TRIBAL HAZARDOUS WASTE TRAINING

EPA Region 7

Course Objectives

During the course, participants will:

- Learn how to identify solid and hazardous waste
- Explore waste management guidelines and options
- Develop plans, procedures, and standards for individual needs
- Determine what regulations apply and how to maintain compliance

Training Outline

- RCRA Overview - Cradle to Grave Management
- Lesson 1: Household Hazardous Waste
- Lesson 2: Medical Waste
- Lesson 3: Waste Identification
- Lesson 4: Hazardous Waste Rules for Generators
- Lesson 5: Waste Management Capacity Building

Introduction

Resource Conservation and Recovery Act Overview

Cuyahoga River Catches Fire
June 22, 1969

Love Canal
1978

Times Beach, MO

History of Waste Management

The Evolution of Significant RCRA legislation

SOLID WASTE DISPOSAL ACT OF 1965

RESOURCE CONSERVATION & RECOVERY ACT OF 1976

HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

FEDERAL FACILITIES COMPLIANCE ACT OF 1992

LAND DISPOSAL PROGRAM FLEXIBILITY ACT OF 1996

Current RCRA Hazardous waste Law

What is your waste management story?

Resource Conservation and Recovery Act

Goals:

- Conserve energy and natural resources
- Reduce or eliminate the amount of waste generated
- Ensure that wastes are safely managed
- Protect human health and the environment from hazards posed by waste disposal

RCRA Regulatory Program

- Law
  - Describes the waste management program mandated by Congress; gives EPA authority to develop the RCRA program
- EPA Regulations (40 CFR 239-282)
  - Carry out the Congressional intent by providing explicit, legally enforceable requirements for waste management
- EPA Guidance Documents and Policy
  - Clarify issues related to the implementation of the regulations

Resource Conservation and Recovery Act

Subtitle	Provisions
A	General Provisions
B	Office of Solid Waste; Authorities of the Administrator and Interagency Coordinating Committee
C	Hazardous Waste Management
D	State or Regional Solid Waste Plans
E	Duties of the Secretary of Commerce in Resource and Recovery
F	Federal Responsibilities
G	Miscellaneous Provisions
H	Research, Development, Demonstration, and Information
I	Regulation of Underground Storage Tanks
J	Standards for the Tracking and Management of Medical Waste

Subtitle D - Managing Solid Waste

Solid waste regulations (40 CFR 239 - 259):

- "Solid Waste" generally refers to nonhazardous solid wastes
- Focus on state & local governments
- Establishes standards & guidelines for solid waste, recycling, & disposal programs
- Regulations for design, operation, maintenance, & closure for municipal solid waste landfills

Subtitle C – Managing Hazardous Waste

Hazardous waste regulations (40 CFR 260 - 279):

- Generators
- Transporters
- Treatment, storage, and disposal (TSD) facilities
- Hazardous waste management from "cradle to grave"

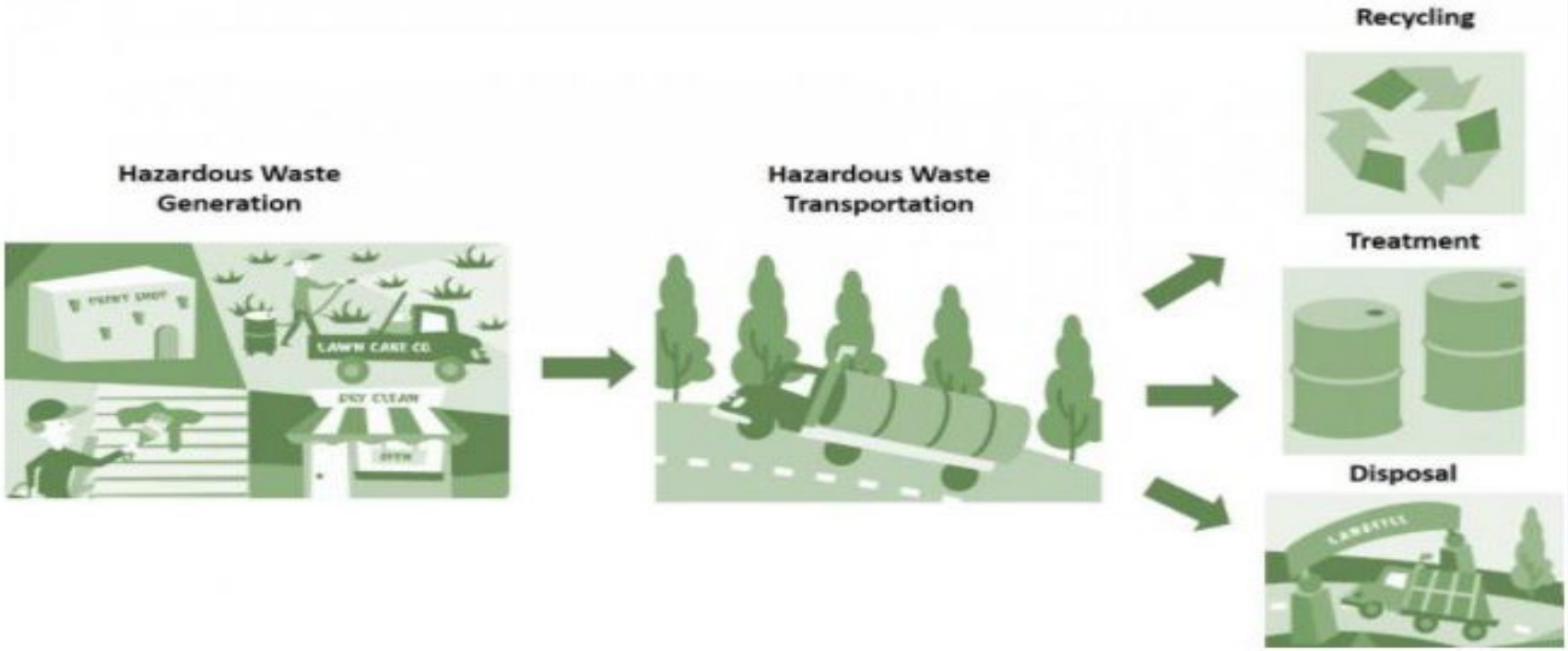
RCRA Subtitle C

Hazardous waste regulations (40 CFR 260 - 279)

