

Iowa Strategic Goals Program Assistance Workshop

Hazardous and Solid Waste Compliance and Management

May 1, 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)

- **Ship hazardous waste to a hazardous waste landfill**
- **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



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 LDH OR NA NO. WITH PREFIX

HANDLE WITH CARE!

Container that is labeled
and dated correctly

Violations of RCRA

- 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

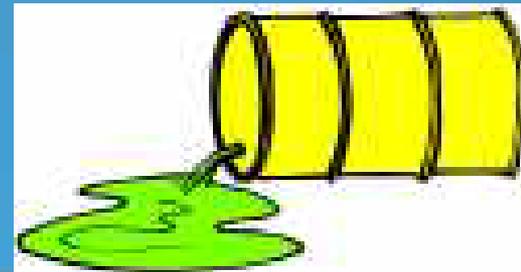
- **Hazardous waste manifest required for waste shipments (40 CFR 262.20)**
- **Must have emergency coordinator on site or on call at all times (40 CFR 262.34(d))**
- **Post emergency information by the telephone (40 CFR 262.34(d))**

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**

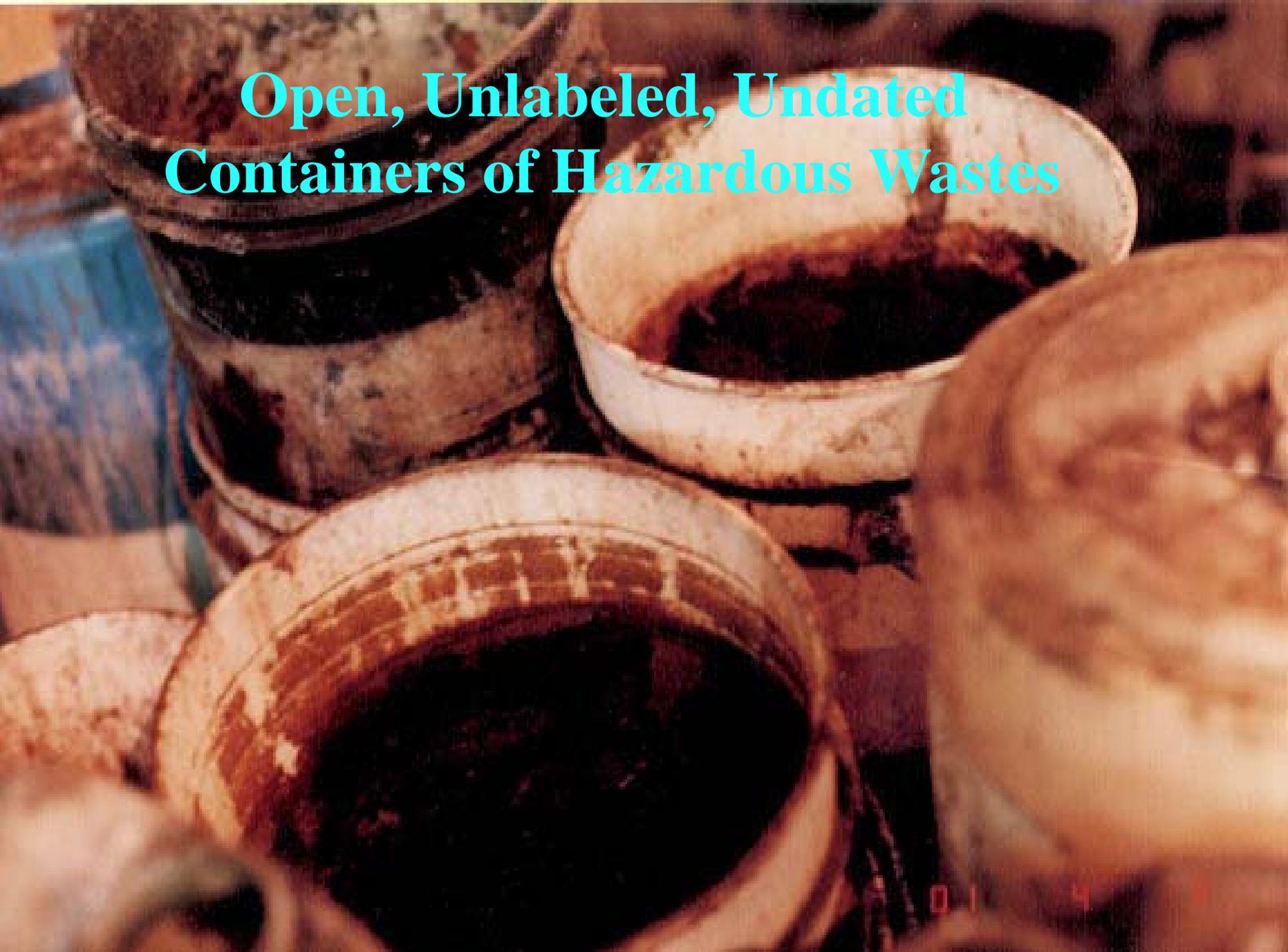


Violations of RCRA

- 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

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: Chloro-Wipe
ADDRESS: 97 Old
CITY: Lees Summit STATE: MO ZIP: 64081 PHONE: 816-241-2412

EPA MANIFEST NO. MO018577874 STATE: MO ZIP: 64081

ACCUMULATION START DATE: Wash in site EPA WASTE NO.: 0002

VN2031, PLD

DO NOT PROPER SHEET NAME AND USE OR NA NO. WITH PREFIX

HANDLE WITH CARE!

