

# Iowa Strategic Goals Program Assistance Workshop

## Hazardous and Solid Waste Compliance and Management

**September 26, 2012**



# RCRA Generator Classifications



# Generator Classifications

- **What quantity of hazardous waste is generated each month?**
- **Identify and count all hazardous waste generated each month**



# Generator Classifications

- Is the facility a **Conditionally Exempt Small Quantity Generator (CESQG)**, **Small Quantity Generator (SQG)**, or **Large Quantity Generator (40 CFR Part 261.5)**?

# Generator Classifications

- **CESQG:** <100 kg/mo (<220 pounds); Acute H.W. < 0-1 kg/mo (<2.2 pounds)
- **SQG:** >100 kg/mo and < 1000 kg/mo (<2,200 pounds)
- **LQG:** >1,000 kg/mo; Acute H.W. > 1 kg/mo



# Generator Classifications

- How much waste does that represent (approximately)?
  - CESQG - less than 1/2 drum of water per month
  - SQG - between 1/2 and 4.5 drums of water per month
  - LQG - more than 4.5 drums of water per month



# Conditionally Exempt Small Quantity Generators



# **CESQG Requirements (40 CFR 261.5)**

- **Conduct hazardous waste determinations**
- **Generate < 100 kg of hazardous waste per month**
- **Accumulation of no more than 1,000 kg total**
- **Keep containers of hazardous waste closed**

# CESQG Requirements (40 CFR 261.5)

- **Ensure hazardous waste is shipped to a hazardous waste landfill or other permitted facility**
- **Follow Department of Transportation (DOT) requirements**
- **Label used oil containers/tanks with the words “USED OIL”**



# Common CESQG Violations

- **Failure to conduct a hazardous waste determination (40 CFR 262.11)**
- **Illegal disposal (RCRA § 3005)**
- **40 CFR 265.31**

# CESQG Noncompliance



40 CFR 265.31  
RCRA Section 3005



**CESQG Noncompliance**

**40 CFR 265.31  
RCRA Section 3005**

**CESQG**  
**Noncompliance**



**40 CFR 265.31**  
**RCRA Section 3005**

# CESQG Noncompliance

A photograph showing a concrete drainage structure. On the right, a large, textured concrete wall is visible. A pipe runs along the bottom of this wall, leading to a narrow channel or stream. The stream is surrounded by dense, green vegetation, including tall grasses and various shrubs. The water in the stream appears slightly turbid. The overall scene suggests a natural area with a man-made drainage system.

**40 CFR 265.31  
RCRA Section 3005**

**6/15/2001**

# CESQG Noncompliance



40 CFR 265.31  
RCRA Section 3005

6/15/2001

**CESQG**  
**Noncompliance**



**40 CFR 265.31**  
**RCRA Section 3005**

**6/15/2001**

# Small Quantity Generators



# **SQG Requirements**

- **Conduct hazardous waste determinations**
- **Must notify state and/or EPA of hazardous waste activities and receive EPA ID number (40 CFR 262.12)**

# SQG Requirements

- **Keep containers of hazardous waste closed (40 CFR 262.34(a))**
- **Label and date hazardous waste containers (40 CFR 262.34(a))**

# 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 INFORMATION

NAME UNIVERSITY OF MISSOURI - ROLLA  
ADDRESS 1201 STATE ST. PHONE 314-341-4300  
CITY ROLLA STATE MO ZIP 65401

EPA / MANIFEST ID NO. / DOCUMENT NO. MOD000677773

ACCUMULATION START DATE

8/15/02

EPA WASTE NO.

F002, D002  
D001, F003, F004

Flammable liquids, N.O.S. UN1993, 3, PG-II

USE PROPER SHIPPING NAME AND EPA OR NA NO. WITH PREFIX

## HANDLE WITH CARE!

Container that is labeled  
and dated correctly

# RCRA Violations?

**- Open Container**

**- No Hazardous Waste Label**

**- No Accumulation Start Date**



# SQG Requirements

- **Facility can store hazardous waste for:**
  - **< 180 days (40 CFR 262.34(d)),**
  - **< 270 days if disposal facility > 200 miles away (40 CFR 262.34(e))**



# SQG Requirements

- **SQG never accumulate >6,000 kg of hazardous waste or facility is subject to the permitting requirements (40 CFR 262.34(f))**



