



Hazardous Material, Waste and Spill Response Training

September 2015



Agenda

- » Hazardous Materials vs Hazardous Waste
- » Hazardous Material Management- Storage
- » Hazardous Waste Management Storage
- » Hazardous Material Labeling
- » Hazardous Waste Labeling
- » Other Wastes
- » Secondary Containment
- » Universal Waste
- » Electronic Waste (E-Waste)
- » Emergency Preparedness-Spill Prevention Control and Countermeasure Plan (SPCC)

Hazardous Material vs Hazardous Waste

Hazardous Material Definition: USDOT, "Any substance which may pose an unreasonable risk to health and safety of operating or emergency personnel, the public, and/or the environment if not properly controlled during handling, storage, manufacture, processing, packaging, use, disposal, or transportation."

 Virgin new items and products = Hazardous Material (storage can be local – Fire Marshalls, State regulations or Federal –OSHA- based on NFPA and other industry guidelines = proper storage/segregation of materials

Hazardous Waste Definition: EPA, "items that are dangerous or potentially harmful to our health or the environment. Hazardous wastes can be liquids, solids, gases, or sludges. They can be discarded commercial products, like cleaning fluids or pesticides, or the by-products of manufacturing processes."

Materials or items intended to be discarded, not useable, must be properly labeled, stored, shipped and disposed (can be State or Federally regulated) = *cannot be disposed in the regular solid waste trash or down sewer/storm drains*

Hazardous Waste

A waste is hazardous if:

- The waste is listed in the Minnesota Hazardous Waste Rules.
- The waste is ignitable, corrosive, reactive, lethal and/or an oxidizer (read your material safety data sheets and container labels carefully = DOT shipping name in the transportation section or EPA codes for metals, solvents, by-products, or general flammable, corrosive, toxic, or reactive properties.
- The waste fails the Toxic Characteristics Leaching Procedure (TCLP), a laboratory test that determines the toxicity level of a substance.
- *Note: When uncertain about the nature of any material or waste contact the EHS department Ext. 6024 or Ext. 4360
 - Always assume something might be hazardous, as a precaution = can always throw it in the solid waste trash later, if appropriate

Hazardous Material & Waste Storage

Containers

- Hazardous waste/materials must be stored in sturdy, leak proof containers.
- The containers must be compatible with the material or the waste which is being accumulated or stored
- Dents and rust can make the container unacceptable or compromise its ability to fully contain the material or waste.
- Stored in the proper /appropriate cabinet, shelving or storage area (Combustible/flammable materials or corrosive items) and location (secondary containment, when at all possible, for all bulk containers = 5 gallons and over = all drums including hydraulic Oils, coolants and cleaning solutions)

Container Closure

Keep all hazardous containers closed/covered except when adding or removing waste/material (Note: funnels for waste drums should be latched/secured and, material drums closed after use)

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Hazardous Material Storage at MTS



Unused Oil Drum-Virgin Material



Virgin Coolant Material Tote



Hazardous Material Storage at MTS

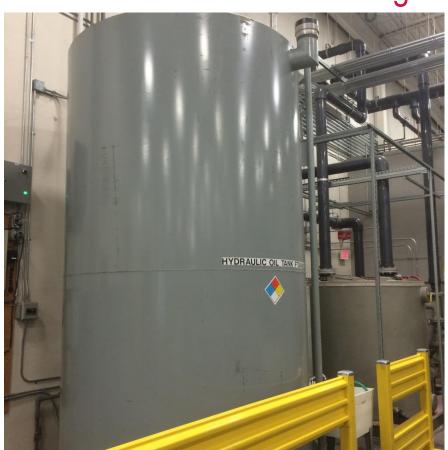


Receiving Flammable Storage -Virgin Material



Receiving Corrosive Storage -Virgin Material

Hazardous Material Storage-Bulk Storage Containers



Hydraulic Oil Bulk Tank-HPU Area



Hydraulic Oil Bulk Tank-Pit



DELIVERING. **TEST**

Hazardous Material Labeling



Good Secondary Container Labeling

What is a Secondary Container? - When you transfer a chemical from its original container to another container, the container you transfer it into is called a "secondary container."