CHL

Container in Poor Condition
Inadequate Aisle Space
No visible labeling



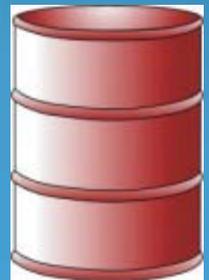
9 1 3 6

Large Quantity Generators



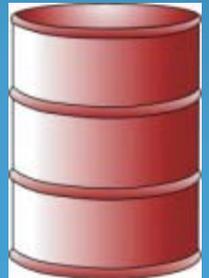
LQG Requirements

- **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)**



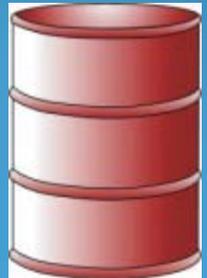
LQG Requirements

- **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)**



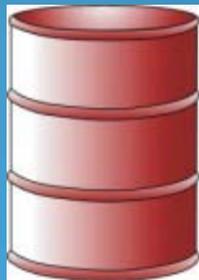
LQG Requirements

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



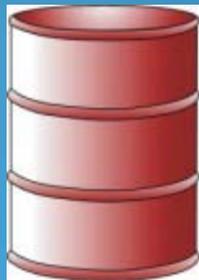
LQG Requirements

- **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)**

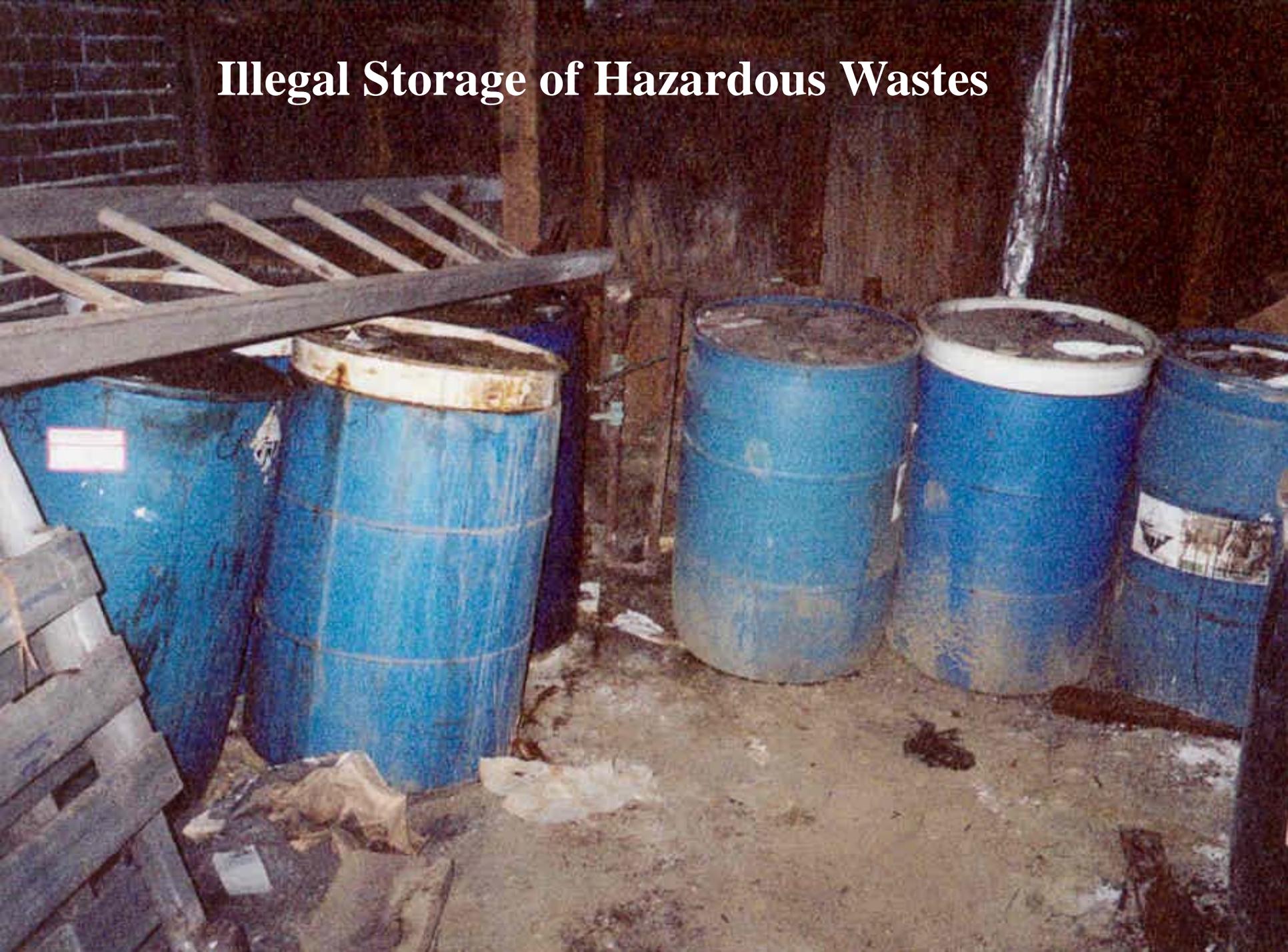


Common LQG Violations

- **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

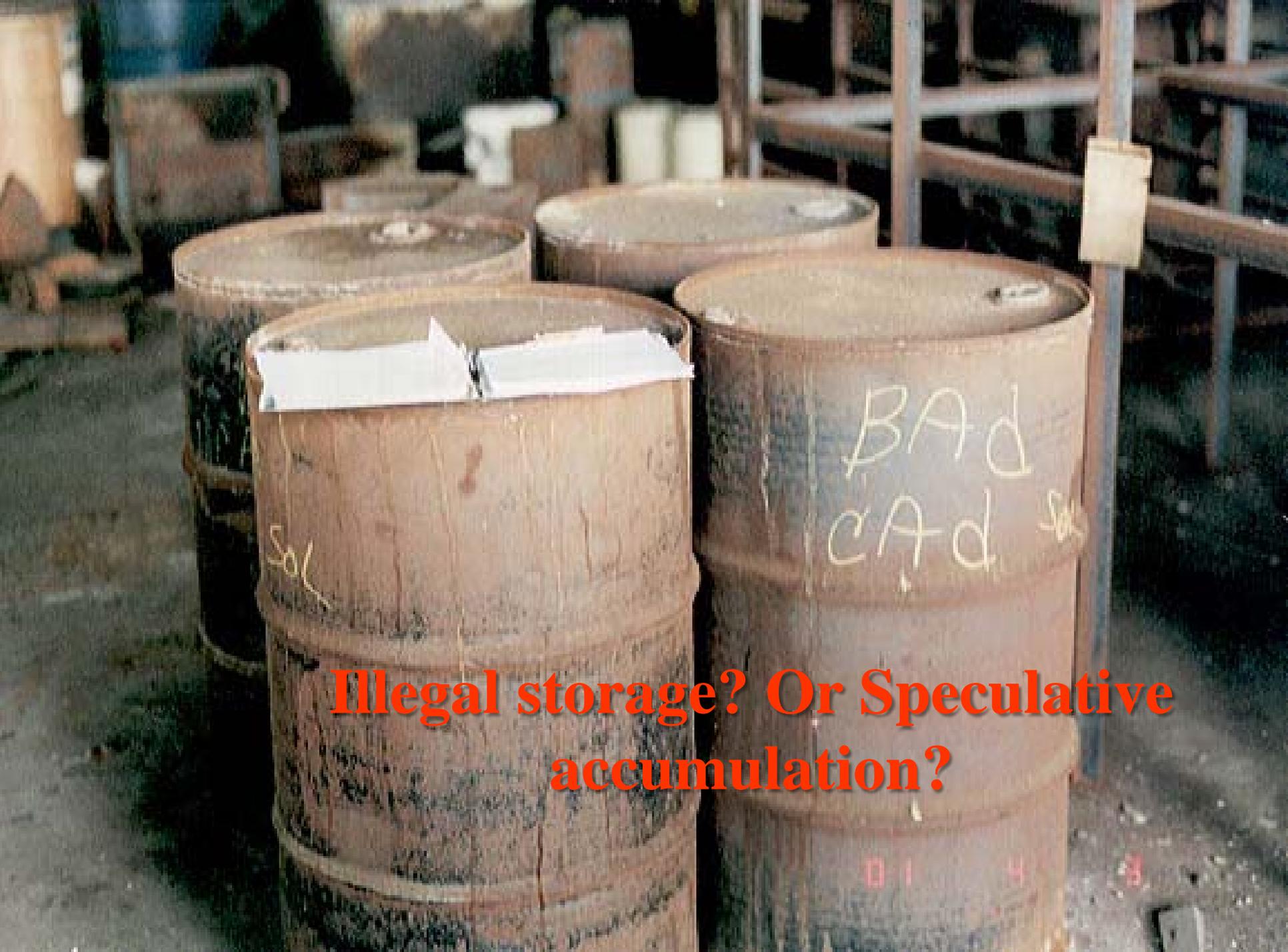