# **SQG Requirements**

- **Hazardous waste manifest required for waste shipments (40 CFR 262.20)**
- **Must have emergency coordinator on site or on call at all times (40 CFR 262.34(d))**
- **Post emergency information by the telephone (40 CFR 262.34(d))**

# **SQG Requirements**

- **Exception reports for manifests not returned to the facility (40 CFR 262.20)**
- **Train employees on proper handling of hazardous waste**
- **Label used oil containers/tanks with the words “USED OIL”**

# Common SQG Violations

- **Failure to conduct hazardous waste determination (40 CFR 262.11)**
- **Failure to notify and receive EPA identification number for hazardous waste activities (40 CFR 262.12)**
- **Illegal disposal (RCRA Section 3005)**



# Common SQG Violations

- **Failure to label, date, and close containers**
- **Failure to use containers in good condition**
- **Failure to train employees in hazardous waste management**

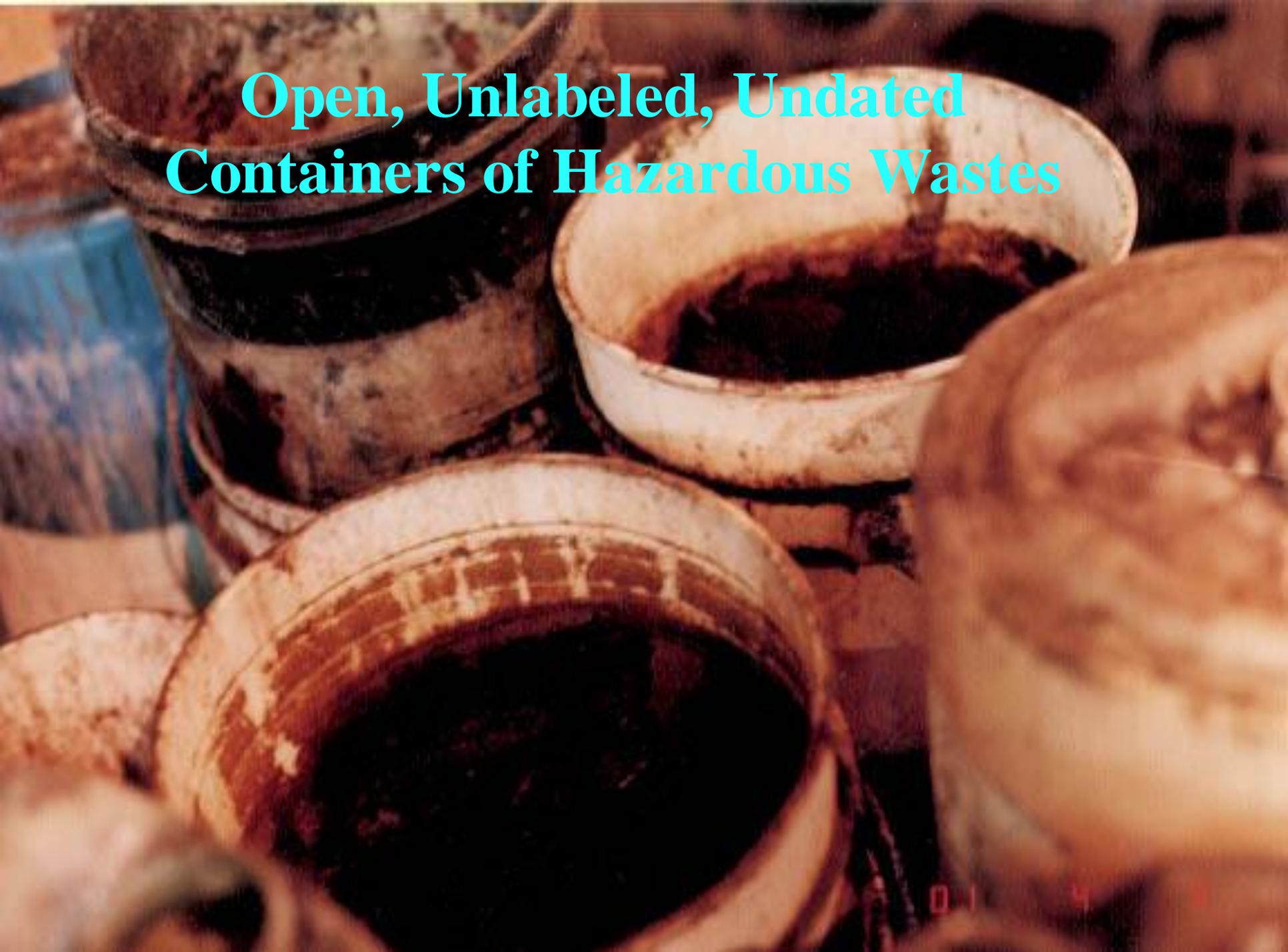


# RCRA Violations?

- Open Container
- Container in Poor Condition
- No Hazardous Waste Label
- No Accumulation Start Date



# Open, Unlabeled, Undated Containers of Hazardous Wastes





**Open, Unlabeled, Undated Container  
with Inadequate Aisle Space**

# No Accumulation Start Date Inadequate Aisle Space

29762603-0  
FedEx  
East

**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 INFORMATION:  
NAME: Chesapeake  
ADDRESS: 97 Oldham  
CITY: Lee Summit PHONE: 816-541-5413  
EPA / MANIFEST ID NO. / DOCUMENT NO. MO098577826 STATE: MO ZIP: 64081  
ACCUMULATION START DATE: Wash in Air EPA WASTE NO.: D002  
VN2031, PG D Lee Wm, S

DOT: PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX  
**HANDLE WITH CARE!**

ST-18 (REV. 11/88)  
Printed by Environmental Air Systems

CHL

**Container in Poor Condition**  
**Inadequate Aisle Space**  
**No visible labeling**



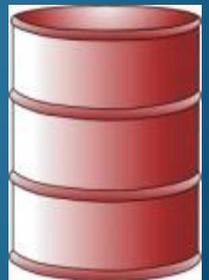
