

Record Keeping and Inspections

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Goals

- ✓ Reduce inspection anxiety
- ✓ Provide opportunity and tools to be prepared for an inspection
- ✓ Highlight inspector constraints
- ✓ Share examples of good and bad inspection observations

Waste Regulations

Act 451, Michigan Natural Resources & Environmental Protection Act:

Part 111, Hazardous

Part 121, Liquid Industrial By-Products

Part 115, Solid Waste

Part 169, Scrap Tires

Act 368, Michigan Public Health Code:

Part 138, Medical Waste Regulatory Act

Part 2, Ionizing Radiation Rules

Federal Toxic Substance Control Act (TSCA)

Required Paperwork

- ✓ Notification of Hazardous Waste Activity
- ✓ Waste Characterizations
- ✓ Land Disposal Restriction Forms (LDR's)
- ✓ Manifests and Shipping Documents – e-Manifests
NEW
- ✓ Training Records
- ✓ Contingency Plans
- ✓ Waste Area Inspection Documents
- ✓ Annual Liquid Industrial By-Product Reports - **NEW**
- ✓ Biennial Hazardous Waste Reports

Notification of Waste Activity

Hazardous waste generators must notify of their regulated waste activity

The Waste Management and Radiological Protection Division (WMRPD) issues IDENTIFICATION NUMBERS to facilities *per site*



Liquid Industrial By-Product Generators are No Longer required to have a Site ID Number as of March 2016!

<small>Required under authority of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Failure to submit this information may result in civil or criminal penalties.</small>		MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY Waste and Hazardous Materials Division			
I. The form is being submitted CHECK CORRECT BOX(ES) <small>If submitting a subsequent notification you can contact the MDEQ WHMD District or Lansing office for a pre-populated form. For locations and phone numbers go to www.michigan.gov/deq</small>		SITE IDENTIFICATION			
<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 \$50.00 fee on-line using a Master Card, VISA, or Discover Card (https://www.thepayplace.com/michigan/ids/) or by check made payable to the State of Michigan. Mail to MDEQ Revenue Office - HWQD, PO Box 30657, Lansing, MI 48909-8157		<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 directly to WHMD-MDEQ, Notification Unit, PO Box 30241, Lansing, MI 48909-7741 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 (biennial) Report (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 (d/b/a):			
IV. NAICS for this Site		A.	B.	C.	D.
V. Site Location Address and Other Site Information		Street Address line 1:			
		Address line 2:		City, Town, or Village:	

Notification of Waste Activity

Site notification using the EQP 5150 form is also required for:

- Hazardous waste and liquid industrial by-product transporters
- Liquid industrial by-product treatment, storage, and disposal facilities (designated facilities)
- Hazardous waste treatment, storage, and disposal facilities
- Large quantity universal waste handlers

Waste Characterization

Waste characterization records are required for each waste stream

See recorded webinar on Waste Characterization and Generator Status at www.michigan.gov/deqwaste

See Waste Characterization Steps/Questions and Optional Form

Waste Characterization

Solvent wipes guide includes a form for documenting the exclusion

If wipes go to intermediary before disposal (e.g. a hazardous waste TSDF) the records must identify the intermediary and destination facility

DEQ must be able to follow the wipes to an ultimate disposal option that meets the exemption (MSW or HW incineration or landfill)

Hazardous Waste Land Disposal Restrictions (LDR)

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)

Hazardous Waste Land Disposal Restrictions (LDR)

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

Hazardous Waste Land Disposal Restrictions (LDR)

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

FO01 – FO05 SPENT SOLVENTS

CONSTITUENT	WW	NWW	CONSTITUENT	WW	NWW
Acetone – F003			Methylene chloride – F002		
Benzene – F005 (D016)			Methyl ethyl ketone – F005 (D038)		
n-Butyl alcohol – F003			Methyl isobutyl ketone – F003		
Carbon disulfide – F005			Nitrobenzene – F004 (D036)		
Carbon tetrachloride – F001 (D018)			2-Nitropropane – F005		
Chlorobenzene – F002 (D021)			o-Xylene – F005 (D048)		
m- & p-Cresol – F004 (D024 & D025)			Tetrachloroethylene – F001 (D039)		
o-Cresol – F004 (D023)			Tetrachloroethylene – F002 (D039)		
Cyclohexanone – F003			Toluene – F005		
1,2-Dichlorobenzene – F002			1,1,1-Trichloroethane – F001		
1,2-Dibromoethane – F005			1,1,1-Trichloroethane – F002		
Ethyl acetate – F003			1,1,2-Trichloroethane – F002		
Ethyl benzene – F003			1,1,2-Trichloro-1,2,2-tetrafluoroethane – F002		
Ethyl ether – F003			Trichloroethylene – F001 (D040)		
Isobutanol – F005			Trichloroethylene – F002 (D040)		
Methanol – F003			Trichloroethylene – F002		
Methylene chloride – F001			Xylene – F003		