Hazardous waste management from “cradle to grave”:

- Requires those who generate a solid waste to determine if it is hazardous (**262**)
- Identify the criteria to determine which solid wastes are hazardous (**261**)
- Manage hazardous wastes according to appropriate requirements

Resource Conservation and Recovery Act



RCRA's Cradle-to-Grave Hazardous Waste Management System

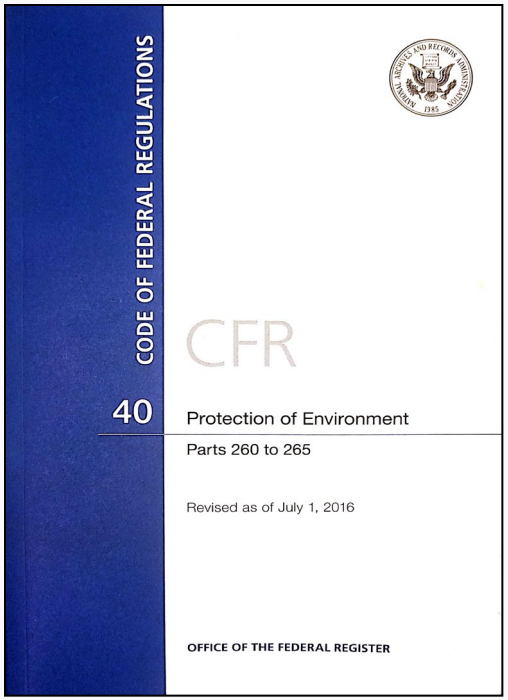
RCRA Subtitle C Structure

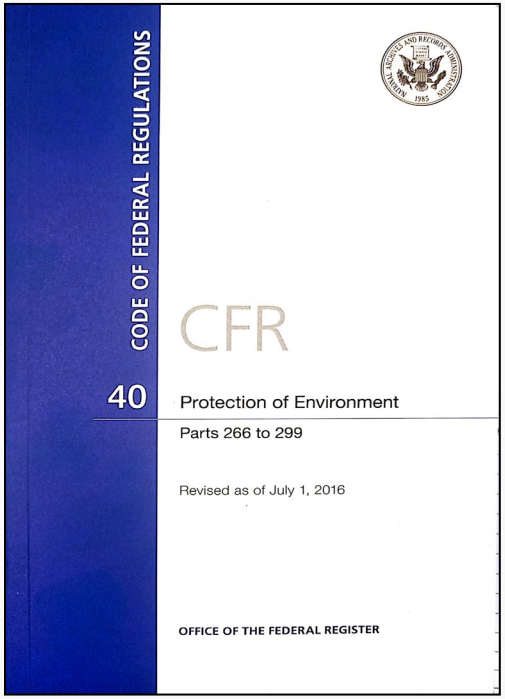
- Consists of 10 Subtitles (A, B, C, D, E, F, G, H, I, & J)

Example Provisions:

- 40 CFR Part 260: General purpose & definitions
- 40 CFR Part 261: Identify solid wastes that are subject to regulation as hazardous wastes
- 40 CFR Part 262: Standards applicable to generators of hazardous waste

