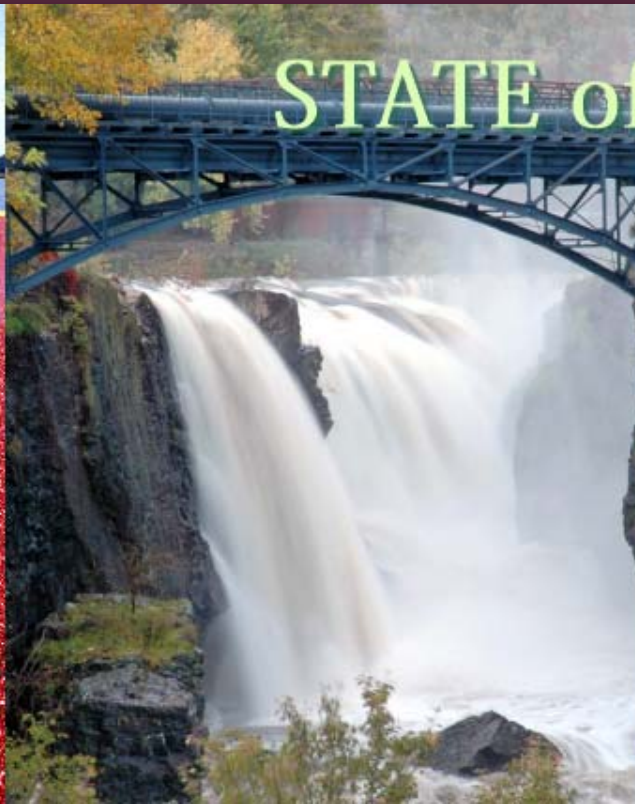


# “Where’s the Waste?, and Where are you Storing It?”

Stephan Szardenings, CHMM



# Container Management.



What is a container?

# Definition of a Container:

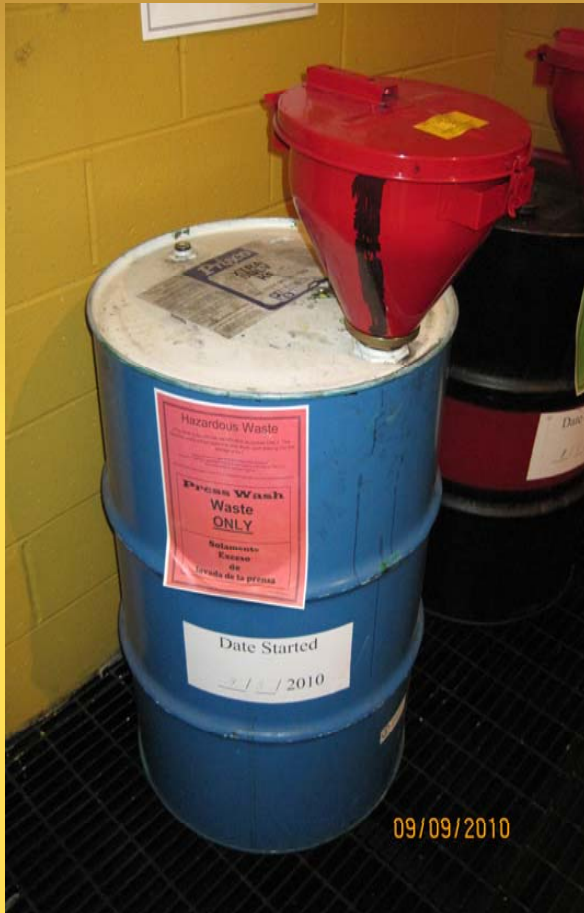
- 40 CFR 260.10 Subpart B:

A container means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

Can you show me some examples????