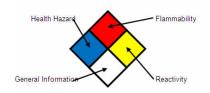
When Do Secondary Containers Have to Be Labeled? Except for a few cases, secondary containers must be labeled. IF IN DOUBT, LABEL IT!

One common case where you do **not** have to label a secondary container is if the container is portable and will be used immediately by the person who transferred the chemical into that container.

Example: if you pour a concentrated disinfectant into a bucket and dilute it with water, and then immediately use it (or pour it into smaller spray bottles to be used later in the day), that mixing bucket does not have to be labeled (but the spray bottles do).



Hazardous Material Labeling





What Information Must Appear on the Label?

OSHA says you have to put the PRODUCT NAME, the HAZARDOUS CHEMICALS it contains, and words or pictures that show the KEY HAZARDS (e.g. inhalation hazard, ingestion hazard, skin absorption hazard, skin irritant, eye corrosion hazard, etc). This information can be found on the chemical's original container, or on the Safety Data Sheet (SDS).

Where in OSHA does it Require All This?

The OSHA citation is 29 CFR 1910.1200(f). The employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with the following information:

- (i) Identity of the hazardous chemical(s) contained therein; and,
- (ii) Appropriate hazard warnings, or alternatively, words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

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Hazardous Waste Accumulation



Lead Contaminated Debris **Hazardous Waste Collection**



Paint Waste Collection Drum



Non-Hazardous Waste / Oil Recycling Accumulation





Bulk Water and Oil – Non Hazardous Waste Collection Tote



Bulk Waste Oil -Non Hazardous Waste Collection Tank

to and from work and home, and in everything you do.







Other Hazardous Wastes

Oily Pads/Rags/Absorbents

Aerosol Cans

If saturated, wring out and collect/dispose of collected oil as "used oil".

Place used absorbents in containers designated for oily pads/rags:





Empty or unusable aerosol cans containing hazardous flammable substances (e.g., solvents) shall be delivered to the following locations for disposal: Eden Prairie: Paint Department

Lead Wastes

Wastes that contain "lead" (e.g., lead solder, lead containing parts) shall be disposed in containers labeled as "Lead Wastes".

Lead waste containers are located in Soldering areas:

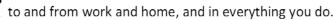






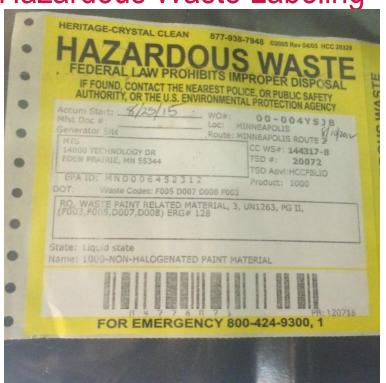






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Hazardous Waste Labeling





- -Requires the words "Hazardous Waste"
- -Clear description of the waste being generated hazards of the material (flammable, corrosive, toxic etc... based on the SDS and or Waste Profile determination)
- -Accumulation start date (when the first amount of material is introduced into the container)



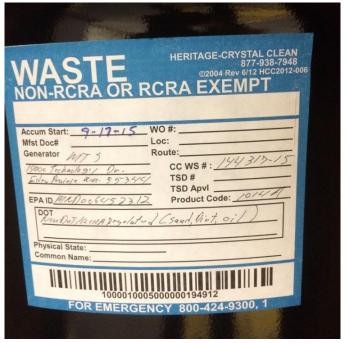
Bring Safety With You





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Non-Hazardous Waste Labeling





- Identify items not Federally, but state (MN) regulated and CANNOT be disposed in the normal trash or down storm/sewer drains
- Stored and handled like hazardous waste items (spill response etc..)
- Used oils can be stored on site indefinitely as long as in proper containers