9 1 3 6

# Large Quantity Generators



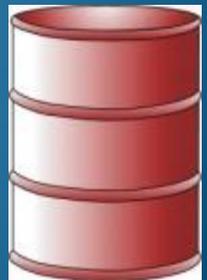
# LQG Requirements

- **Conduct hazardous waste determinations**
- **EPA ID number required**
- **Store hazardous wastes less than 90 days**
- **Ship hazardous waste to a permitted Treatment, Storage and Disposal Facility (TSDF)**



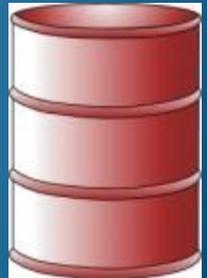
# LQG Requirements

- **Label used oil containers/tanks with the words “USED OIL”**
- **Emergency equipment required (40 CFR 265.32)**
- **Must have communication or alarm system (40 CFR 265.34)**



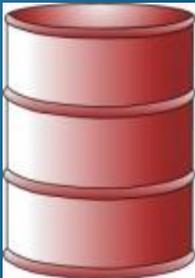
# LQG Requirements

- **Must maintain adequate aisle space (40 CFR 265.35)**
- **Must inspect the hazardous waste storage areas weekly (40 CFR 265.174)**



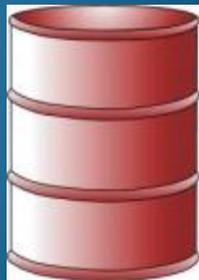
# LQG Requirements

- **Contingency plan required (40 CFR 265.50-56)**
  - **Describes arrangements with local emergency response agencies**
  - **Lists the names addresses and phone numbers of persons qualified to act as emergency coordinators**



# LQG Requirements

- **Contingency plan required (40 CFR 265.50-56)**
  - **List of all emergency equipment**
  - **Locations and physical descriptions of the equipment**
  - **Brief outlines of equipment capabilities**
  - **Includes evacuation plan**



# LQG Requirements

- **A copy of the contingency plan must be (40 CFR 265.53):**
  - **maintained at the facility**
  - **submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams**



# LQG Requirements

- **Train employees on proper handling of hazardous waste (40 CFR 265.16)**
  - **Trainer must be trained on hazardous waste management**
  - **Must ensure personnel are able to effectively respond**
  - **Training must be completed within 6 months of employment**