RCRA Regulations
40 CFR § § 239 - 282

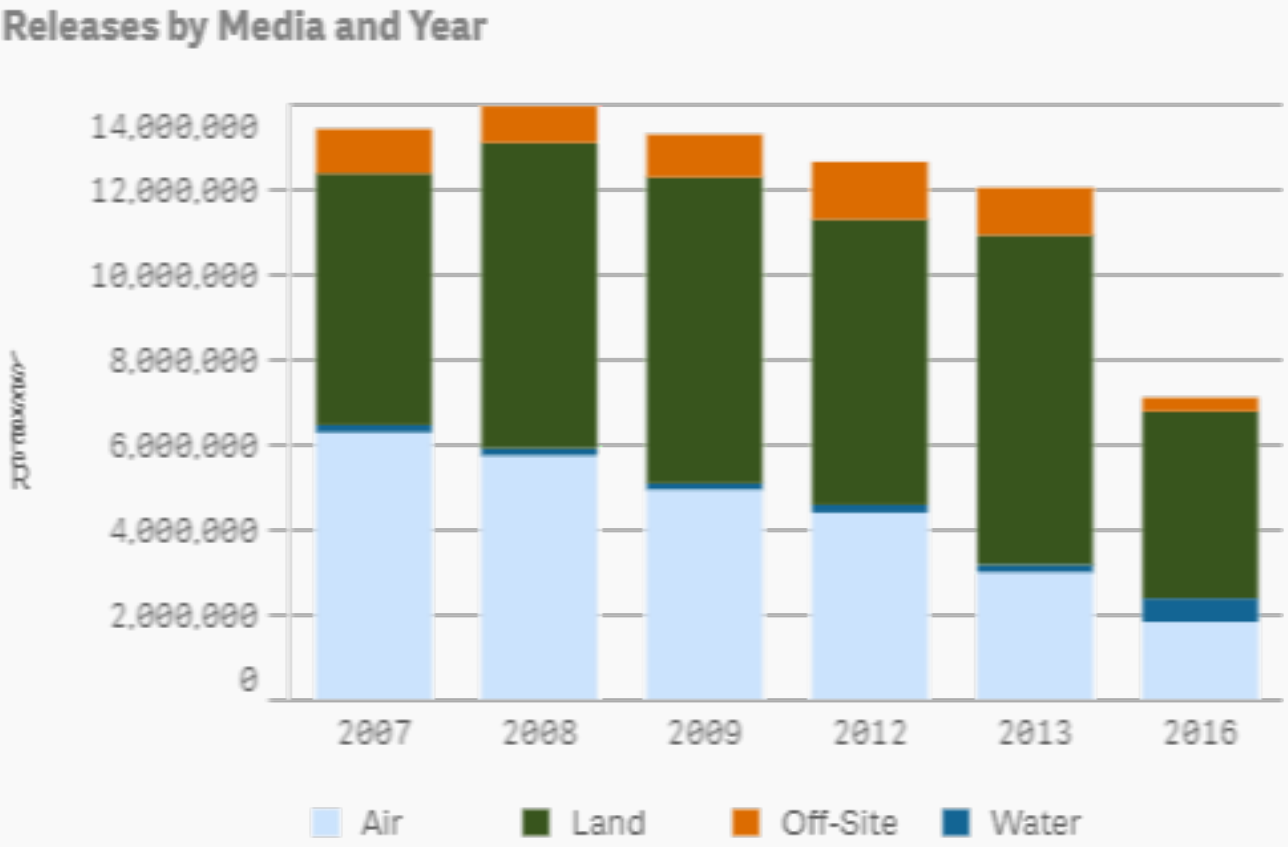




General Applicability

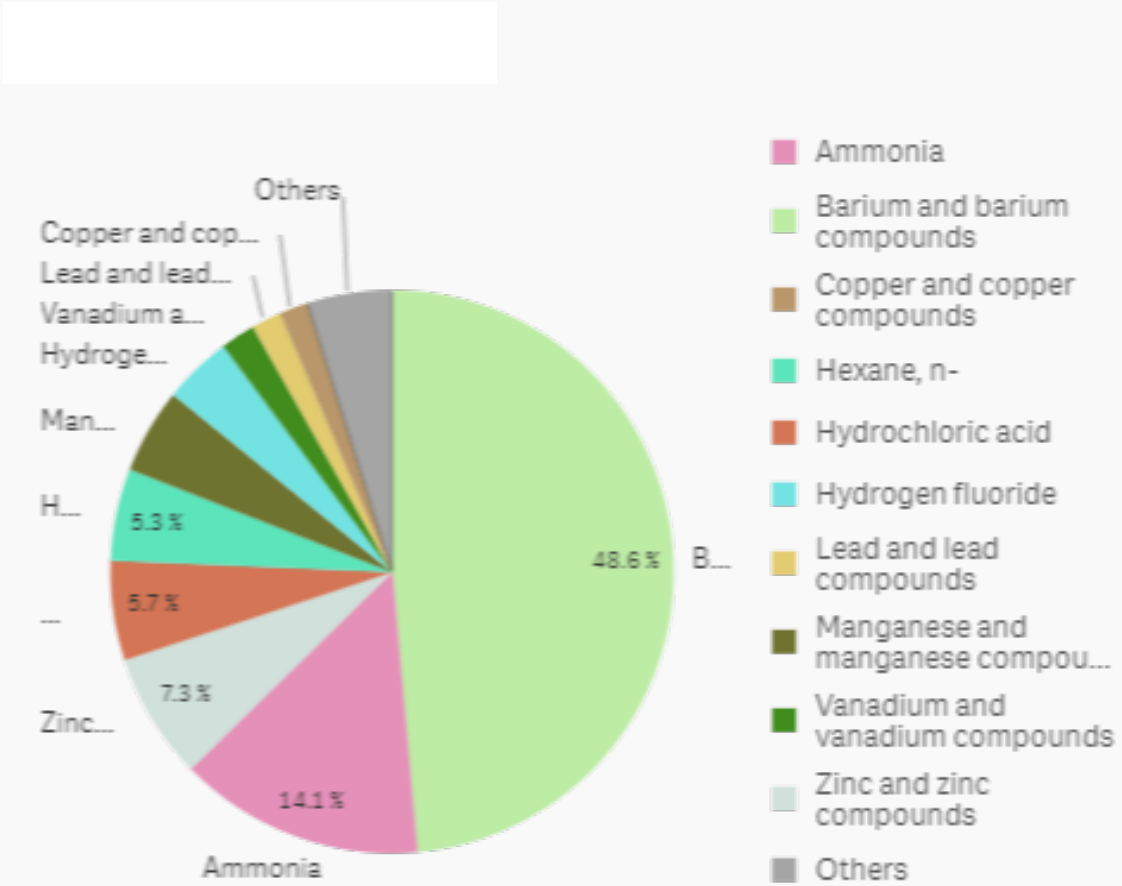
- Federal RCRA Law is applicable in Indian County
- Tribal Nations must comply with RCRA Subtitle C
- Keep communities safe by following this hazardous waste law

What Happens When Waste Isn't Handled Correctly?



Chemicals Released on Tribal Lands in 2016

Top Chemicals by Releases



Chemical	Percentage
Ammonia	14.4%
Barium and Barium Compounds	48.6%
Copper and copper compounds	[unreadable]
Hexane, n-	5.3%
Hydrochloric acid	5.7%
Hydrogen flouride	[unreadable]
Lead and lead compounds	[unreadable]
Manganese and manganese compounds	[unreadable]
Vanadium and vanadium compounds	[unreadable]
Zinc and zinc compounds	7.3%
Others	[unreadable]

50+ Year Old Chemicals

Is this your image of your Chemical Storage?

This is the reality!