# Most Common Container found:



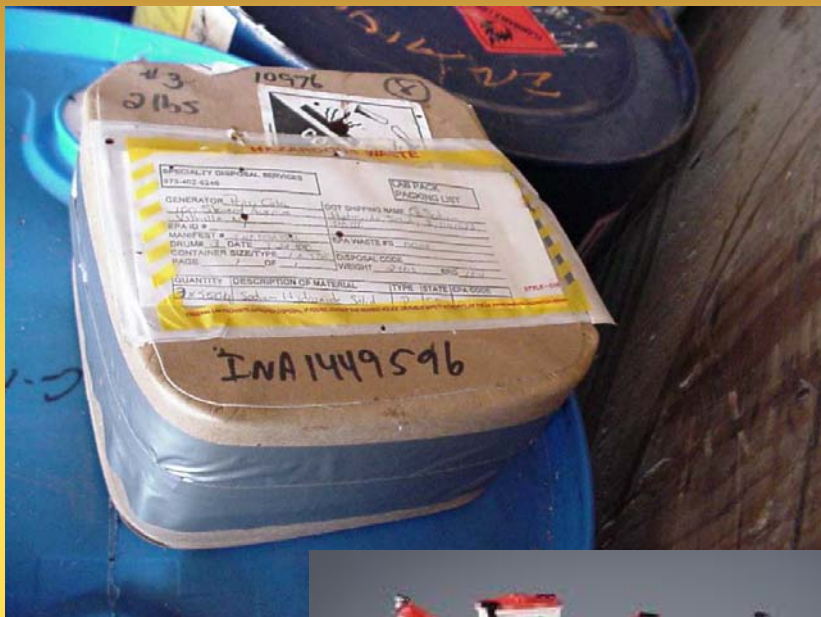


# Other Containers Include:



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# Other Containers Include:





# Other Containers Include:





# Other Containers Include:



# Other Containers Include:



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# Other Containers Include:





# Other Containers Include:

- Boxes (various sizes and materials)
- One cubic yard heavy duty cardboard boxes with a plastic lining (gaylord boxes)

# Is this a tanker or container?



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# Hazardous Waste Storage Area





# Why were Container Management/Storage Regulations created?

May 19, 1980 preamble

- to minimize emissions of volatile wastes;
- help protect ignitable or reactive waste(s) from sources of ignition or reaction;
- help prevent spills; and
- reduce the potential for mixing of incompatible waste and direct contact of facility personnel with waste(s).

Suggests that containers are closed with lids or some other closure device when adding or removing the waste from the container.

When an inspector visits a hazardous waste storage area, what are we going to look for?

That depends on the type of generator that you are :

- + Large Quantity Generator (LQG)
- + Small Quantity Generator (SQG)
- + Conditionally Exempt Small Quantity Generator (CESQG).

However, ALL Generators MUST  
comply with  
40 CFR 262.30:

Before transporting hazardous waste or offering hazardous waste for transportation offsite, a generator must package the waste in accordance with applicable USDOT regulations, on packaging, under 49 CFR parts 173, 178, and 179.



49 CFR 173 – Covers the General requirements for Shipments & Packagings of Hazardous Materials / Wastes.

49 CFR 178 – Covers the “Specifications for the Packagings” that the hazardous material / waste will be shipped in.

49 CFR 179 – Covers the “Specifications for Tank Cars”.

(these to be covered under Transportation Section of the seminar!!)

## A Hazardous Waste Storage Area is:

An area where waste accumulation container(s) are of such distance from the process generating the waste, or in such a location, that it is NOT routinely within the control and cognizance of the operator of the process.

### Examples:

- a) location of the accumulation container in another room where intervening walls or partitions block it from the view of the process operator for significant periods of time
- b) place the container in areas subject to other plant activities not under the control of the process operator where the risks of release or mismanagement may be greater.
- c) location of the waste storage container outside a building in which the waste is generated may be regarded as placing it beyond the routine attention of the process operator, and therefore not legitimate satellite accumulation.

# Accumulation Time Limitations

CESQG's – NONE, as long as Hazardous Waste in storage does not exceed 1,000Kg, and maintain CESQG waste generation rates (<100 Kg/220 lbs/@30 gal. per mo.)

SQG's – must manifest/ship Hazardous Waste offsite within 180-days of being accumulated onsite. (40 CFR 262.34(d))

LQG's – must manifest/ship Hazardous Waste offsite within 90-days of being accumulated onsite (40 CFR 262.34(a))

# Exceptions to Accumulation Time Limitations:

- 40 CFR 262.34(e) –

If you are a SQG of hazardous waste, who must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status provided that he complies with the requirements of paragraph (d) of this section.

**NOTE:** The quantity of waste accumulated on-site may never exceeds 6000 kilograms



# Exceptions to Accumulation Time Limitations:

- 40 CFR 262.34(b) –

If you are a LQG of hazardous waste, and accumulate hazardous waste onsite for more than 90-days, the generator is considered an operator of a storage facility and is subject to the requirements of 40 CFR parts 264 & 265 (TSDf), and permit requirements of 40 CFR part 270 (TSDf), UNLESS the generator has been granted an extension to the 90-day period.