# LQG Requirements

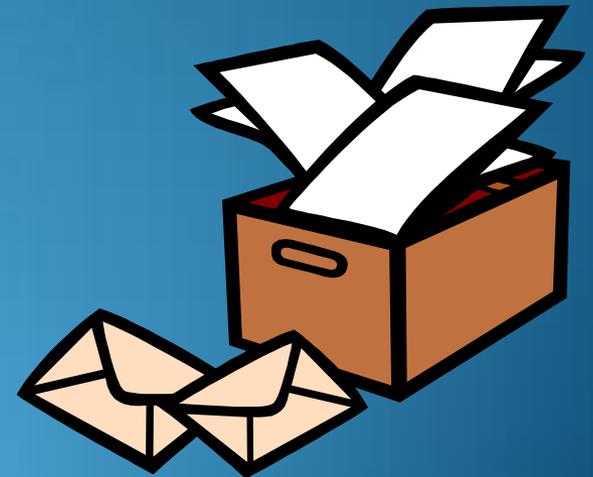
- **Training records retention (40 CFR 265.16(d) & (e))**
  - **Job title for each hazardous waste position**
  - **Name of employee filling each hazardous waste position**
  - **Written job description for each position**
  - **Written description of each type of training**

# LQG Requirements

- **Training records retention (40 CFR 265.16(d) & (e)) (cont.)**
  - **Amount of each type of training**
  - **Documentation of training completion**
  - **Training records of current employees kept until facility is closed and 3 years for those who have left**
  - **Annual refresher training required**

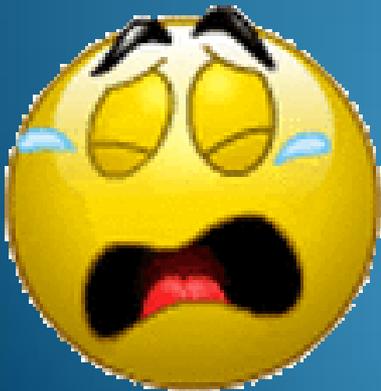
# LQG Requirements

- **Complete exception reports for manifests not returned**
- **Submit Biennial Hazardous Waste Report to EPA (or the State)**



# Common LQG Violations

- **Same violations as SQG**
- **Failure to train employees (40 CFR 265.16)**
- **Failure to have contingency plan (40 CFR 265 Subpart D)**