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

OTHER RESTRICTED WASTES

EPA Hazardous Waste No.	WW	NWW	Subcategory of Waste	EPA Hazardous Waste No.	WW	NWW	Subcategory of Waste	N o t i n e
D001			High TOC-Ignitable Liquid (≥10%)					
D001			Ignitable Waste in non-CWA/DWA					
D002			Corrosive Waste in non-CWA/DWA					
D003			Reactive Cyanides					
D003			Reactive Sulfoxides					
D003			Water Reactive					
D003			Other Reactive					
D009			High Mercury – Inorganic (≥360 mg/kg)					
D009			High Mercury – Organic (≥200 mg/kg)					
D009			Low Mercury (<260 mg/kg)					

HAZARDOUS DEBRIS

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

UNDERLYING HAZARDOUS CONSTITUENTS (UHCs)

Hazardous Waste Land Disposal Restrictions (LDR)

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)

Hazardous Waste Land Disposal Restrictions (LDR)

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 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 TSDF

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

Manifests & Shipping Documents

Uniform manifest must be used when hiring permitted & registered transporter to ship **hazardous** waste from a small or large quantity generator except when:

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

Manifests & Shipping Documents

Shipment of **non-hazardous** liquid industrial by-products no longer requires use of uniform manifest as of March 2016

Generators may use the uniform manifest to meet the shipping document requirements

Consolidated shipping document may be used for **non-hazardous** liquid industrial by-products, including CESQG liquids

Manifests & Shipping Documents

Generators must track manifests and shipping documents

Manifest copies signed by the disposal facility must be sent back to the hazardous waste generator after date of shipment by:

SQG - 60 days

LQG - 45 days

Manifests & Shipping Documents

2013 rule changes, no longer required to mail manifest to DEQ

July 1, 2018 e-Manifest system deployment – **NEW!!!**

Use of the e-manifest will be optional

Paper manifests cost \$20, e-manifests cost \$4

Still must create and carry paper copy for US DOT transport safety

Manifests & Shipping Documents

No more DEQ manifest fees

All manifests go directly to EPA after 6/30/18

Can use e-manifest for non-hazardous shipping document but not recommended

Learn more at www.epa.gov/e-manifest

Register to for DEQ e-Manifest webinar on 5/16/18 at www.michigan.gov/deqevents

E-Manifest System

June 30, 2018 U.S. EPA deploys the NEW e-Manifest System

View recorded webinar on e-Manifests at www.michigan.gov/deqwaste under "Announcements" to learn more

See the DEQ Uniform Manifest Information Web Page for access to DEQ and U.S EPA resources on the new system

Discuss manifest/shipping document changes with your receiving facilities

Liquid Industrial By-Product Shipping Document

2016 STATUTE CHANGE!!

No longer required to use uniform manifest to document shipment/disposal of liquid industrial by-product

“Shipping document” may be any of the following in written or electronic form:

- log
- invoice
- bill of lading
- any record that includes required information

Liquid Industrial By-Product Shipping Document

The shipping document must include:

- Name and address of the generator
- Name of the transporter
- Type and volume of the liquid industrial by-product in the shipment
- Date the it was shipped from the generator
- Name, address, and Site ID number of the designated facility

Liquid Industrial By-Product Shipping Document

At the time of shipment, generator must certify

- The liquid industrial by-product is accurately described on the shipping document
- Shipment is in proper condition for transport
- The information on the shipping document is factual

Liquid Industrial By-Product Shipping Document

Generator provides copy of shipping document to transporter to accompany shipment to the designated facility

Generator must receive confirmation of acceptance of the liquid industrial by-product from the designated facility

Generator must maintain records for 3 years

Liquid Industrial By-Product Designated Facility

Liquid Industrial by-product designated facility is a facility that receives liquid industrial by-product from another site, this could include:

- Receiving unwanted liquid waste from other locations owned and operated by the same company
- Receiving unwanted liquids from other companies