An extension of up to 30-days may be granted by the Department, on a case-by-case basis.

# Common Storage Area Requirements:

40 CFR 262.34(a)3 – While being accumulated on-site, each container...must be clearly marked, and/or labeled with the words:

**“HAZARDOUS  
WASTE”**

(There are no exceptions!!!)

# Common problems seen with 40 CFR 262.34(a)3

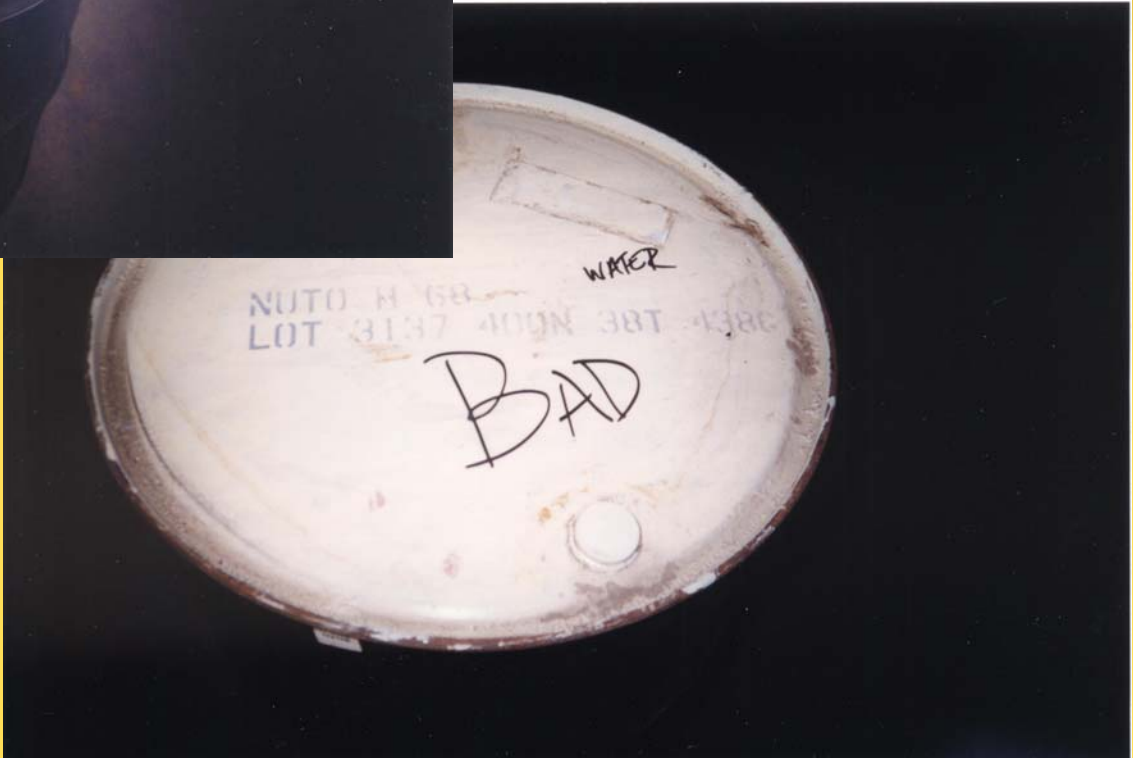
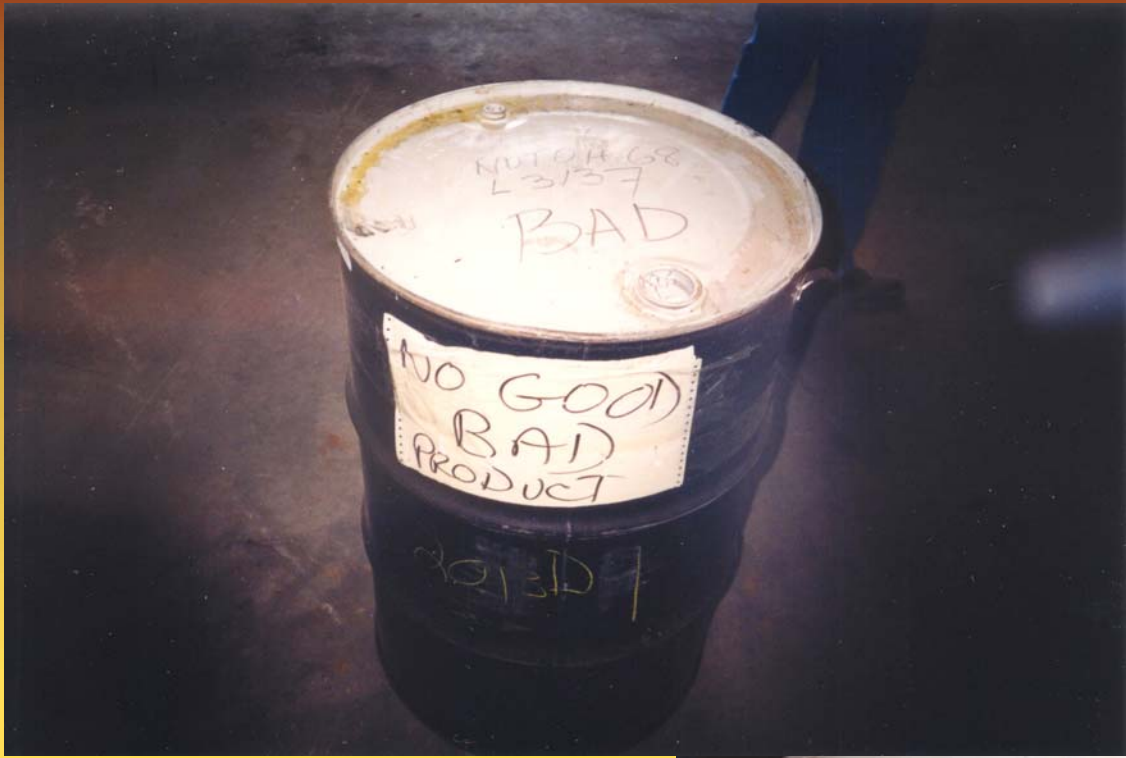




