

# 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

<b>Hazardous Waste</b>	
<b>FEDERAL LAW PROHIBITS IMPROPER DISPOSAL</b>	
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): lbs <i>40 CFR Subchapter J, Part 302, Table 302.4</i>	Address:
Manifest Document #:	City:
Emergency Response Guide #:	State:
EPA Waste Code(s) and/or Characteristic(s)	Zip:
	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!**

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# 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  
TASTE  
HAZARDOUS

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# Discussion