Illegal Storage of Hazardous Wastes



Inadequate aisle space





**Illegal storage? Or Speculative
accumulation?**

Incompatible Storage

Caustic
Flakes

Nickel
Strip

Muriatic
Acid

F007

NH_4OH

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

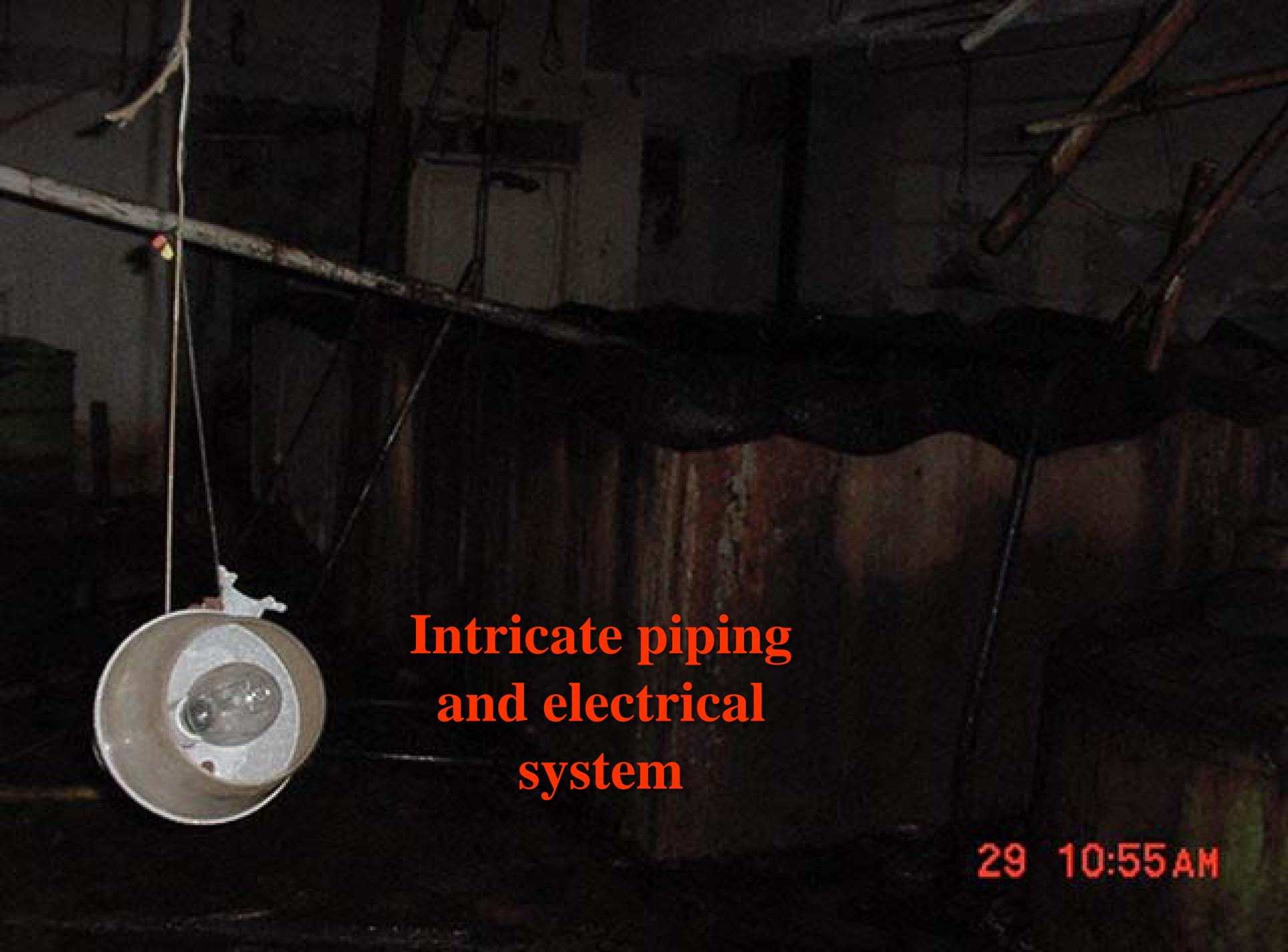


Drums in Poor Condition
No Hazardous Waste Labels
No DOT Labels
No Dating
Inadequate Aisle Space
No weekly inspections

A photograph of a dark, cluttered room, likely a storage area for hazardous waste. The room contains several large, cylindrical tanks, some of which are stacked or arranged in rows. A single light fixture hangs from the ceiling, casting a dim glow. The walls and ceiling appear to be made of concrete or masonry, with some visible pipes and structural elements. The overall atmosphere is dim and industrial.