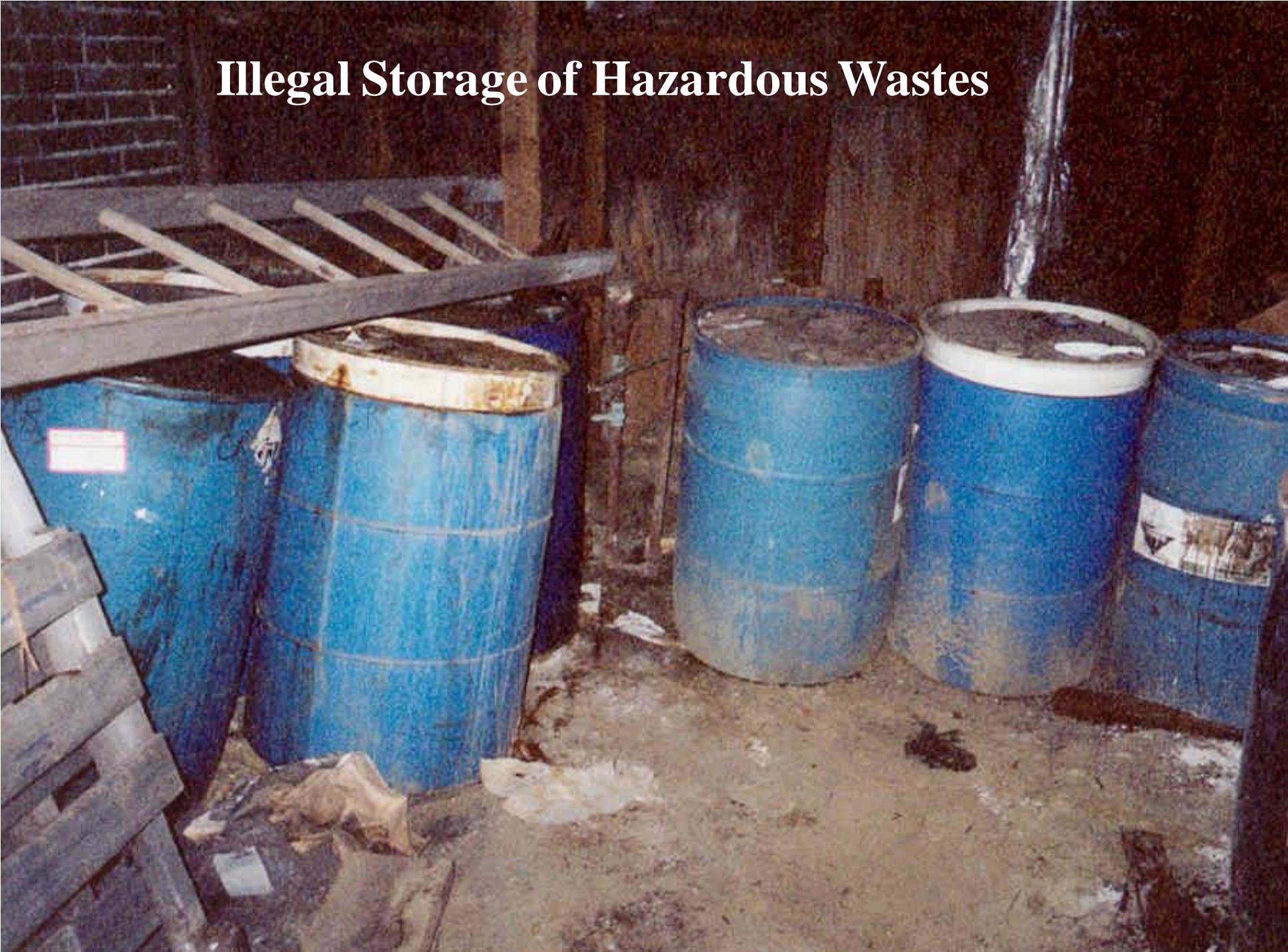


# Common LQG Violations

- **Failure to follow container management requirements (40 CFR 265 Subpart I)**
- **Failure to follow tank system requirements (40 CFR 265 Subpart J)**



