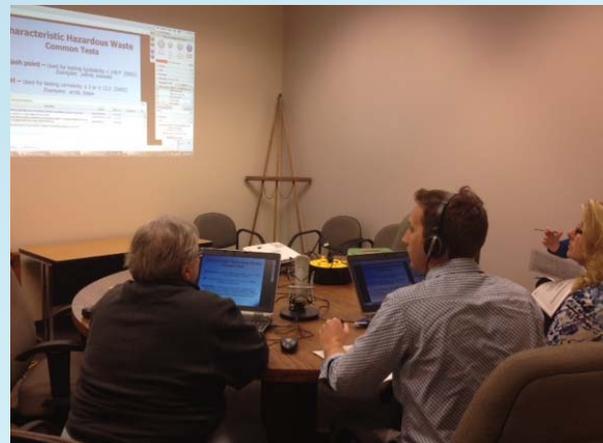


Introduction to Hazardous Waste Regulations Webinar Series

Office of Environmental Assistance

Office of Waste Management and Radiological Protection



Introduction to Hazardous Waste Regulations Webinar Series

**Generator Recordkeeping
& Inspections**



Office of Environmental Assistance



Jim Ostrowski
Environmental Manager
Training & Outreach Program
Lansing



Office of Waste Management & Radiological Protection



Nadine M. Deak
Environmental Quality Specialist
Waste Programs
Kalamazoo



Office of Environmental Assistance



Christine Grossman
Environmental Quality Specialist
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Lansing



Housekeeping

- All lines will be muted
- Questions can be sent to us via the question/chat box
- Notes page
- We will record and post online
- Poll questions



Environmental Assistance Center (EAC)

**Phone: 1-800-NO2-WASTE
(1-800-662-9278)**

**Hours: 8:00 AM to 4:30 PM
Monday – Friday**



Technical Assistance Services Include:

**Air
Waste
Water**

**Environmental Audit Privilege
Site Remediation
Permit Coordination**



Paperwork Requirements

Notification of Hazardous Waste Activity

Waste Characterizations

Manifests

Land Disposal Restriction Forms (LDR's)

Waste Area Inspection Documents

Biennial Reports

Training Records

Contingency Plans



Notification of Hazardous Waste Activity

Generators must notify of regulated waste activity.



The Office of Waste Management and Radiological Protection (OWMRP) issues IDENTIFICATION NUMBERS to facilities *per site*

Liquid Industrial Waste Generators must have a Site ID number!

<small>Prepared under authority of the Natural Resources and Environmental Protection Act, 1994 It is illegal to knowingly submit false information or to omit or falsify information.</small>		MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY Waste and Hazardous Materials Division		DEQ
SITE IDENTIFICATION				
I. The form is being submitted CHECK CORRECT BOXES! If submitting a subsequent notification you can contact the MDEQ-WHMD District or Licensing office for a pre-populated form. For locations and phone numbers go to www.michigan.gov/deq		<input type="checkbox"/> as initial notification , to notify as a new site or new owner for the site. Mail this form and the user charge fee with either a receipt from paying the \$10.00 fee on-line using a MasterCard, VISA, or Discover Card (http://www.Registration.com/michigan) or to check made payable to the State of Michigan Mail to MDEQ Revenue Office -WHMD, PO Box 36057, Lansing, MI 48909-0157 OR <input type="checkbox"/> as subsequent notification , to change, update, or verify site information for an existing owner of a site with a previously issued site ID number. Mail checks to WHMD-MDEQ, Notification Unit, PO Box 36041, Lansing, MI 48909-7141. If a fee is not required. Otherwise submit to MDEQ Revenue Office (see above).		
		AND ANY OF THE FOLLOWING		
		<input type="checkbox"/> as a component of a Hazardous Waste Permit Part A (submit to WHMD-MDEQ)		
		<input type="checkbox"/> as a component of the Hazardous Waste (benzene) Deposit (submit to WHMD-MDEQ)		
II. Site's ID Number		A. Site's Identification (ID) Number		
III. Name of Site TYPE OR PRINT CLEARLY		A. Legal Company Name		
		B. Site Specific Name (if any)		



Manifests & Shipping Papers

Uniform Manifest must be used when hiring permitted & registered transporter to ship hazardous or liquid industrial waste to MI facilities except when:

SQG shipping waste off-site for reclamation and regenerated material is brought back to generator when specific conditions are met (tolling agreement).