BAD WASH

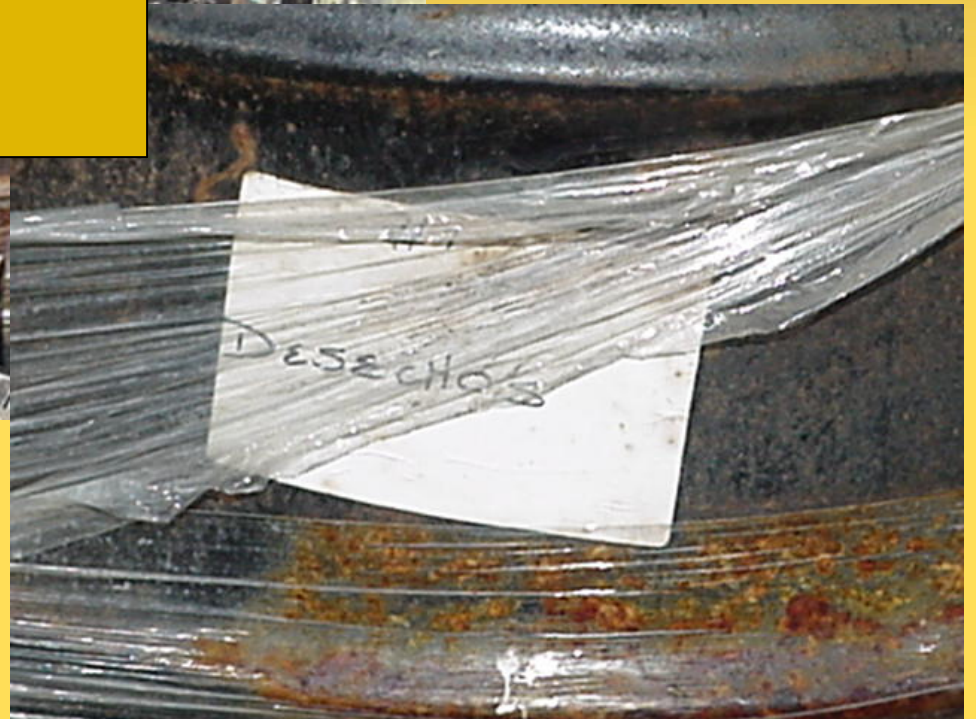
07/17/2009

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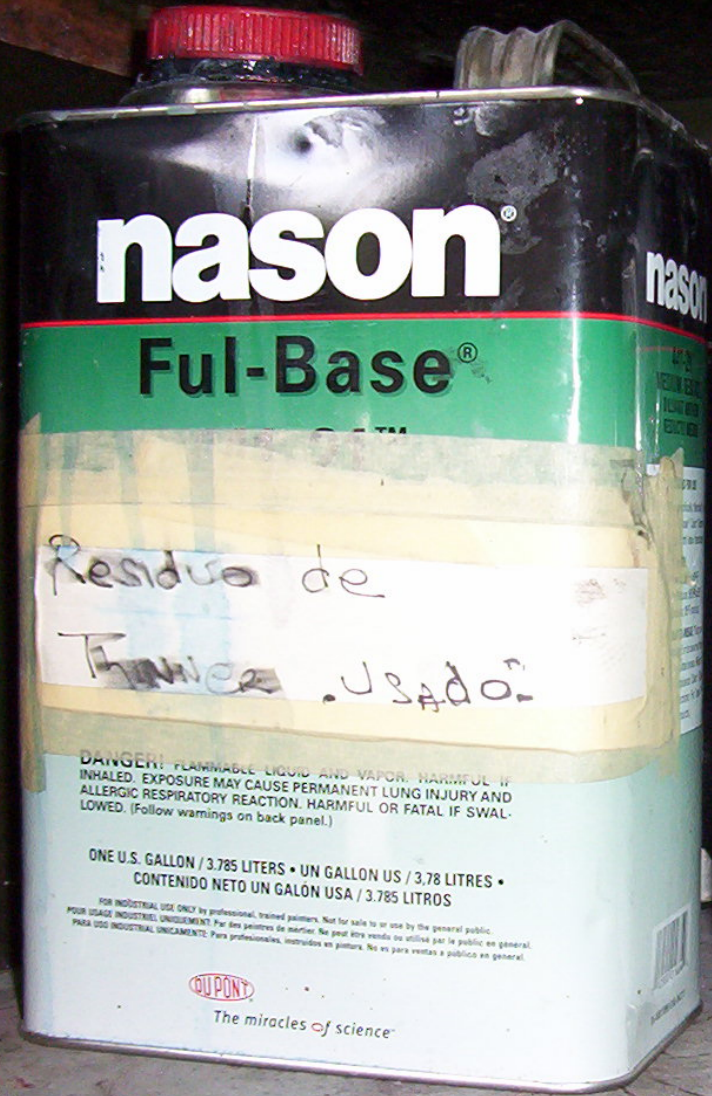
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**se**

49

Spot Primer  
C  
Transpa  
Retou  
Transparent  
Repara

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07/09/2008

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# How it should/can be done:



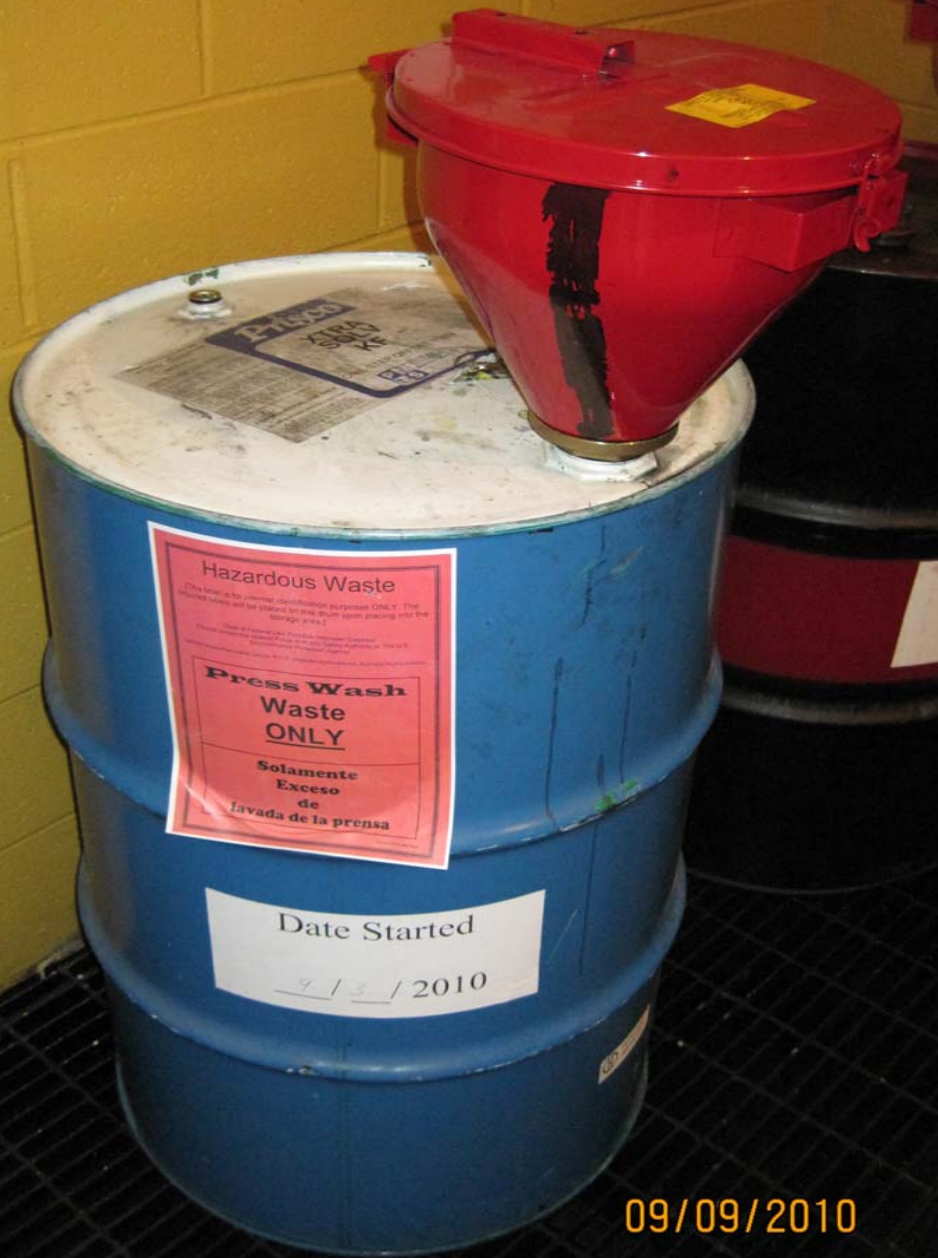




06/05/2008

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# Common Storage Area Requirements:

- 40 CFR 262.34(a)2 – the date upon which each period of accumulation begins is clearly marked and visible for inspection on each container.

## Reason:

- SQG – has 180-day storage limit (40 CFR 262.34(d))
- LQG – has 90-day storage limit (40 CFR 262.34(a))



# Common problems seen with 40 CFR 262.34(a)2



**HAZARDOUS WASTE**  
FEDERAL AND/OR STATE LAWS  
PROHIBIT IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY, THE U.S. ENVIRONMENTAL PROTECTION AGENCY OR THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION 2-5624

GENERATOR INFORMATION:

NAME ZINSSER CO., INC. PHONE 732/652

ADDRESS 480 FRELINGHUYSEN AVENUE STATE NJ ZIP 07114

CITY NEWARK

EPA ID NO. / MANIFEST DOCUMENT NO. NJD002149789 STATE NJ ZIP 07114

STATE MANIFEST DOCUMENT NO. NJA5109254

ACCUMULATION START DATE    /   / EPA WASTE NO. D001

RQ, WASTE RESIN SOLUTION, 3, UN1866, PGII, ERG#127.