Liquid Industrial By-Product Designed Facility Annual Report

2016 Statutory Change!!!

Second report was due 4/30/18

Report was to identify liquid industrial by-product received from 1/1/17 to 12/31/17

Completed EQP 1602 forms are to be submitted to DEQ-Part-121-Reporting@michigan.gov

See recorded Liquid Industrial By-products Handling & Reporting webinar at www.michigan.gov/deqwaste to learn more

Liquid Industrial By-Product Designed Facility Annual Report

No report required if designated facility received only by-product from only 1 generator owned, operated or legally controlled by the receiving facility

Required reporting includes:

- Name and address of the designated facility
- Calendar year covered by the report
- Types and quantities of by-product received
- Description of the manner in which the by-product was processed or managed

Liquid Industrial By-Product Designed Facility Annual Report

Waste Reporting Types

- Antifreeze
- Brine Car Wash Sludges
- Conditional Exempt Small Quantity Generator Hazardous Waste
- Coolants and Water Soluble Oils
- Crankcase Oil
- Grease Trap Wastes
- Hazardous Secondary Materials
- Mixed Solvents
- Other Oil
- Other Wastes
- PCB
- Pharmaceutical
- Sanitary Sewer Cleanouts
- Storm Sewer Cleanouts
- Water Based Cleaning Solutions
- X-Ray/Photo Solutions
- Universal Waste

Liquid Industrial By-Product Designed Facility Annual Report

Waste Treatment Types

- Authorized Discharge to Municipal Sanitary Sewer System
- Beneficial Reuse
- Blending with Hazardous Waste for Fuel
- Deep Well Injection
- Elementary Neutralization
- Filtration
- Incineration
- Non-hazardous Waste Fuels
- Other Processing (specify)
- Recycling (such as antifreeze or non-hazardous solvent recycling)
- Recoverable Petroleum Products (RPP) Re-refining
- Solidification/Landfilling
- Storage Only
- Used Oil Fuel
- Used Oil Recovery/Recycling
- Used Oil Re-refining
- Wastewater Treatment (precipitation)

Liquid Industrial By-Product Designed Facility Annual Report

Form and instructions are available at www.michigan.gov/deqwaste, select

- “Hazardous Waste”
- “Hazardous Waste and Liquid Industrial By-Products” and
- Part 121 Liquid Industrial By-Product Reporting”

Liquid Industrial By-Product Resources

Also available on this page include:

- ✓ Example Shipping Document
- ✓ FAQ
- ✓ Liquid Industrial By-product Generator Guidance
- ✓ Recorded Webinar

Hazardous Waste Biennial Report

Details hazardous waste activity in the previous odd numbered year

Required of LQGs and TSDs

Submit to WMRPD 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

2014 biennial reports required to be submitted electronically

2018 biennial reporting information found on Biennial Reporting Web page

The screenshot displays the DEQ website's navigation and content for hazardous waste reporting. The header includes the DEQ logo and the text "Department of Environmental Quality". A search bar is visible in the top right. The main navigation menu includes "ABOUT THE DEQ", "AIR", "LAND", "WATER", "WASTE", and "SUSTAINABILITY". The "WASTE" section is expanded, showing a sidebar with categories like "Solid Waste", "Hazardous Waste", "Hazardous Waste and Liquid Industrial By-Products Management", "Crup Disposal", "Retail Environmental Workgroup", "Transporters", "Radiological Protection", and "Waste Compliance & Enforcement". The main content area is titled "Hazardous Waste Biennial Reporting" and includes contact information for Pam Corbett (517-264-6555) and the Agency (Environmental Quality). It provides details about the reporting cycle, including the requirement for LQGs and TSDs to report by March 1, 2018, and the availability of a 2017 RCRARs Industry Application Help and Guidance document. A "Related Content" sidebar on the right lists various resources such as "U.S. EPA Review of LWDES", "MDHEQ Review of the University of Michigan (UoM) Exposure Study (UNCES)", and "Approved Information Review to Bore's Office Corrective Action - Site Visit Approval".

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)																
WASTE #	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Container Label																
Container Closed																
Spills																
Corrosion																
Container Distance																
Insulation																

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

Labels: Check that all drums and all other containers are properly labeled ("Hazardous Waste" and waste number), or chemical name, or it can have both. If satellite container, check if label has "Hazardous Waste" and either waste number or chemical name, or it can have both. Check to see if the container has the date label when waste was first put in the container, and confirm the date on the container has not exceeded 90 days for Large Quantity Generators, or 180 days for Small Quantity Generators, which ever is applicable. If the date on the container has exceeded 90 days or 180 days, contact management.