Generator hauling ≤ 55 gallons of their own liquid industrial waste to designated facility with proper records.

Transporter using a consolidated manifest, then they must provide company with a record of shipment (keep copies at least 3 years).



Hazardous Waste Manifests

2013 RULE CHANGE!!

Generator copies of the manifests for hazardous waste do not need to be sent to the DEQ.

For hazardous waste shipped out of state, generators remain responsible for ensuring that DEQ receives manifest copy with 3 signatures (TSD copy).



Liquid Industrial Waste Manifests

No change in law for submittal of manifests!!

Must submit copy of the manifest to DEQ by the 10th day after the end of the shipment month.

Must track manifests. Must receive 3rd signature copy from designated facility within 35 days of shipment.

Part 121 law is currently being reviewed for similar change.



Land Disposal Restrictions (LDR) Overview

(Rule 311 and 40 CFR 268)

LQGs and SQGs must determine if the waste requires treatment before land disposal.

LQGs and SQGs must provide notice of LDR information for the initial waste shipment to each off-site TSD.

Notification required even for shipment to non-land based TSDs (e.g. incinerator)



Land Disposal Restrictions (LDR) Overview

(Rule 311 and 40 CFR 268)

Applies to listed & characteristic hazardous wastes
from SQGs & LQGs

Notice sent to each TSD for each waste stating
waste meets or does not meet LDR standards.

Requires treatment before land disposal for most
wastes.



Land Disposal Restrictions (LDR) Overview

(Rule 311 and 40 CFR 268)

Land disposal includes any disposal on land (landfill, land treatment, injection well, salt caverns, etc.).

New LDR notice must be sent when there is a waste or facility change.

LAND DISPOSAL RESTRICTION NOTIFICATION AND CERTIFICATION FORM

Generator Name: _____

Manifest Number: _____ LDR Continuation Page? No Yes _____ of _____

Applicable Certification/Notification Statement (found on reverse side): A

F001 – F005 SPENT SOLVENTS

CONSTITUENT		WW	MWW	CONSTITUENT		WW	MWW
Acetone – F001				Methylene chloride – F002			
Benzene – F005 (D016)				Methyl ethyl ketone – F005 (D026)			
n-Butyl alcohol – F003				Methyl isobutyl ketone – F003			
Carbon disulfide – F005				Nitrobenzene – F005 (D036)			
Carbon tetrachloride – F001 (D018)				n-Propylene – F005			
Chlorobenzene – F002 (D019)				Pyridine – F005 (D038)			
1,1,1-Trichloroethane – F002 (D048 & D050)				1,1-Dichloroethane – F002 (D036)			
Diethyl ether – F004 (D025)				1,1-Dichloroethane – F002 (D036)			
Cyclohexanone – F003				1,2-Dichloroethane – F002 (D036)			
1,2-Dichlorobenzene – F002				1,1,1-Trichloroethane – F002			
1,2-Dichloroethane – F002				1,1,2-Trichloroethane – F002			
Ethyl acetate – F003				1,2-Dichloroethane – F002			
Ethyl benzene – F003				1,2-Dichloroethane – F002			
Ethyl ether – F003				1,1-Dichloroethane – F002 (D048)			
Heptane – F005				1,1-Dichloroethane – F002 (D048)			
Methanol – F003				1,1-Dichloroethane – F002			
Methylene chloride – F001				Xylene – F003			

Shaded areas indicate waste that can carry 12 waste numbers also. 12 waste numbers shown in parentheses are for reference only.

