

Hazardous Waste Container Discussion for Container Workgroup March 3, 2011

3 Items from February 7, 2011
Forum

Department Goals

- Protection of health and the environment
- Prevention of costly cleanups by promoting good hazardous waste management practices
- Principle –
Knowledge of hazards = Safety for everyone

Packaging, marking and labeling (PM&L) hazardous waste containers

- History of the hazardous waste rules
- Packaging, marking and labeling basics
- Differences between EPA regulations and the state regulations on this subject
- Missouri stakeholder concerns
- Department responses to date

Early EPA history on management of hazardous waste containers onsite

- EPA February 26, 1980 Final Rule Adopted - required DOT containers for waste accumulated onsite
 - 40 CFR 262.34
 - Generators could accumulate waste onsite for 90 days or less without having to obtain a hazardous waste storage permit
- IF
- Waste shipped w/in 90 days
- AND
- Packaged, marked and labeled per DOT

Hazardous materials standards

- HAZARDOUS MATERIALS – Designated by the Secretary of the Department of Transportation as posing an unreasonable threat to the public and the environment.
- "Hazardous Materials" includes all of the following: (1) Hazardous Substances, (2) Hazardous Wastes, (3) Marine Pollutants, (4) Elevated Temperature Material (5) Materials identified in 172.101, and (6) Materials meeting the definitions contained in Part 173.
- Regulated by the U.S. D.O.T.



Purpose of hazardous materials regulations

- To promote the safe transportation of hazardous material through the effective communication of information concerning the hazards of hazardous materials being transported.
- Through the communication of this information, accidents are either altogether avoided or, emergency responders are properly prepared to respond to a given incident or accident.

History of Missouri's PM&L regulation

(staged photo)

- Package, mark and label hazardous waste during the entire onsite storage period – July 1, 1983 amendment
- Based on EPA's final rule adopted February 26, 1980 (40 CFR 262.34)



Exceptions to PM&L requirement (federal and state)

- Does not apply to hazardous wastes in satellite accumulation

or to

- Hazardous wastes that are not shipped offsite

EPA container marking requirement changed in 1982

- The words “hazardous waste” and
- The accumulation start date
- EPA’s final rule with this decision published January 11, 1982

Hazardous
Waste

1-10-11

Comparison of EPA's PM&L regulations to Missouri's

- EPA requires words “hazardous waste” and accumulation start date
- Missouri requires that the hazardous waste generator package, mark and label hazardous waste per DOT during the entire onsite storage period

What is hazardous materials packaging?

Packaging = a receptacle and any other components or materials necessary for the receptacle to perform its containment function in conformance with the minimum packing requirements of 49 CFR 172

Packing group = a grouping according to the degree of danger presented by hazardous materials:

- I – Great danger
- II – Medium danger
- III – Minor danger



DOT packaging example



Hazardous waste marking example

<h1>Hazardous Waste</h1>	
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL	
If found, contact the nearest police or public safety authority, and the Washington State Department of Ecology or the Environmental Protection Agency	
Accumulation Start Date:	Generator Name:
Reportable Quantities (RQ): <i>40 CFR Subchapter J, Part 302, Table 302.4</i>	Address:
lbs	City:
Manifest Document #:	State:
Emergency Response Guide #:	Zip:
EPA Waste Code(s) and/or Characteristic(s)	EPA ID #:
EPA/DOT Shipping Name:	
Hazard Class:	
UN/NA #:	
Packing Group (PG):	
In the event of a spill or release of this hazardous waste, contact the US Coast Guard National Response Center at 1-800-424-8802 for information and assistance.	