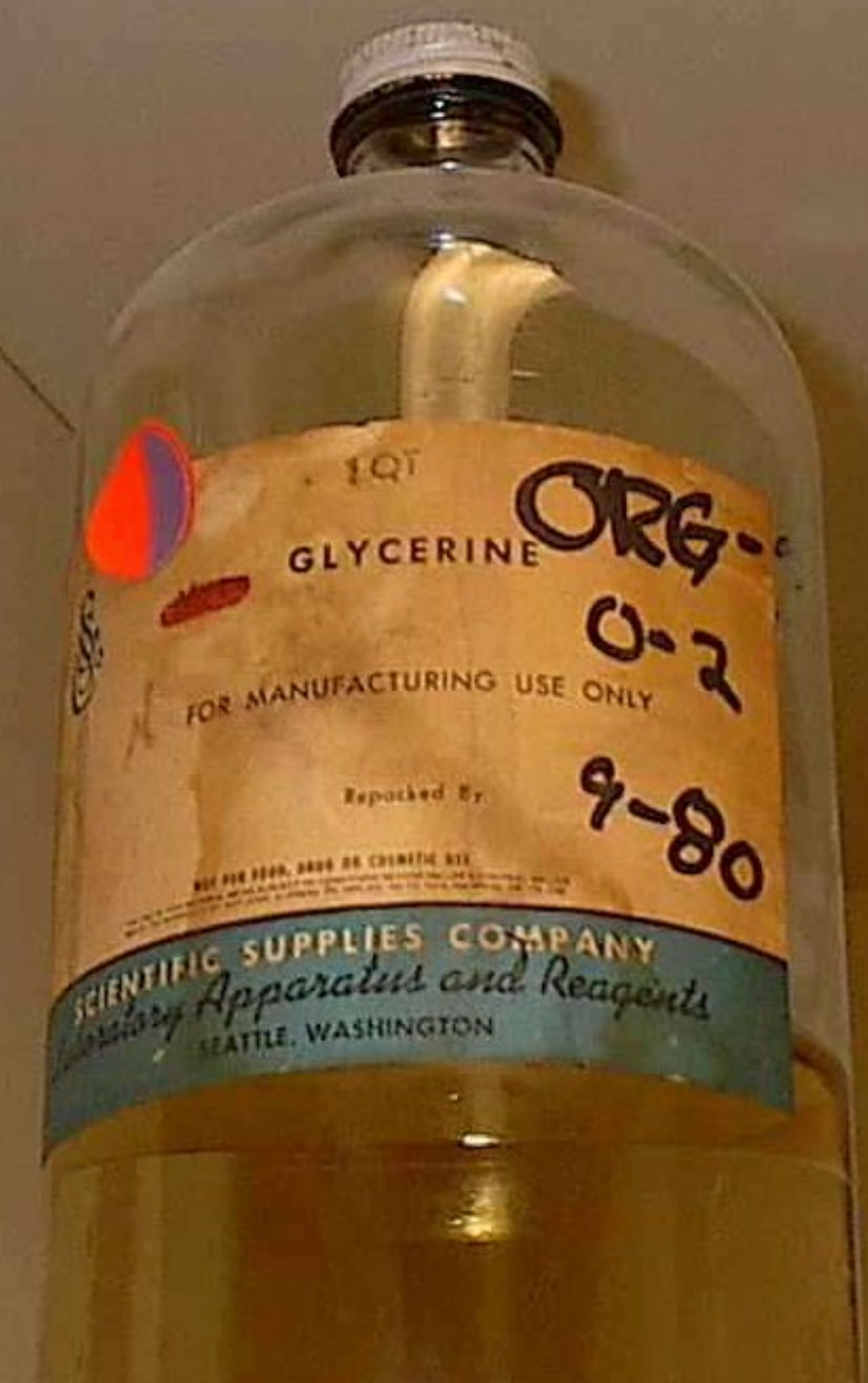
Mercury Released When Broken

HNO_3 Crystals

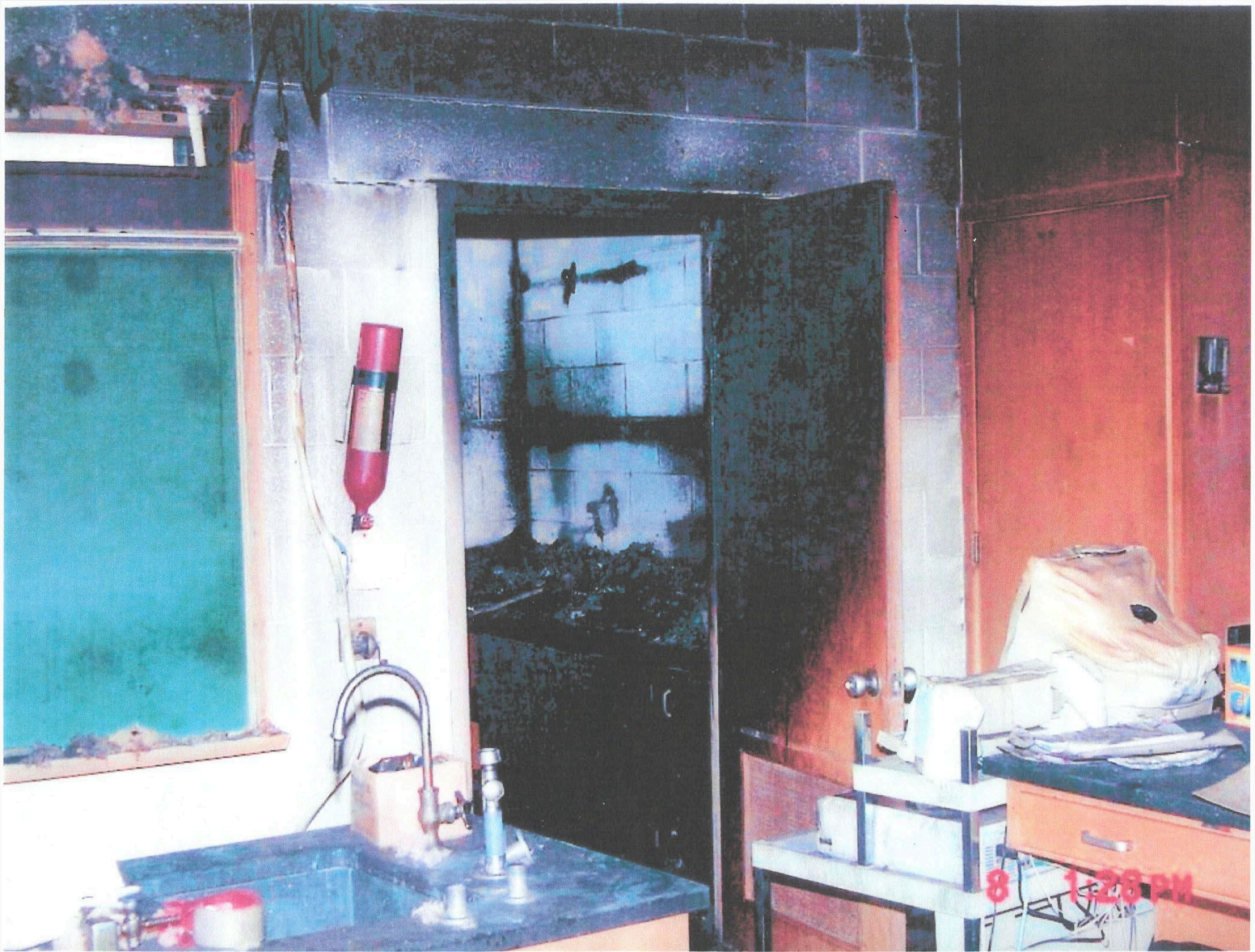
Beards, Nitric Gnomes

Mislabeled bottle of Glycerine

- **Hand-written word “Nitro”**
- **In middle school**
- **Tested and found nitroglycerine**