OTHER RESTRICTED WASTES

EPA Hazardous Waste No.	WW	MWW	Subcategory of Waste	EPA Hazardous Waste No.	WW	MWW	Subcategory of Waste	12 11 10 9 8 7 6 5 4 3 2 1
D001			High TOC/ignitable liquid (pH)					
D001			Ignitable waste in non-D048/D049					
D002			Corrosive waste in non-D048/D049					
D003			Reactive Solids					
D003			Reactive Solids					
D003			Water Reactives					
D003			Other Reactives					
D005			High Mercury – Inorganic (≥200 mg/kg)					
D005			High Mercury – Organic (≥200 mg/kg)					
D005			Low Mercury (≥50 mg/kg)					

HAZARDOUS DEBRIS

The hazardous debris is subject to the alternative treatment standards of 40 CFR 268.45. The comments subject to treatment are indicated on the attached Underlying Hazardous Constituent form.

UNDERLYING HAZARDOUS CONSTITUENTS (UHCs)



Land Disposal Restrictions (LDR) Overview

(Rule 311 and 40 CFR 268)

To determine if treatment is required, review if waste codes for each waste stream meet the standards in 40 CFR 268.40, 268.45(debris), or 268.49(soil).

Notification required even for shipment to non-land based TSDs (e.g. incinerator)



Land Disposal Restrictions (LDR) Overview

(Rule 311 and 40 CFR 268)

LDR Notice must include:

- Manifest document number
- EPA hazardous waste numbers
- Treatment standards

*There is no standard EPA notification form
for the LDR notice!*



LDR Generator Recordkeeping

Generators treating a prohibited waste to meet the standards in 40 CFR 268.48 must have a written waste analysis plan describing the activities they perform to meet the treatment standards.

All generator LDR records are required to be maintained for 3 years from the last date of shipment or on-site treatment and/or disposal, whichever is later.



LDR Generator Recordkeeping

Keep LDRs & related documents for at least 3 years after waste last sent to TSD

LDR's must have complete information such as categories of waste and underlying hazardous constituents

Information on LDR must be consistent with the waste characterization

Hazardous Waste Biennial Report

(Rule 307)

Details hazardous waste activity in the previous odd numbered year.

Required of LQGs and TSDs.

Submit to OWMRP by March 1 of even-numbered year.

Report includes both MI & EPA hazardous wastes.

Keep copy at least 3 years from due date.



Hazardous Waste Biennial Report

(Rule 307)

2014 CHANGE!!!

OWMRP no longer mails out biennial report packets.

The process changed
to provide for electronic
submittal.

Find 2016 reporting
information on the
DEQ Biennial Reporting
Web page



A screenshot of the Michigan Department of Environmental Quality (DEQ) website. The page is titled "Hazardous Waste (Biennial) Reporting" and is part of the "HAZARDOUS AND LIQUID INDUSTRIAL WASTE MANAGEMENT" section. The page contains several paragraphs of text providing information about the reporting process, including the deadline for 2014 (March 1) and the transition to electronic reporting. It also includes a "Related Content" section with links to various reports and documents. The website header includes navigation links for "DEQ", "Contacts", "Permits", "Online Services", "Programs", "Locations", and "MI.gov". The DEQ logo is prominently displayed at the top left of the page content.

Hazardous Waste Area Inspection Documents

SQG & LQG must perform:

- ✓ weekly container accumulation area inspections
- ✓ daily for tank inspections

LQGs must document hazardous waste container accumulation area and tank inspections.

REQUIRED WEEKLY HAZARDOUS WASTE MAINTENANCE INSPECTION CHECKLIST																
MONTH:																
YEAR:																
WEEK #	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Labeled																
Dated																
Containers Closed																
Spills																
Containment																
Corrective Measures																
Date																
Initials																

On the back, write comments on any areas below that were not in compliance (include the date).

Labelled: Check that all drums and all other containers are properly labeled ("Hazardous Waste" and waste number).
If satellite container, check if label has "Hazardous Waste" and either waste number or chemical name, or it can have both.