Spills: If it uses a satellite container, check if the date was listed when the container first had satellite waste reached the maximum amount, either 55 gallon non-acute, or 1 quart acute or severely toxic, hazardous waste. Make sure that containers are closed (i.e., both bungs are in place, during top is secure, funnel edge closed, funnel valve closed, or dry over top of bin).

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

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

Insulation: Are non-inflame insulations needed and taken? Record details on the back.

Date & Initials: Inspector date and initials.

Revised 1/10/16. Use of this checklist is optional, but large quantity generators are required to have written inspection systems and all others are encouraged to have written systems. Written records are required for regulated entity audits, final records or next 3 years. See Part 111 of Act 311 of 2002, Administrative Code R 200.20061 (3)(c), 200.2, and Chapter 2 of the Michigan National Manufacture, Sales and Environmental Safety and Health Requirements 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 operations
- Must send facility diagram to responders or discuss facility layout, access roads, evacuation routes, etc.,
- Must ensure emergency coordinator is identified and on premises or on-call

HAZARDOUS WASTE EMERGENCY INFORMATION

(Use in facility spill response response, spill response, etc. Only, not spill location.)

Company Name:	Name
Company:	Phone
Address:	Phone
City/State:	Phone
Zip Code:	Phone
Spill Control:	Phone
Spill Control:	Phone

Spill control equipment is located: _____

Fire extinguishers are located: _____

National Response Center: 1-800-424-8802
Michigan Pollution Emergency: 1-800-252-0766

Warning: This document contains information that is both Confidential and/or Trade Secret and is intended solely for use by the recipient. If you have received this document in error, please notify the sender immediately.

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
- Must have description of the *type of training given*
- Must be conducted by someone who is qualified to conduct training

Emergency Planning & Training Requirements

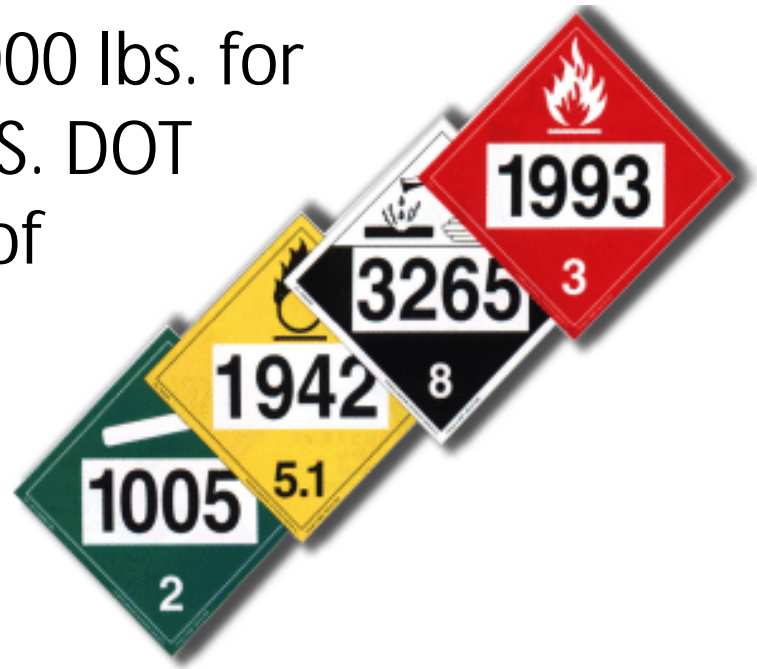
SQGs and LQGs must:

- Have **CURRENT** & complete written contingency plan on-site
- Make contact/arrangements with local fire department, police, hospitals, emergency response contractors, and local emergency response teams

LQGs must document that they made this contact

Pre-Transport Requirements

SQG & LQG offering 1,000 lbs. for shipment must have U.S. DOT placards for their type of waste available for transporters at pick-up



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

Requires professional engineer certification

Written certification must be 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 an Inspection



Relax



Don't be adversarial

How to Survive an Inspection

Have your records in order!