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

**HAZARDOUS WASTE**  
**HANDLE WITH CARE!**

12/19/2005

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08/16/2007

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03/05/2010

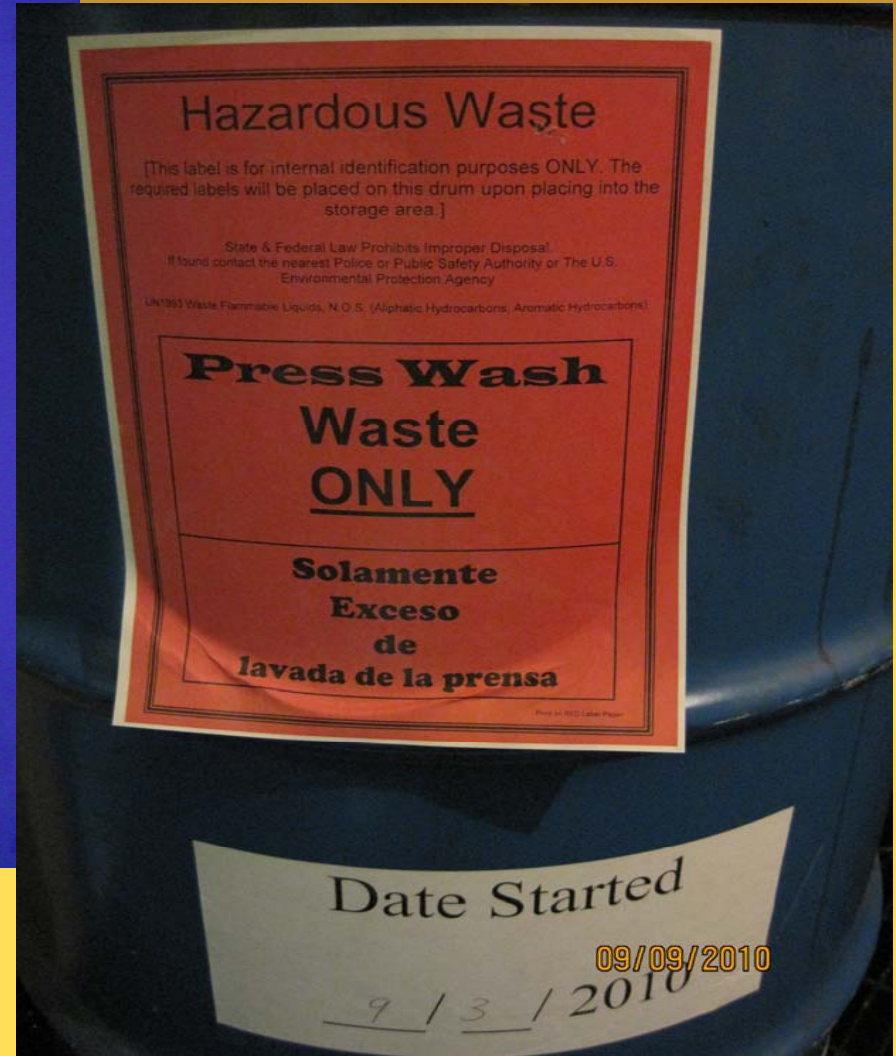
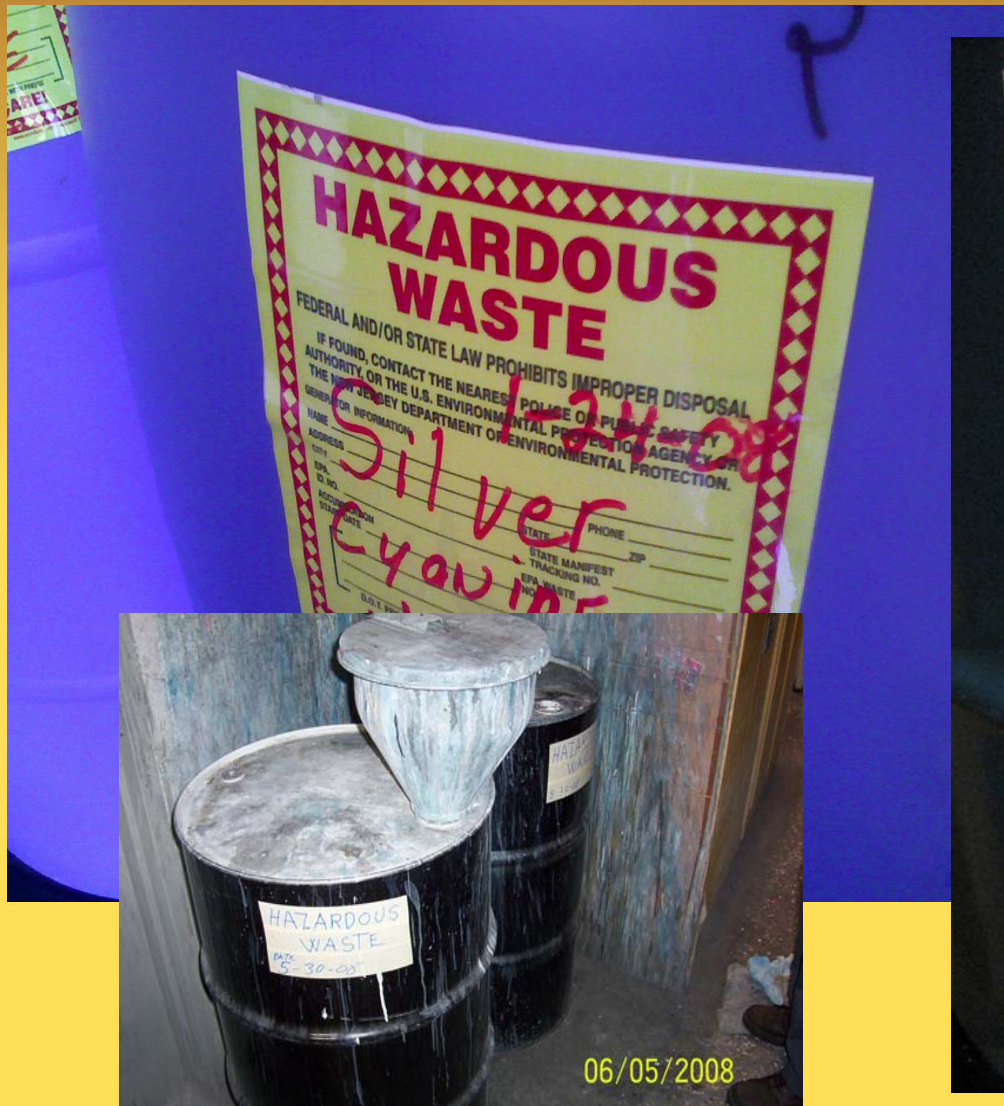