Dated: Check to see if the container has the date listed when waste was first put in the container, and confirm the date on the container has not exceeded 90 days for Large Quantity Generator, or 180 days for Small Quantity Generator, which ever is applicable. If the date on the container has exceeded 90 days or 180 days, contact management.
If it was a satellite container, check if the date was listed when the containers from that satellite area reached the maximum amount, either 55 gallons non acute, or 1 quart acute or severely toxic, hazardous waste.

Containers Closed: Make sure that containers are closed (e.g., both bungs are in drums, drum ring top is secure, funnel tops closed, funnel valve closed, or tarp over roll-off box).

Spills: Check that all containers are not leaking, bulged, or in poor condition. Are spills or staining present? If so, contact management.

Containment: Make sure that there hasn't been any degradation to the secondary containment, (e.g., any cracks, is coating sufficient?) Is there enough set back distance of containers for squirt protection? Are all containers in the containment area?

Corrective Measures: Are corrective measures needed and taken? Record details on the back.

Date & Initials: Inspector dates and initials.

Revised 5/2006. Use of this DEQ WHMD checklist is optional, but Large Quantity Generators are required to have written inspection records and all others are encouraged to have written records. Written records are required for regulated waste tanks. Keep records at least 3 years.
See [DEQ 111 of Act 451 of 2004 Implementation rules](#), R 269-9306(1)(a)(i), 306(2), and Chapter 2 of the [MDOCA Michigan Manufacturers' Guide to Environmental Safety and Health Regulations](#) for more information.



Emergency Planning & Training Requirements

CESQG

- No specific requirements

SQG

- Informal training
- Training records not required
- No stipulated review period
- Must post CURRENT emergency info by phone near scene of operations.
- Must send facility diagram to responders or discuss facility layout, access roads, evacuation routes, etc., with them.
- Must ensure emergency coordinator is identified and on premises or on-call.

HAZARDOUS WASTE EMERGENCY INFORMATION	
EMERGENCY NAME _____	Map of facility with emergency equipment, spill equipment, exit routes, and alarm locations.
COORDINATOR PHONE _____	
ALTERNATE NAME _____	
PHONE _____	
FIRE DEPT. PHONE _____	
HOSPITAL PHONE _____	
POLICE PHONE _____	
Fire alarm is located _____	
Spill control equipment is located _____	
Fire extinguishers are located _____	

National Response Center: 1-800-424-8802	Provided by: The Environmental Assistance Division and the Waste Management Division of the Michigan Department of Environmental Quality
Michigan Pollution Emergency: 1-800-292-4706	Environmental Assistance Center 1-800-462-9178
Other hazardous waste requirements may apply.	 

Emergency Planning & Training Requirements

LQG Employee Training Documents:

- Must have written hazardous waste training program.
- Must conduct annual training for employees.
- Must keep written training records for 3 years.
- Training must be conducted by someone qualified to give training.
- Must have description of the *type of training given*.
- Training must be conducted by someone who is qualified to conduct training.

Emergency Planning & Training Requirements

- Must have *CURRENT* & complete written contingency plan on-site.
- Must make arrangements with fire department, police, hospitals, emergency response contractors, and local emergency response teams & document that they were contacted.

Pre-Transport Requirements

SQG & LQG offering 1,000 lbs. for shipment must have USDOT placards (for their type of waste) available for transporters [Rule 305(1)(e)]



Tank Inspection Documents

All tank inspections must be documented and all records must be kept for at least 3 years.