# Illegal Storage of Hazardous Wastes

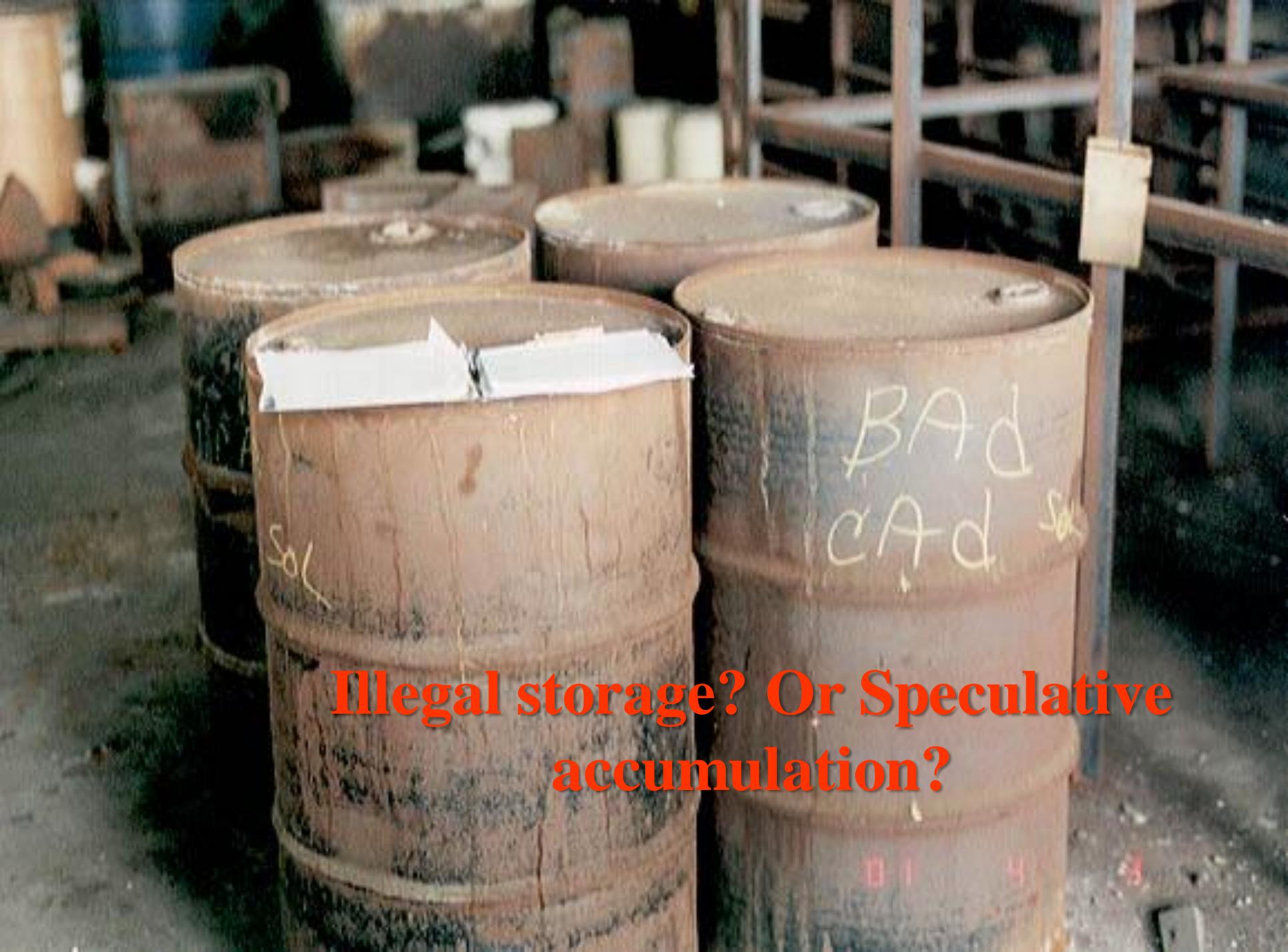


# Illegal Storage of Hazardous Wastes



# Inadequate aisle space





**Illegal storage? Or Speculative  
accumulation?**

# Incompatible Storage

Caustic  
Flakes

Nickel  
Strip

Muriatic  
Acid

F007

$\text{NH}_4\text{OH}$

Sodium  
Cyanide

F006  
Nickel  
Chloride

Nitric  
Acid



# Illegal Treatment, Storage, and Disposal Facilities



# Illegal TSD Facilities

- **SQGs** that store hazardous wastes greater than 180 days/270 days or
- **LQGs** that store greater than 90 days or
- Any facility, **CESQG**, **SQG**, or **LQG** treating or disposing hazardous waste on-site

# Illegal TSD Facilities

- **Must have a permit or have interim status if you're operating as a TSDF (40 CFR Part 264/265)**
- **Must submit a full RCRA Part B permit application**
  - **Permit conditions are contained in 40 CFR 270 Subpart C**