Bring Safety With You

Other Non-Haz Wastes = treat like Hazardous for accumulation = generally no longer than six months at any one collection point, no longer than 3 months in waste storage area = keep under the one year time frame



Hazardous Material & Waste Training growth

Secondary Containment of Liquids – Materials and Wastes

5 gallons and greater





Paint Area – Parts Washing Booth **Cleaning Chemicals**

Bring Safety With Y

Warehouse – Receiving Storage prior to delivery



Hazardous Waste Shipping Labeling

- Labeling Requirements (Wastes Offered for Transportation = ready for shipping off-site) **>>**
 - Proper DOT shipping name and UN/NA ID #
 - Company Name and Address
 - **EPA ID Number**
 - Manifest Document Number
 - The words "Hazardous waste-Federal law prohibits improper disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency."



Universal Waste

- **Definition**: Universal wastes are products and materials that are commonly used across many businesses and industries that may contain hazardous components, but are not regulated as hazardous waste
 - In Minnesota = light bulbs, batteries, mercury containing equipment and pesticides are all universal waste items





Electronic Waste (E-Waste)

- Include video display terminals, such as computer monitors and televisions, which contain lead. Also include all types of electronic component item; keyboards, mouse units, speakers, small electronics all types of electrical wiring = anything that can be plugged in (labeled collection containers located in West High bay-Receiving area = cubic yard box)
- » Technically are not Universal in Minnesota = fall under the recyclable materials guidelines (similar to used oil)
- » Like universal wastes, they cannot be thrown away in the regular trash and must be managed through the appropriate vendors



SPCC Plan

- If spill is small and readily identifiable, absorb with clean up rags/absorbents and **>>** place in a sealed container to be treated as hazardous or non-hazardous waste.
- If the spill is hydraulic oil, clean up with absorbents and place in lined bulk storage boxes and label as non-regulated waste.
- Note: small spills are less than (5) gallons of oil or less than (1) gallon of any chemical other than oil.
- All chemical spill clean-up activity requires some prior training = **CALL 6000** and report spills no matter the size and provide the following:
 - the location of the spill,
 - material involved,
 - estimated amount spilled,
 - impact to staff or material, supplied and equipment, .



- » Spill Station Kits are available throughout the facility
- Only used if personnel are trained, know what the material is, comfortable dealing with it, and the spill is estimated at 5 gallons or less of material
- Still want to contact 6000 in case initial "small" item becomes large and or anytime there is question as to what the spilled material might be





Notification

(Any Employee)

Dial 6000 OR 952-974-6000 (day-shift Security)

If after hours dial 612-790-1541 or 952-250-6459

If the line is busy, keep trying.

If the telephones are inoperable, report to Security at the front desk.

Give Security/Contact the appropriate information.

State the nature of the emergency.

Allow Security to control the conversation.

Give the exact location of the chemical release by using the grid system located on building walls or posts.

State your name.

Give the extension you are calling from.

Follow Security's instructions

Do not hang up until instructed by Security

Definitions

Chemical Spill: Any toxic liquid, powder, or solid which creates a hazard when spilled.

EMPLOYEE RESPONSIBILITIES:

- Turn off equipment as previously instructed by your Supervisor.
- Exit quickly through the nearest available exit.
 - Do not travel through any other parts of the building unless your primary exit is blocked.
 - Help any handicapped individuals who may need assistance.
- Gather with your work unit at your **designated assembly point** at least 200 feet away from the building.
 - If using an exit not near your work unit, move immediately to your designated assembly point.
 - Stay at your designated assembly point until the "All Clear" has been announced.
 - Return to the building through the Employee of Visitor Entrance.
 - Check your work area for damage or problems.
- Small spills: if you know the chemical and associated hazards, small spills can be cleaned up by using absorbents and other common cleanup equipment. Containerize cleanup materials for proper disposal.
- Note: small spills are less than (5) gallons of oil or less than (1) gallon of any chemical other than oil.
- Report any safety problems or damage to your Supervisor