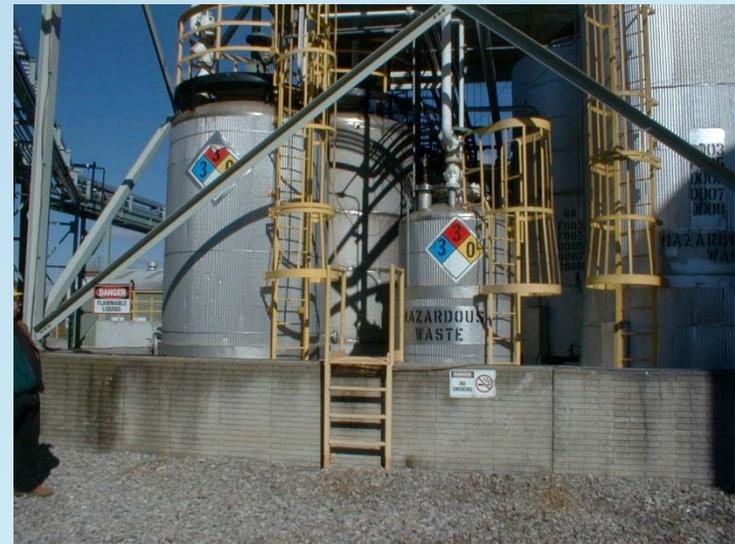
Tank Certification

Must obtain a written assessment that is reviewed and certified by a qualified professional engineer that includes:

- Design standards.
- Hazard characteristics of the waste.
- Determination performed by corrosion expert. if the external shell of a metal tank is in contact with soil or water.
- Design considerations if tank affected by vehicles.

Tank Certification

Professional engineer written certification must be kept on file at facility.



Inspection Day!!



Inspection Day!!

When and why does an inspector visit?

Routine Compliance Inspection

Complaint Received

Manifest Discrepancies

Inspection requested by another agency



How to Survive and Inspection



Relax!

Have your records in order.

Don't try to hide anything.

If asked to "fix" something, consider doing it then, if possible.



Don't be adversarial

What Do Inspectors Look At?

Records:

Waste Related – waste characterizations, manifests, LDR's, storage area logs, biennial report

Emergency Preparedness – personnel training records, contingency plans, spill control equipment



Waste Handling and Accumulation Areas:

Containers, labeling, secondary containment

Gallery of Violations



Manifest Common Violations

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

Form Approved: OMB No. 2050-0030

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: 000137379 GBF

2. Page 1 of 3. Emergency Response Point

4. Manifest Tracking Agency

5. Generator's Name and Mailing Address: Generator's Site Address (if different than mailing address)

6. Generator's Phone

7. Transporter 1 Company Name: U.S. EPA ID Number

8. Designated Facility Name and Site Address: U.S. EPA ID Number

9. Facility's Phone

10. U.S. DOT Descriptor (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	11. Containers		12. Total Quantity	13. Unit Wt./Vol.	14. Weight/Volume
	No.	Type			
1.					
2.					
3.					
4.					

14. Special Handling Instructions and Additional Information

15. GENERATOR'S OFFICER'S CERTIFICATION: I hereby declare that the contents of this manifest are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this manifest conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste manifest was submitted in accordance with 40 CFR 262.27(a) if I am a large quantity generator or (b) if I am a small quantity generator it is true.

Generator's Officer's Printed Name: Signature: Month: Day: Year

16. International Shipments: Import to U.S. Export from U.S. Part of entry point: Date leaving U.S.

17. Transporter Acknowledgment of Receipt of Materials: Transporter 1 Printed Name: Signature: Month: Day: Year

18. Discrepancy: Quantity Type Residue Partial Rejection Full Rejection

19. Alternate Facility (or Generator): Manifest Reference Number: U.S. EPA ID Number

20. Designated Facility Owner or Operator: Signature: Month: Day: Year

21. Designated Facility Owner or Operator: Signature: Month: Day: Year

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Using wrong ID number

Using wrong or incorrect waste codes

Failing to send copy to state (when required)

Failing to keep signed manifests for three years

Failing to have records of used oil shipped on consolidated manifest



LDR Common Violations

Failing to keep LDRs & related documents for at least 3 years after waste last sent to TSDF.

Missing LDR notification and waste analysis documents.

Missing or incomplete information such as categories, underlying hazardous constituents, and manifest numbers.

Listing LDR information that is inconsistent with waste characterization.



Other Common Violations

Failing to have waste characterizations on site for **ALL WASTES**

Failing to have copy of last Biennial Report on-site (LGG)

Failing to have *updated* contingency plan on-site (LQG)

Failing to have personnel training records on-site (LQG)

Common Storage Violations

Failing to have adequate space or aisle width to properly inspect containers and for emergency personnel.