# Container Management Violations

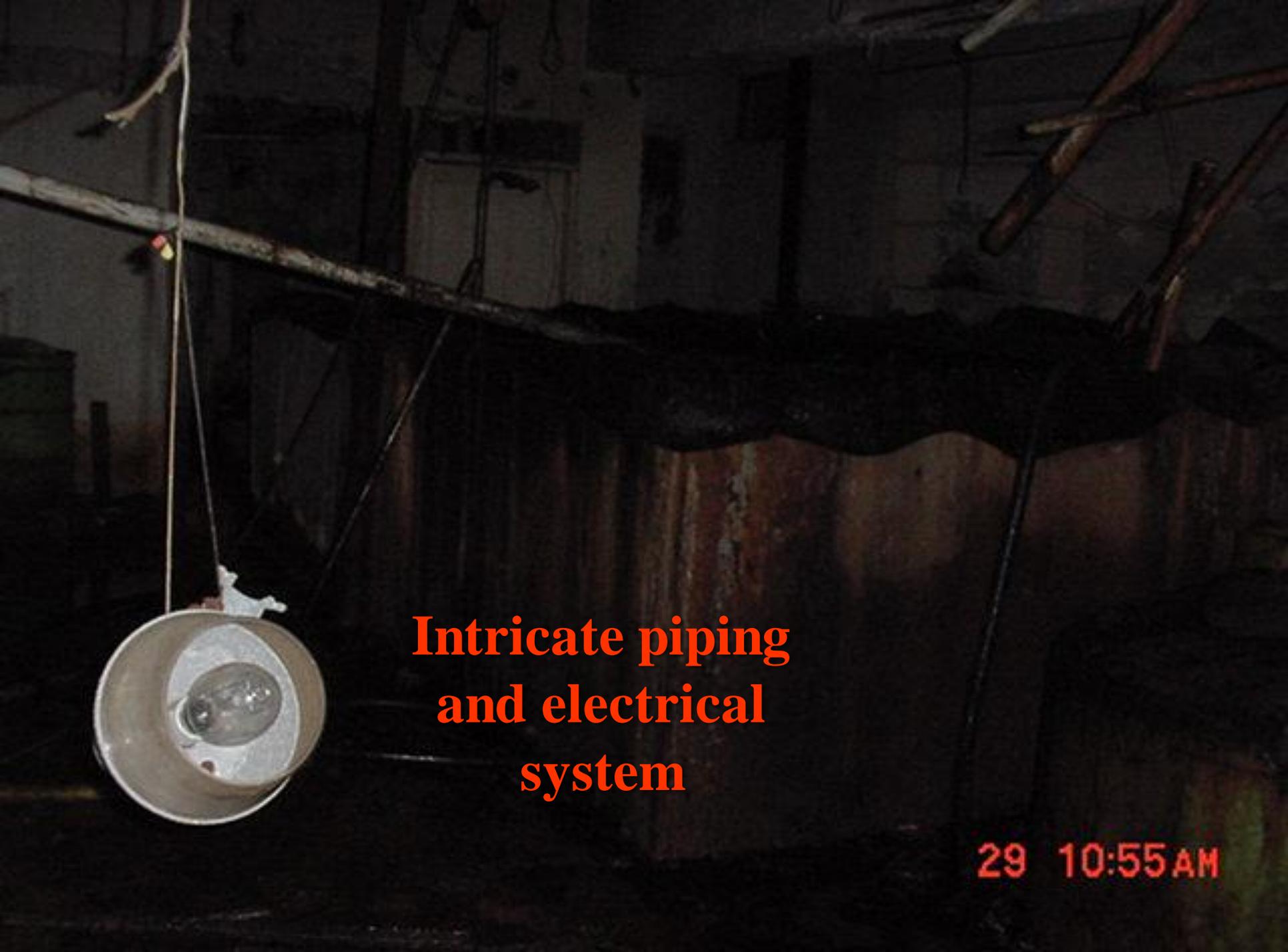


**Drums in Poor Condition**  
**No Hazardous Waste Labels**  
**No DOT Labels**  
**No Dating**  
**Inadequate Aisle Space**  
**No weekly inspections**

A photograph of a dark, cluttered room, likely a storage area for hazardous waste. A single light bulb hangs from the ceiling. The room contains various pipes, wires, and a large green cylindrical object. The text "Hazardous waste accumulation tanks" is overlaid in orange. A timestamp "29 10:54 AM" is visible in the bottom right corner.