Burned School Lab



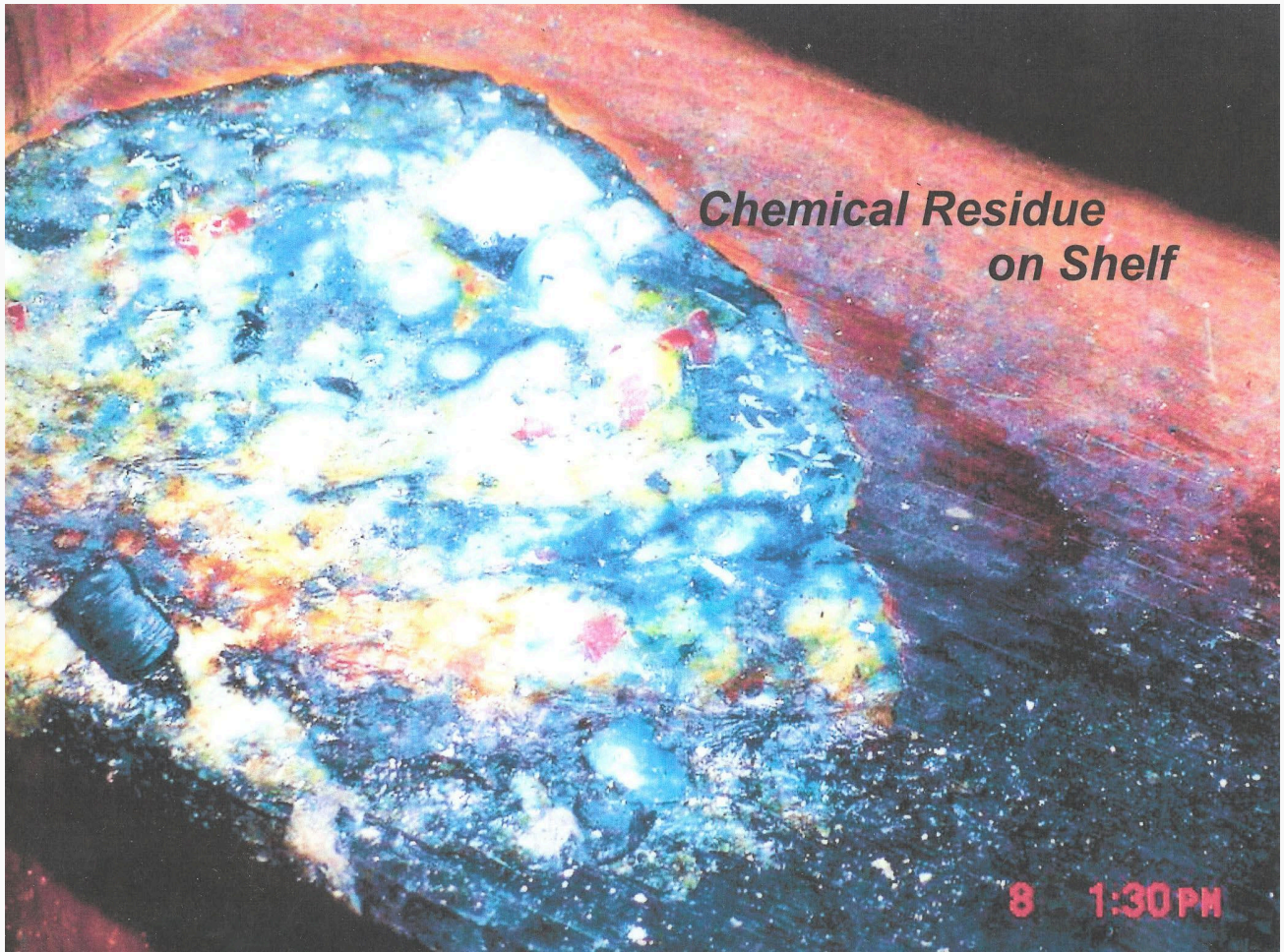
School Lost Money

Property Destruction

No Injuries ... This Time

How Did This Happen?

Cause: Legacy Chemicals Stored Beyond Usefulness



Moral of the Story

- Understand where waste is being generated
- Identify hazardous waste
- Follow RCRA's cradle to grave management system
- Consider setting up your own hazardous waste program to suit your tribe's needs

Resource Conservation and Recovery Act (RCRA)

40 CFR 279

Used Oil

Learning Objectives

- Briefly overview the Subparts.
- What records must a generator retain?
- What is the rebuttable presumption?
- What is the difference between off-spec and on-spec used oil?
- Who may burn used oil?
- Who is a used oil marketer?
- Who is a used oil processor?

Used Oil
40 CFR 279

- Subpart A: Definitions
- Subpart B: Applicability
- Subpart C: Generators
- Subpart D: Collection Centers & Aggregation Points
- Subpart E: Transporters & Transfer Facilities
- Subpart F: Processors and Re-Refiners
- Subpart G: Used Oil Burners
- Subpart H: Marketers
- Subpart I: Dust Suppressant

Used Oil

- Used oil means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities
- Not vegetable oil
- Percent water not defined
- Not waste product

Grease can be used oil

Subpart B
Applicability

- EPA assumes used oil will be recycled
- Mixtures of used oil and HW are HW except for VSQGs
- Rebuttable presumption
  - If halogen >1000 ppm, presumed to be HW
  - May rebut by proving UO contains no HW

Used Oil Exemption

- Materials containing UO that have been drained
- Oil filters are not Used Oil if:
  - Non-terne plated, and
  - Hot drained, and punctured, crushed, or disassembled
- Materials derived from Used Oil except fuels
- Disposal as solid waste opens door for being hazardous waste
- Do-it-yourself used oil
- Farmers less than 25 gallons per month
- TSCA regulations for PCB override Part 279

On-Specification Used Oil 40 CFR 279.11

On specification used oil is not subject to the used oil regulations, except recordkeeping.