Failing to have labels visible for inspections.



Common Storage Violations

Leaning drum is a safety issue!

Don't stack more than 2 drums high!



Common Storage Violations

Exceeding the allowable on-site accumulation time limit for hazardous waste without requesting an extension or obtaining a storage permit



Notice leaking drum and stains.

Common Storage Violations

Using Containers in Poor Condition



Some bad containers are obvious!

Leaking bucket & tank



Common Storage Violations



Others require looking all around the container to see a problem

Look for staining as a sign



Common Storage Violations



Leaving containers exposed to weather or vandals.

Common Storage Violations



Failing to keep the containers closed, except when waste is added or removed.



Common Storage Violations

Leaving funnels in place that are not screwed into the bung and funnel not capable of being kept closed would be considered open



Valve must be closed except when adding waste

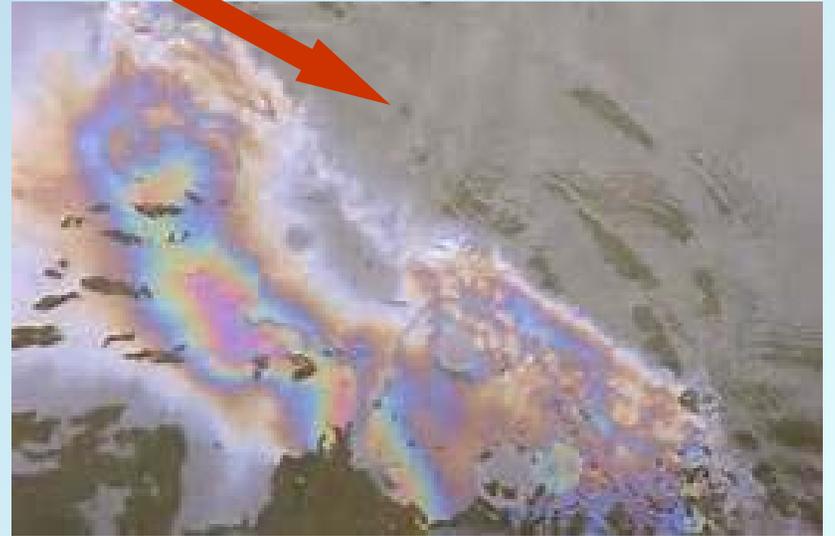


Notice splashing on wall



Common Storage Violations

Other leaks require noticing signs on the ground or puddles, etc.