Source of marking info for hazardous material shipping papers

- Hazardous Materials Table - 49 CFR 172.101
 - Column 1: mode of transportation restrictions/conditions, using symbols (+, A, D, G, I, W)
 - Column 2: Hazardous materials descriptions and proper shipping names
 - Column 3: Hazard class or division (9 of these)
 - Column 4: Class or Division - UN/NA Identification number
 - Column 5: Packing group - I, II and III
 - Column 6: Labels
 - Column 7: Special provisions
 - Column 8: Packaging requirements
 - Column 9: Air transportation
 - Column 10: Vessel transportation

EPA hazardous waste container marking (left drum - staged photo)

- The words “hazardous waste” (no size specification)
- The date that waste was first placed in the drum (“the accumulation start date”)



Missouri hazardous waste markings (staged photo)



HAZARDOUS WASTE

FEDERAL LAWS PROHIBIT IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE OR
PUBLIC SAFETY AUTHORITY OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERATOR INFORMATION:

NAME: Missouri Department of Natural Resources

ADDRESS: 1730 East Elm Street

CITY Jefferson City STATE MO ZIP 65101

EPA ID NO. MO000000000 EPA WASTE NO. D003

ACCUMULATION START DATE 01/31/11 MANIFEST TRACKING NO. _____

[UN1935, Waste Cyanide solutions, nos. 6.1, PG I]

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

www.accuform.com • reorder# MH2W20

Label examples



More labels



EPA requirements before transport

- EPA – Before offering a container of 110 gallons or less in capacity holding hazardous waste for shipment offsite, the container must be marked with the following information: *"HAZARDOUS WASTE – Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.*
- *Generator's Name and Address _____.*
- *Manifest Document Number _____."*
- Hazardous waste is also regulated under the DOT regulations when in transport, so must also display the appropriate DOT markings and labels.
- Typical "hazardous waste labels/markings" have spaces to enter the required DOT and waste markings and provide space for the user to enter additional mandatory and voluntary information.



HAZARDOUS WASTE
FEDERAL LAWS PROHIBIT IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERATOR INFORMATION:
NAME: Missouri Dept. of Natural Resources
ADDRESS: 1730 East Elm Street
CITY: Jefferson City STATE: MO ZIP: 65101

EPA ID NO. MO0000000000 EPA WASTE NO. U122

ACCUMULATION START DATE: 01/31/11 MANIFEST TRACKING NO. _____

UN1198, Waste Formaldehyde, Solutions, Flammable, 3, 8 PG III

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX
HANDLE WITH CARE!

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Missouri concerns

- Open to ideas
- Still information gathering
- Other protective standards?
- Open to facts and data from stakeholders
- Discussion on potential solutions to meet goals invited

Satellite accumulation

Hazardous waste generators may accumulate limited quantities of hazardous waste at satellite accumulation areas (SAAs) prior to removal to areas designated for 90-day or less storage (for large quantity generators) or 180-day or less storage (for small quantity generators) without a permit or interim status, and without complying with the full requirements applicable to generator storage provided that certain requirements and limitations are met.

EPA's satellite accumulation regulations

Containers:

- “at or near any point of generation where wastes initially accumulate”
- under the control of the operator generating the waste
- in good condition
- waste compatible with container
- closed unless adding or removing waste
- marked as “hazardous waste” or with other words that identify the contents
- moved to storage area within 3 days of filling (guidance sets 55-gallon total quantity limit in a satellite accumulation area)



Additional Missouri SA container regulations (right drum - staged photo)



- Container marked with beginning date of accumulation
- Stored in satellite area less than 1 year
- Guidance allows 55-gallons per wastestream in a satellite accumulation area

Stakeholder worklist concerns

- One-year limit results in need to remove partially full containers to storage or shipping – wasted containers – unnecessary shipping costs for partially full containers – increased risk of employee exposure or accident
- Serves as potential source of paperwork violations since accumulation start date must be checked

Missouri concerns

- Containers can be “lost,” forgotten and eventually leak, since not subject to weekly inspections
- Willing to consider a longer timeframe or other options
- Guidance could be codified
- Tiered system of regulation possible
- Current regulations limit storage time which can help facilities avoid more serious violations (e.g., failure to determine, operation as a TSD without a permit, failure to operate and maintain the facility to minimize an emergency)



IT DOESN'T
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Discussion