- Arsenic 5 ppm max
- Cadmium 2 ppm max
- Chromium 10 ppm max
- Lead 100 ppm max
- Flash point 100°F min
- Total halogens 4,000 ppm max

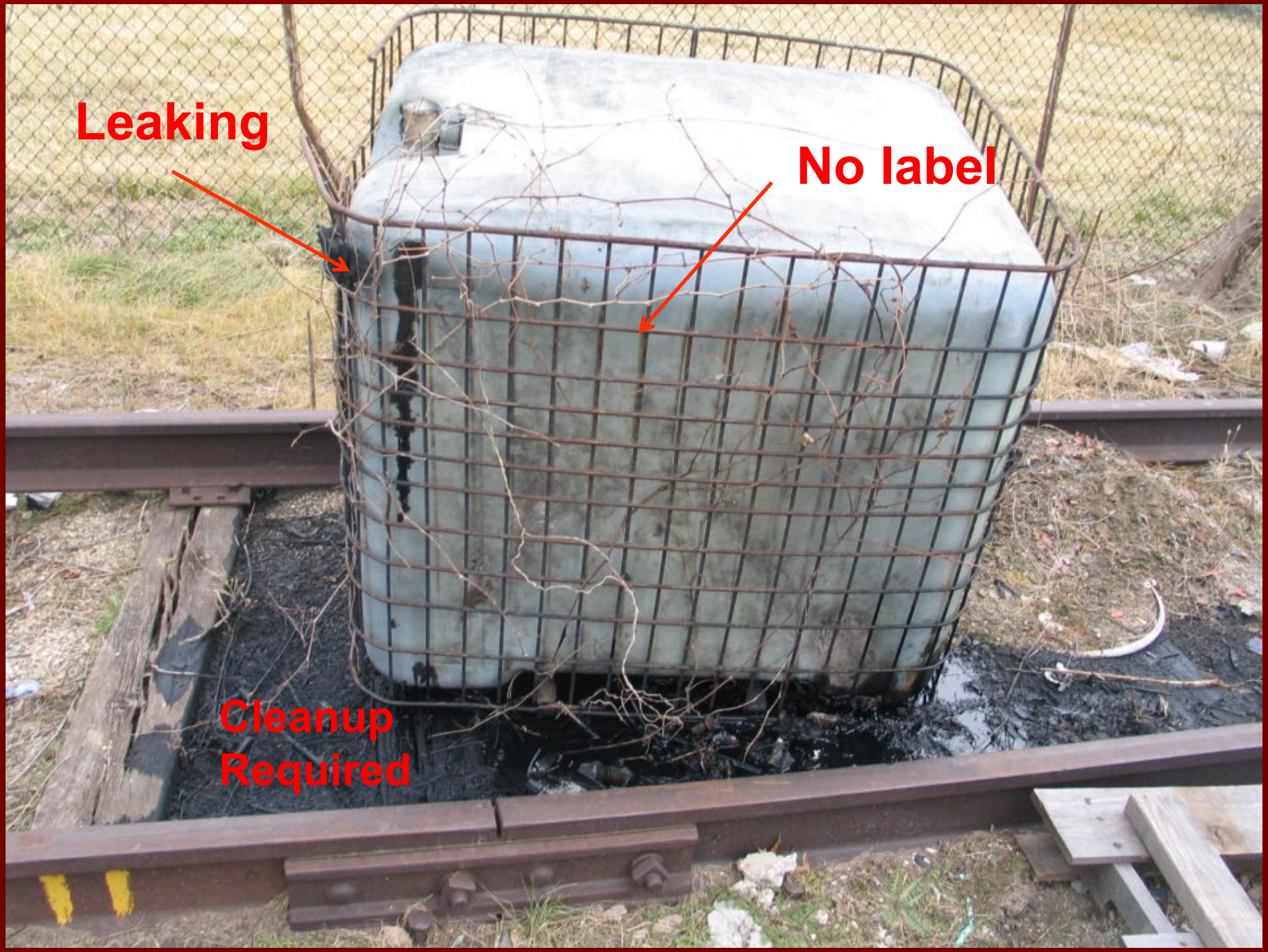
Subpart C

Used Oil Generators

- Tanks, containers, and piping to underground must:
  - Be in good condition and not leaking
  - Labeled with the words "used oil"
  - Containers may be open
- May burn own used oil in space heater
- Must stop and contain releases and clean up resulting spills
- May self-transport less than 55 gallons


USED
OIL
USED
OIL
USED
OIL
USED
OIL

Used Oil Violations


Leaking
No label
Cleanup
Required

Subpart D
Collection Centers and Aggregation Points

- Collect oil from DIY, self-transporters, and other facilities owned by same company
- Subject to Used Oil Generator regulations

Subpart E

Transporters and Transfer Facilities

1 of 2

- No processing allowed unless incidental to transportation
- Must have EPA ID number
- Must deliver UO to:
  - Another transporter
  - Processor/re-refiner
  - Off-spec used oil burner
  - On-spec used oil burner

Subpart E
Transporters and Transfer Facilities
2 of 2

- Must determine halogens to prevent hazardous waste management, and so generator may make rebuttable presumption
- Maintain determination, acceptance, and delivery records for 3 years
- Storage requirements similar to generators plus secondary containment

Subpart F
Processors and Re-Refiners

- Must follow generator requirements
- Secondary containment for all containers and tanks
- Additional recordkeeping and notification requirements
- Incidental filtering is not processing

Subpart G
Off-Spec Burners

- Must be a boiler or industrial furnace (BIF)
- Space heaters are not BIF
- Additional recordkeeping and notification requirements
- Typically cement kilns, asphalt plants

Subpart H
Marketers

- Those sending off-spec used oil to a burner
- Those first determining that used oil meets specifications (on spec)
- Additional recordkeeping and notification requirements

Subpart I
Dust Suppression

Using off-specification used oil as a dust suppressant is prohibited.

Lesson 3: Waste Determination

Topic 1 – Point of Generation

Point of Generation

- First point at which a material becomes a waste, both physically and chemically
- Location where material initially becomes a waste and is under the control of the operator of the waste generating process
- Before any alteration occurs, such as dilution or treatment
- Waste determination must be done here

Example 1


HAZARDOUS WASTE
HANDLE WITH CARE!
6010129
PINT PLAIN CANS
307/315
ARCO @ 50
DUPONT
VariPrime
615S
Self-Etching Primer

Example 2

Example 3

Example 4

Dilution

Dilution Prohibition - A waste handler cannot dilute a hazardous waste as a substitute for adequate treatment. Dilution is not permitted when it is used to avoid meeting an applicable treatment standard. This is referred to an “impermissible dilution.”

Treatment

Treatment - “any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.”

40 CFR 260.10

What happens if waste is illegally treated?