SUPERVISOR RESPONSIBILITIES:

- » Direct employees to the exists they should use.
 - Ensure that all visitors in your area know where to exit.
 - Check equipment to ensure everything which should be shut down is turned off.
 - Monitor corridors to ensure employees are exiting in a correct manner.
 - Remind employees not to use elevators.
- Call roll as soon as possible once outside the building.
 - Note any employees that are not present.
- » Dispatch someone to inform the SES Representative of any missing or injured employees.
- » Keep your employees at the designated assembly point until the "All Clear" has been given.
 - Return through the employee entrance or the main visitor entrance.
 - Check your work area for damage or problems as soon as you return to work.
- » Report safety problems or damage to the EHS Manager.

Emergency Equipment

- Spill response equipment (PPE, Absorbents etc.) appropriate to the type and amount of waste accumulated on site must be available for use.
- Portable fire extinguishers must be available/nearby in all waste storage areas.

Emergency Notifications (external)

- Pre-plan with the fire department and or external response teams (Bay West) to familiarize responders with the types and amounts of waste stored on-site.
- Ensure agreements are in place with waste contractors.
- Follow Chemical Spill Emergency Response Procedure (EHS-600-102)
 - Emergency Preparedness & Response docs.

Posting of Emergency Contact Information

- The name and telephone number of the emergency coordinator and back-ups
- The telephone number of the fire department (911)
- The location of fire extinguishers, spill control equipment and fire alarms.

State Spill Notification Procedures: Larger spills, EHS dept. will notify

Minnesota Department of Public Safety, Division of Emergency Management requires immediate notification to the Minnesota Duty Officer (612) 649-5451, regarding the spill of a petroleum product exceeding five gallons. Notification is also required if a discharge event threatens polluting a watercourse.

Federal Spill Notification Procedures:

- The facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in a single spill event; or
- The facility discharges oil in quantities greater than 42 gallons in each of two spill events within any twelve-month period.
- Spill information must be submitted to the U.S. EPA RA within 60 days if either of the above thresholds is reached



SPCC – Tank Inspections

- Monthly Tank Inspection Form
 - Supported by Facilities looks for any issues related to tank integrity, fittings, leaks, wear, damage etc.. to the bulk collection and transfer systems = required by the MTS-SPCC site plan



Bulk Storage Tank - Periodic Monitoring Record

EHS - 500-141

Rev. A

Location:	Date:		•
Inspected by:	Tank		
inspected by.	Volume: Tank		
	Contents	<u> </u>	_
Aboveground Storage Facilities			_
	YES	NO	NA
Tanks identified with tank capacity, contents & hazard signs.			
Exterior of tank is painted and/or protected from corrosion.			
Tank is free of cracks, corrosion or areas of wear.			
Regular visual inspections are performed on tank.			
Deficient equipment has been repaired or tank taken out of service.			
Fill ports have mated connections*			
Tank level gauges operating with no apparent issues			
High-level alarm/overfill protection.			
Check valves for pump-filled tanks.			
Valves are properly labeled for closed/open positions			
Secondary containment is free of cracks, erosion or evidence of releases.			
Transfer area has spill containment.			
Transfer valves and piping are located within transfer area.			
Tank protected from explosion, vacuum and/or over pressurization.			
Piping is labeled and shows no signs of leaking			
Pumps and valves are protected from leaks.			
SECURITY			
Facility is secured and area locked when not attended.			
Loading/unloading connection of oil pipelines are capped or blankflanged			
Lighting is adequate to discover spills			
EMERGENCY SPILL RESPONSE			
Tank area is free of spills and/or signs of leakage.			
A working telephone is accessible.			
Personal protective equipment is available.			
A fire extinguisher is accessible.			
Unused absorbent material is available - Spill Kit labeled and in the area			
Comments:			

Thank you for your time and attention to this presentation

As always, should you have any questions, please: contact the EHS Department - Ext. 6024 or Ext. 4360