-duty vehicles such as trucks and buses
- Most terne plating was phased out in the early 90's



Used Oil Filters

DON’T put used oil filters in the dumpster unless they are non terne-plated and have been properly hot drained. Remember, recycling is the best option.

Where do I go for help?
?

DHWM's Regulatory Services Unit

- Free guidance
- Regulatory interpretations
- Meetings and presentations
- Lists of recyclers
- www.epa.ohio/dhwm/
- 614-644-2917

Ohio EPA's NEW Office Compliance Assistance and Pollution Prevention

- Formerly SBAO and Office of Pollution Prevention
- Provides services:
  - Small businesses (<100 employees) Statewide
  - Confidential
  - On-site assessments
  - Free publications
  - Workshops

OCAPP
Office of Compliance Assistance and Pollution Prevention

Ohio EPA's new OCAPP

- http://www.epa.ohio.gov/ocapp
- 614-644-3469 or 800-329-7518

P2mail@epa.state.oh.us

Division of Hazardous Waste Management