Treatment requires a permit:

- Develop emergency plans
- Specific insurance and financial backing
- Train employees to handle hazards
- Facility design requirements
- Annual inspections
- Closure & post-closure care
- Groundwater monitoring
- Air Monitoring

Lesson 4: Hazardous Waste Rules for Generators

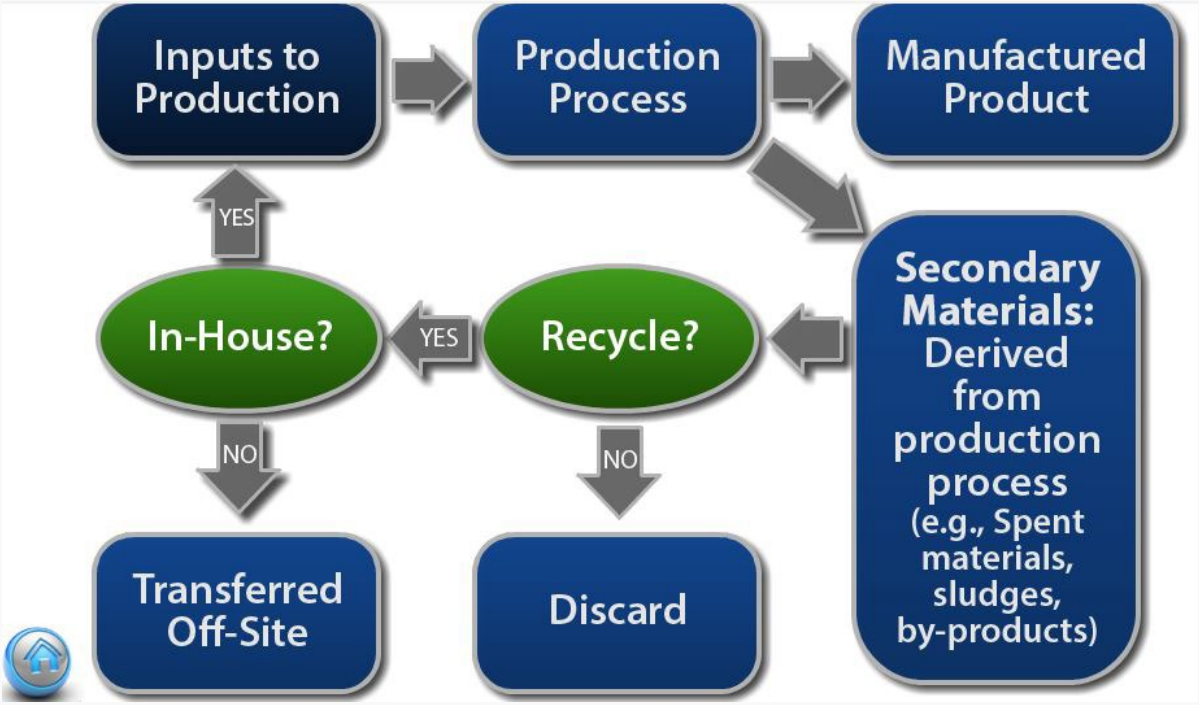
Topic 1 - Generator Categories

Liz Blackburn, WEMM, EPA R7

Hazardous Waste Generators

- A HW generator is –
  - Any person, by site, whose act or process produces HW identified or listed in Part 261 or whose act first causes a HW to become subject to regulation
- Liability for HW is not limited to the generator, but can encompass anyone managing that waste, including: generation, storage, transportation, treatment, and/or disposal.

Process Diagram



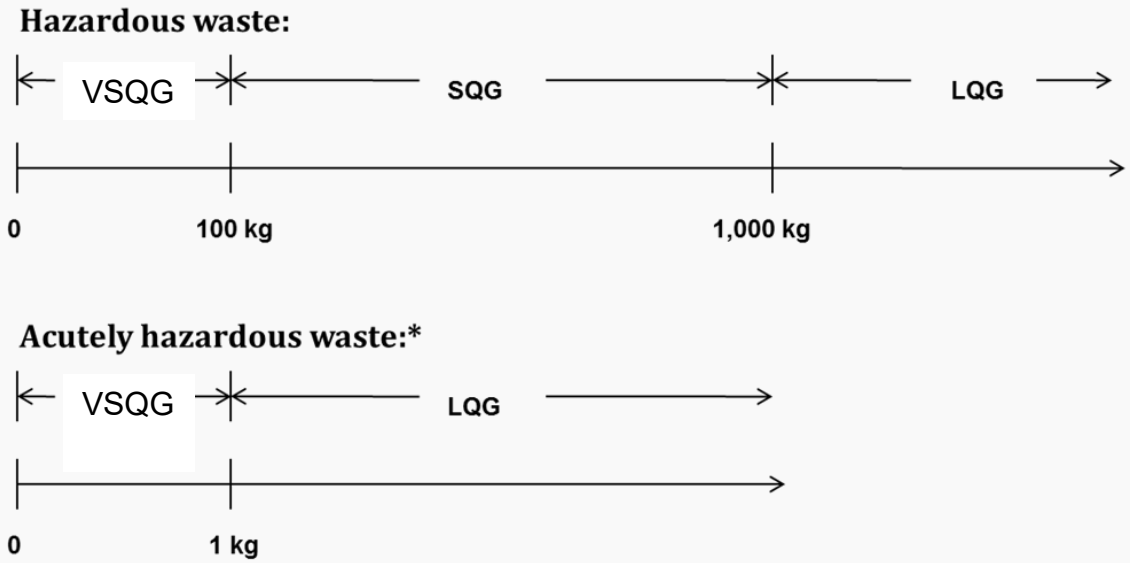
Generator Category Quantity of Waste Generated Per Month

Quantity of acute hazardous waste generated in a calendar month	Quantity of non-acute hazardous waste generated in a calendar month	Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month	Generator category
> 1 kg	Any amount	Any amount	Large quantity generator (LQG)
Any amount	≥ 1,000 kg	Any amount	Large quantity generator (LQG)
Any amount	Any amount	> 100 kg	Large quantity generator (LQG)
≤ 1 kg	> 100 kg and < 1,000 kg	≤ 100 kg	Small quantity generator (SQG)
≤ 1 kg	≤ 100 kg	≤ 100 kg	Very small quantity generator (VSQG)

Waste Counting

- The process of totaling the quantity of a person's hazardous waste to determine what generator size the entity is in the given month
- Include all RCRA-regulated hazardous waste
- Must be done monthly
- Prevents duplicative purchasing

Quantity Limits on Monthly Waste Generated



* Table 1 to 262.13 – Generator Categories Based on Quantity of Waste Generated in a Calendar Month.