Uncommon Storage Violations



Compliant Storage Options



Compliant Storage Options



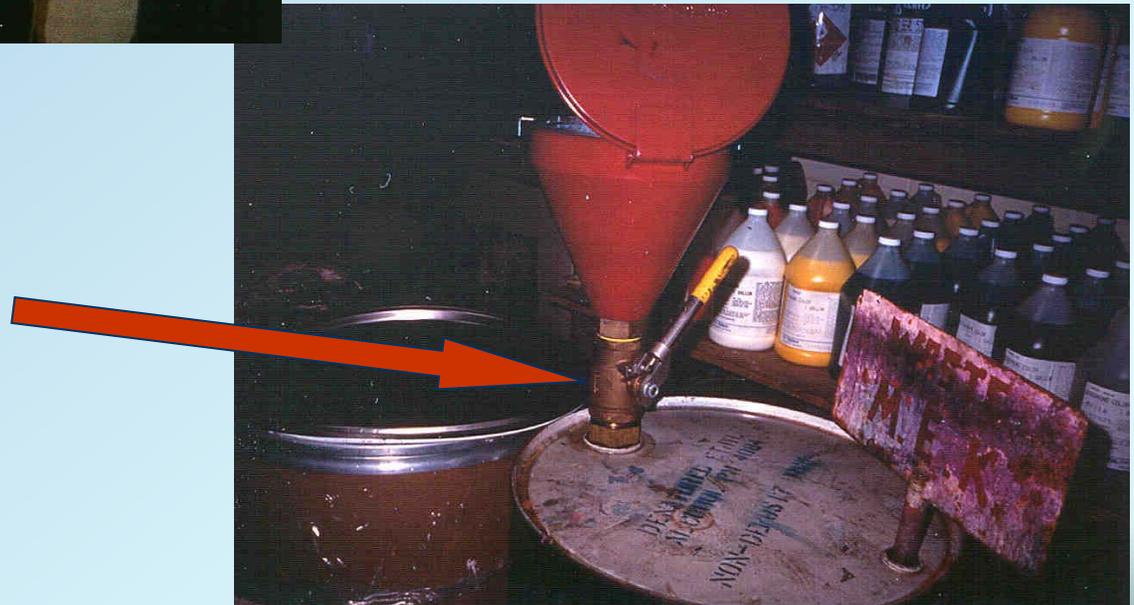
Compliant Closure Options



Use
lockable
options



Notice the valve, it
automatically closes
when handle is
released



Storage Container Labeling Violations

Listing incorrect or incomplete information on hazardous waste labels

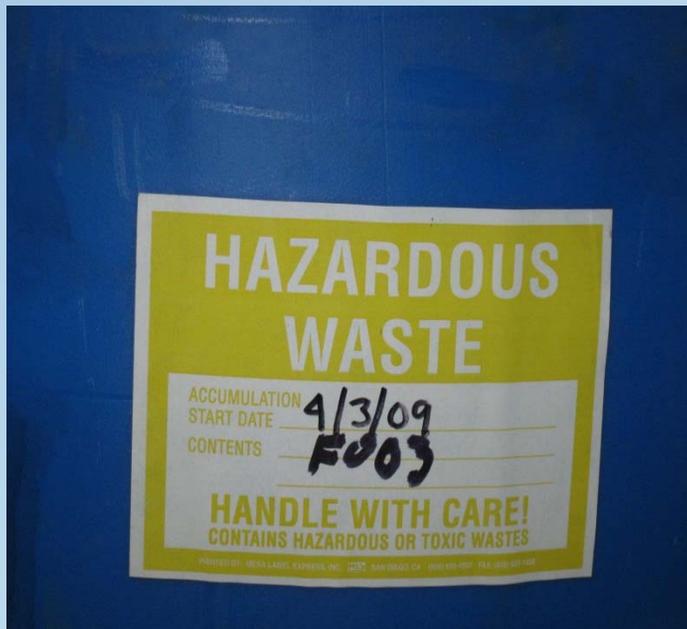


Missing the accumulation date.

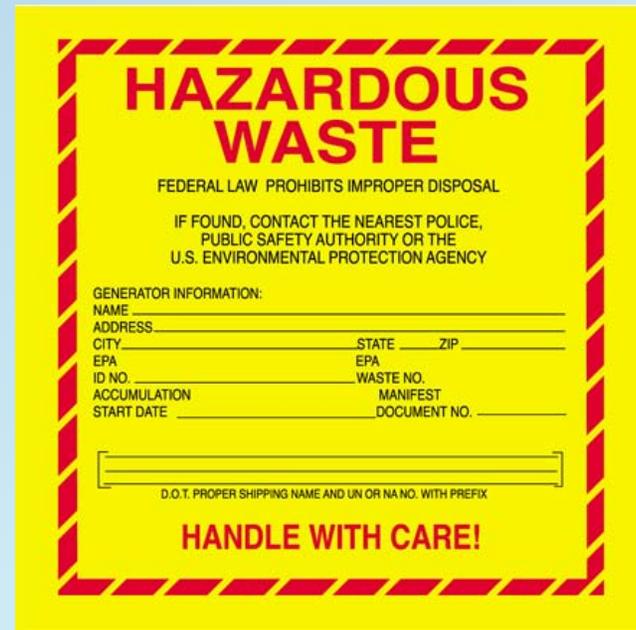
Missing the words "Hazardous Waste."

Missing the hazardous waste number(s).

Compliant Storage Labeling



Accumulation
label



Shipping label

Compliant Storage Labeling



Common Violations

ILLEGAL DISPOSAL
OF USED OIL



Common Storage Violations of Used Oil



Compliant Used Oil Storage Options



Common Secondary Containment Options



Lacking or inadequate secondary containment for LQG, SQG with over 2200 lbs. & any facility storing acutely hazardous wastes.