04/20/2010

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# How it should/can be done:



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# Common Storage Area Requirements:

- 40 CFR 265.173(a) – A container holding hazardous waste must always be securely closed during storage, except when it is necessary to add or remove waste

Reason: To prevent the release of hazardous waste, and/or its vapors. Again, to prevent a spill from occurring, and protect workers from hazardous vapors, fumes, etc...



# Common problems seen with 40 CFR 265.173(a)



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How it should, and  
can be done:  
(and maybe not!)



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# Common Storage Area Requirements:

- 40 CFR 265.173(b) – A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak



# Common problems seen with 40 CFR 265.173(b)



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08/06

08/06/2009

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# Common Storage Area Requirements:

- 40 CFR 265.35 – Required Aisle Space

An owner or operator (generator) must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency (Example - DEP requires 18” for single-stacked 55-gallon drums)









12/19/2005



10/26/2005

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05/05/2010

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How it should/can be done:



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NON  
HAZARDOUS  
MATERIAL

717

NON  
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MATERIAL

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HAZARDOUS  
MATERIAL

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MATERIAL

NON  
HAZARDOUS  
MATERIAL



# Common Storage Area Requirements:

- 40 CFR 265.34(a) – Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee.

## Remember!!

Hazardous Waste Storage Area definition, is

An area where waste accumulation container(s) are of such distance from the process generating the waste, or in such a location, that it is not routinely within the control and cognizance of the operator of the process.

Storage areas are/can usually well removed from active part of facility, and the only means of communications is through some type of communications device – phone, alarm, 2-way radio, etc...





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**WASTE  
SOLVENT**

**WASTE  
OIL**

ALL DRUMS  
MUST BE CAPPED  
AT ALL TIMES.

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# Common Storage Area Requirements:

- 40 CFR 265.174 – the owner or operator (generator) must inspect areas where containers are stored, at least weekly, looking for leaks and for deterioration caused by corrosion or other factors



- Container management and weekly inspections go hand-in-hand.
- Ensures hazardous waste storage containers are being properly managed.
- Ensures any problems that are found, are/can be addressed in a prompt manner before any serious injury or property damage can occur.
- Written inspection log not required for LQG/SQG, but highly recommended to show that they are in fact being conducted.



# IMPORTANT

- a) To meet the hazardous waste storage container requirements in 40 CFR, but
- b) Ensure all applicable facility personnel receive routine training in all aspects of container management - from container labeling & marking requirements, to the proper use, and implementation of the emergency communications plan/devices onsite to ensure that.....

This won't  
happen to one of  
your hazardous  
waste storage  
containers at your  
facility.....





Which can lead to this....all because of  
poor container management!



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