**Hazardous  
waste  
accumulation  
tanks**

29 10:54 AM



**Intricate piping  
and electrical  
system**

29 10:55 AM

**Failure to  
minimize  
releases**

29 10:55 AM



**Cracked  
and  
leaking  
tank**

**29 2:55 PM**

**Part of piping  
to hazardous  
waste storage  
tank**



29 3:15 PM

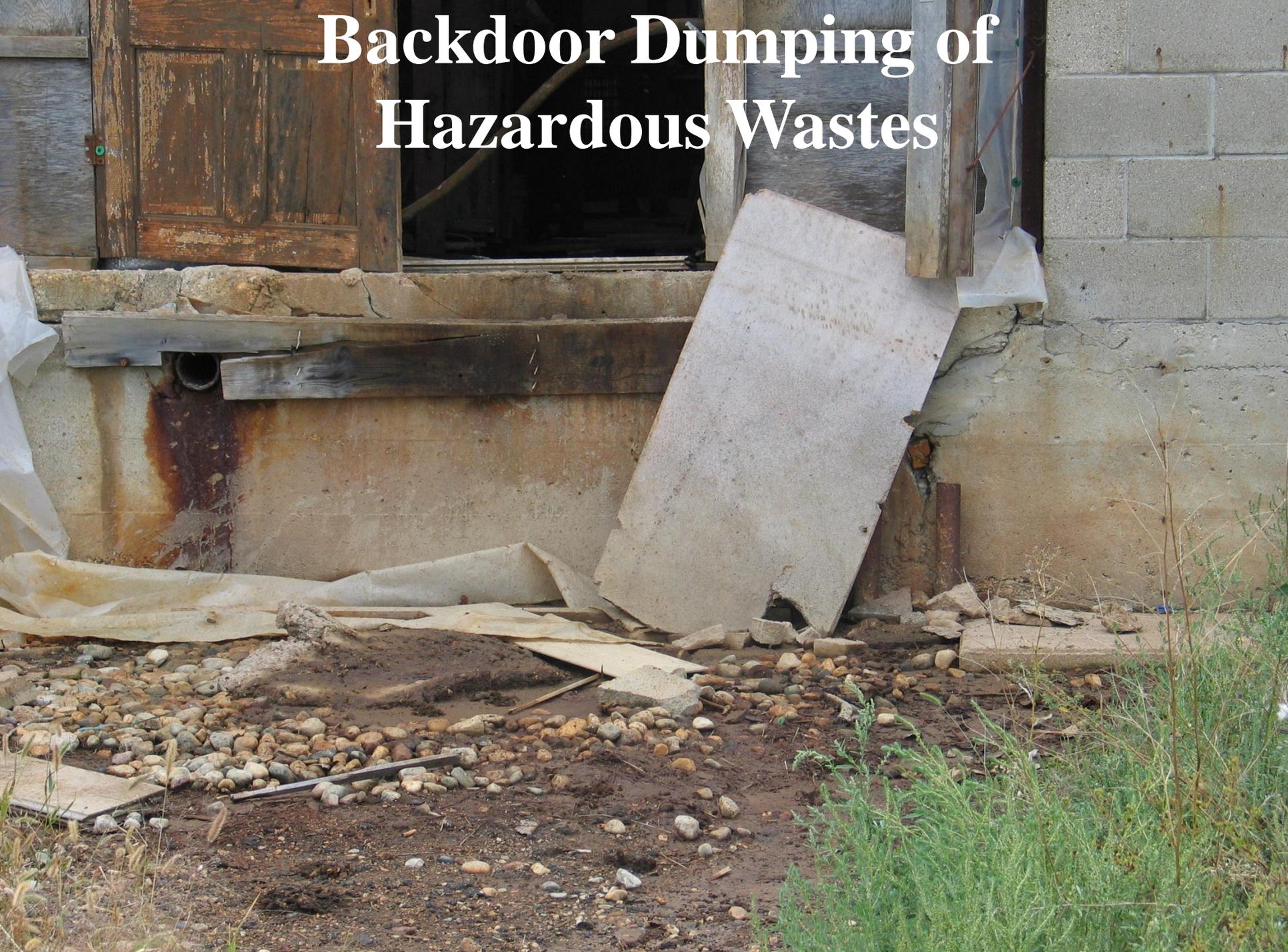
**Illegal  
storage**

29 10:26 AM

**Basement  
ceiling  
underneath  
WWTP**

29 3:11 PM

# Backdoor Dumping of Hazardous Wastes



# Sampling for Hazardous Wastes



# When in doubt, who do I call at EPA?

- **IA: EPA R7 Environmental Action Line:**
  - **800-223-0425**
- **National Superfund/EPCRA/RCRA Hotline:**
  - **800-424-9346**
- **Oil and Chemical Spill Hotline: 913-281-0991**
- **Jim Aycok 913-551-7887**
- **Kevin Snowden 913-551-7022**



# STATE WEB PAGES

- **Kansas:**
  - <http://www.kdhe.state.ks.us/>
- **Missouri:**
  - <http://www.dnr.state.mo.us/index.html>
- **Nebraska:**
  - <http://www.deq.state.ne.us/>
- **Iowa:**
  - <http://www.iowadnr.gov/>



# EPA WEB PAGES

- **EPA HQ Web Page - [www.epa.gov](http://www.epa.gov)**
- **EPA Region 7 Web Page - [www.epa.gov/region07/](http://www.epa.gov/region07/)**
- **EPA Region 7 RCRA Web Page - <http://www.epa.gov/region7/waste/index.htm>**



# Questions?