Common Secondary Containment Options

Failing to elevate containers or have case of containment sloped to drain when required

Notice the staining



Lacking or inadequate squirt protection



Sill is not high enough

Common Secondary Containment Violations



Lacking or inadequate
chemical resistant coating
& having cracked surfaces

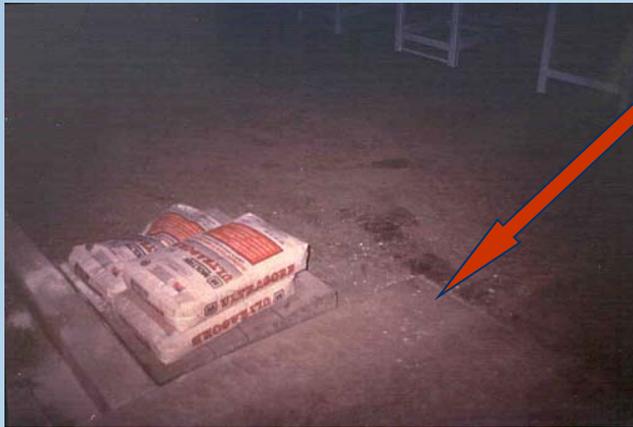
Common Secondary Containment Violations



Failing to remove precipitation in a timely manner from containment areas

How can drums be checked for leaks if buried in snow?

Compliant Secondary Containment Options



Sloping ramp saves backs and reduces spills when moving materials in & out of containment area

Spill pallets OK for solids but does NOT provide squirt protection for liquids



This type does provide squirt protection



Sorbents



Sorbents used to clean up hazardous waste by SQG or LQG *must* be handled as hazardous waste

Can be landfilled IF:
don't contain free liquids, **AND**
not a hazardous waste, OR
were generated by CESQG



What Kind of Inspection Follow-up Is Necessary?



Respond according to the letter sent by the OWMRP.

Accompany inspector if there is a follow-up second inspection.

Have a question about the inspection? Call the inspector who visited your facility.



Have general waste question?
Call the Environmental Assistance Center 800-662-9278 for referral.

Need Help or Resources?

Go to www.michigan.gov/deqwaste

Contact the DEQ EAC at 1-800-662-9278

Go to www.epa.gov/wastes/hazard/downloads/tool.pdf

Contact DEQ district waste inspection staff

Contact hazardous waste vendors

Contact waste consultants



Questions

**Feel free to ask questions via your
question/chat box**

MDEQ Hazardous Waste Generator Webinar - Self Certification

**MDEQ Hazardous Waste Generator Webinar
Trainer - Self Certification**

I, _____
Print signatory's name here

certify that I have viewed the entirety of the Michigan Department of Environmental Quality (MDEQ), Hazardous Waste Webinars listed below, for which I am a signatory, to gain a general understanding of the hazardous waste generator requirements under Part 111, Hazardous Waste Management, of the Michigan Natural Resources and Environmental Protection Act, Act 451 of 1994, as amended, and the rules promulgated thereunder. I further certify that I recognize that this information is general and it is essential for me to evaluate the need for additional site-specific training as part of a site-specific hazardous waste training program. I recognize that additional site-specific training is necessary to develop such a hazardous waste program for my facility and for me to be qualified to provide such training to on-site personnel to perform daily duties related to the generation and management of hazardous waste.

Introduction to Hazardous Waste Regulations: Waste Characterization and Generator Status

Signature _____
Date Training Viewed

Introduction to Hazardous Waste Regulations: Hazardous Waste Generator Accumulation, Storage, and Labeling Requirements

Signature _____
Date Training Viewed

Introduction to Hazardous Waste Regulations: Hazardous Waste Generator Recordkeeping & Inspection

Signature _____
Date Training Viewed

April 10, 2012





THANK YOU FOR PROTECTING
MICHIGAN'S ENVIRONMENT!