How to Survive an Inspection

Don't try to hide anything



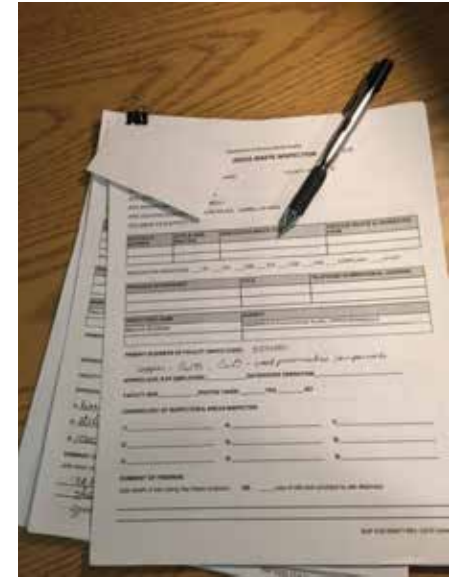
If asked to "fix" something, consider doing it then, if possible



What Do Inspectors Look At?

Waste Related Records:

- ✓ 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 and tanks
- ✓ Labeling
- ✓ Secondary containment

Gallery of Violations



Hazardous Waste Manifest Common Violations

UNIFORM HAZARDOUS WASTE MANIFEST

Generator ID Number: 000137379 GBF

Hazardous Waste Code: 151

No.	U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group if any)	No. Containers		U.S. DOT Quantity	U.S. DOT Weight	U.S. DOT Volume
		No.	Type			
1						
2						
3						
4						

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 (LQG)

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

Failing to have annual 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



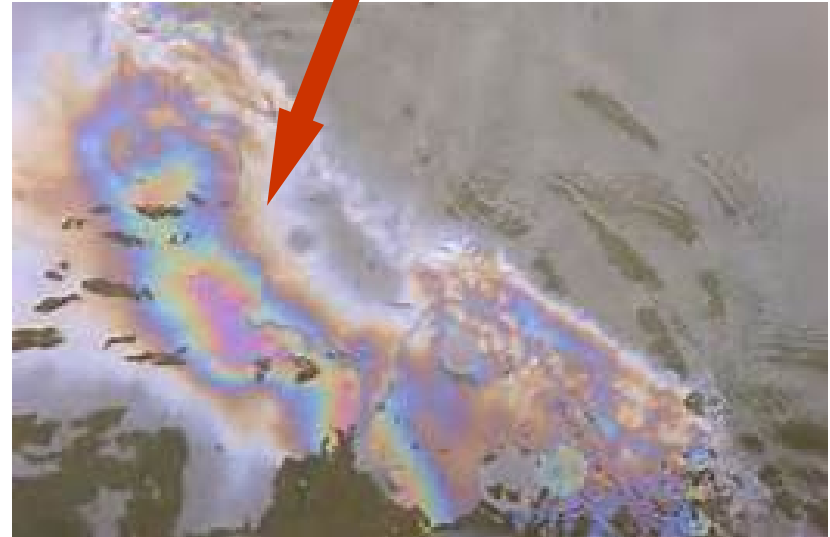
Valve must be closed except when adding waste



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



Container Labeling Violations

Listing incorrect or incomplete information on hazardous waste labels



Missing accumulation date

Missing words "Hazardous Waste"

Missing hazardous waste number(s)

Compliant Storage Labeling



Accumulation Label



Shipping Label

Compliant Storage Labeling



Compliant Storage Labeling Liquid Industrial By-products

2016 Statutory Change!!



Common Used Oil Violations

ILLEGAL *DISPOSAL*
OF USED OIL



Common Used Oil Storage Violations



Compliant Used Oil Storage Options



Common Secondary Containment Violations



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

Common Secondary Containment Violations

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

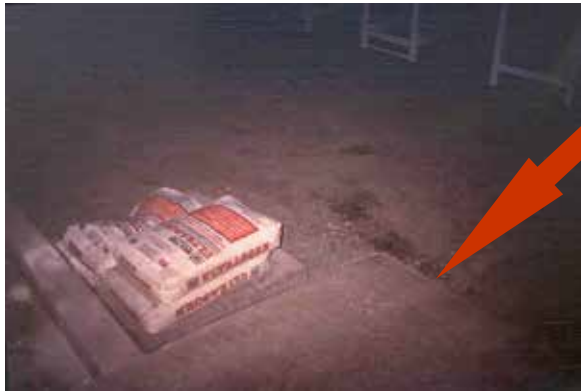


Failing to remove precipitation in a timely manner from containment areas

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 WMRPD

Accompany inspector if there is a follow-up second inspection

Have a question about the inspection?
Call the inspector who visited your facility or Christine Grossman of Environmental Support Office at 517-284-6860



QUESTIONS?