**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**

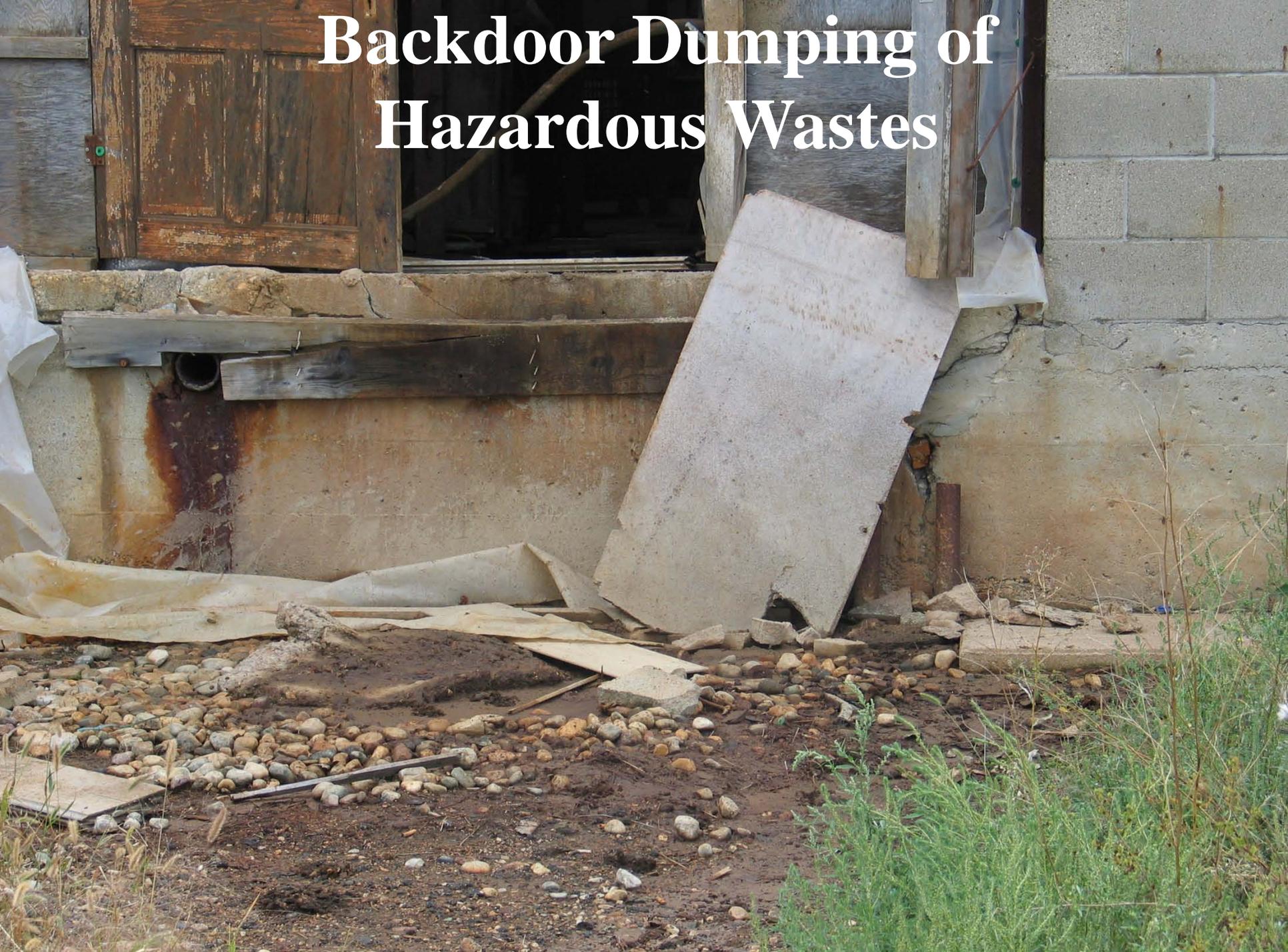
29 10:26AM



**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 Aycock 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.com/>



EPA WEB PAGES

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



Questions?