Example Tracking Systems

- Track through Excel – each generator maintains individually ($)
- Waste management software – can be done for individual generators or for all generators on tribal lands ($$)
- Cloud-based tracking system – all entities on tribal land ($$)
- Contract waste services ($$$)

Episodic Generation

- An **episodic event** is an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.
- Applicable to VSQGs and SQGs

Subpart L – Alternative Standards for Episodic Generation

- Allows VSQGs and SQGs to generate HW above monthly limit twice per year
- Once planned, once unplanned
- Must notify Agency 30 days prior to planned event or 72 days following unplanned
- Must petition Agency for second event
- Does not change generator status

Episodic Generation Requirements

All hazardous waste from episodic events must be shipped by hazardous waste transporter with a hazardous waste manifest to TSDF

Part 262 subpart L

Episodic Generation Requirements (cont.)

- One episodic event allowed per year + one opportunity to petition EPA Region 7 for a second event
- Examples:
  - A generator conducts a clean out in the spring and then has an chemical/material spill in October
  - A generator plans a small episodic project for the fall but a flash flood causes facility damage in July

Case Study 1

A casino generates 1 kg P-listed waste (acute), 1 kg non-hazardous waste, and 2 kg of cleaning waste (D001) waste during the month of May. *What size generator is the casino?*

Answer: LQG

Case Study 2

A utilities department generates 100 kg of solvent-contaminated wipes (F001), 300 kg of solvent from cleaning (D001 – ignitable waste), 200 kg cans of paint thinner (F003), 300 kg of wood treating waste (K001), and 200 kg of contaminated soil (D008) in their warehouse in April. *What size generator is the utilities department?*

Answer: LQG

Case Study 3

A nursing home generates 20 kg of cleaners (F001), 30 kg of disinfectant (F002), 10 kg of oven cleaner (D002), 10 kg of drain opener (D003), and 31 kg of paint waste (D007) in the month of September.

The nursing home usually generates only 50 kg of hazardous waste, but exceeded this amount due to a yearly clean-out and building improvement project. *What is the nursing home's generator size?*

Answer: SQG

Case Study 4 – Last One

An auto shop generates 20 kg of antifreeze (D001), 25 kg of spill residue (D008), 20 kg of carburetor cleaners (D002), 20 kg of lighter fluids (D001), and 20 kg of rat position (toxic hazardous waste) in the month of March. *What size generator is the auto shop?*

Answer: SQG

Summary

Understanding not only the type but the amount of waste generated at your facility is critical to protect yourself and others, as well as to avoid expensive fines. Understanding your generator category allows you to identify the proper management system to manage your hazardous wastes.

Lesson 4: Hazardous Waste Rules for Generators

Topic 2 - Generator Requirements

Liz Blackburn, WEMM, EPA R7

Steps in Complying with Regulations for Hazardous Waste

IDENTIFY > COUNT > NOTIFY > MANAGE > TRANSPORT > RECYCLE/TREAT/DISPOSE

Hazardous Waste Generator Regulatory Summary

Requirement	Very Small Quantity Generators	Small Quantity Generators	Large Quantity Generators
Waste Minimization	None	Good faith effort required	Program in place required
Recordkeeping	Not required	Required (except biennial reports)	Required
Quantity Limits	< 220 lbs./month, < 2.2 lbs./month acute, & < 220 lbs./month of acute spill residue or soil	> 220 lbs./month, and < 2205lbs./month acute, or 220 lbs./month	>2205 lbs./month, or >2.2 lbs./month acute, or 220 lbs./month of acute spill residue or soil
Preparedness & Prevention	Not Required	Required	Required
Pre-Transport Requirements	Only if required by DOT or state	Required	Required
Personnel Training	Not Required	Basic Required	Required
On-Site Accumulation Quantity	< 2,205 lbs., <2.2 lbs. acute, or <220 lbs. of acute spill residue or soil	<13,228 lbs.	No limit
Manifest	Not Required	Required	Required
Land Disposal Requirements	Not Required	Required	Required
Facility Type	Facilities in 262.14(a)(5)	RCRA permitted/interm status facility	RCRA permitted/interm status facility

Hazardous Waste Generator Regulatory Summary (cont'd)

Requirement	Very Small Quantity Generators	Small Quantity Generators	Large Quantity Generators
Exception & Additional Reporting	Note Required	Required	Required
EPA ID Number	Not Required	Required	Required
Contingency Plan & Emergency Procedures	Not Required	Basic Required	Full Plan Required
Closure	Not Required	Required for tanks, drip pads & containment buildings	Required
Biennial Report	Not Required	Not Required	Required
Air Emissions – AA, BB, CC	Not Required	Not Required	Required
Accumulation Time Limits	None	<180 days or <270 days (if greater than 200 miles)	90 days
Accumulation Requirements	None	Basic requirements with technical standards	Full compliance
Update Notification	Not Required	Every 4 years	Every 2 years with biennial report

Satellite Accumulation Requirements

- Satellite Accumulation Areas are locations at or near any point of generation where hazardous waste is first accumulated in containers before consolidating the waste at a designated accumulation or storage area
- Applicable to SQGs and LQGs

Satellite Accumulation Requirements (cont'd)

- May accumulate up to 55 gallons of HW (one quart or kg of acute HW) at or near the point of generation (POG) and under control of operator
- Container must be in good condition, closed, labeled with "hazardous waste" and description of hazard

Container Accumulation Area

May accumulate up to 180 days if it meets exemption requirements

- 6,000 kg accumulation limit
- Containers must be:
  - In good condition
  - Closed
  - Labeled (“hazardous waste” and description of hazard)
  - Dated (accumulation start date)
  - Compatible with contents
  - Separated from incompatible materials

Section 262.16

SAA or CAA?


6010129
PINT PLAIN CANS
3007-315
ARCO @ 50
HAZARDOUS WASTE
VariPrime 615S

RCRA Emergency Preparedness

Emergency planning and preparedness regulatory requirements apply wherever HW is generated or accumulated, including points of generation, satellite accumulation areas, and central accumulation areas (90-day areas)

- SQG regulations — 262.16(b)(8) & (9)
- LQG regulations — 262.17(a)(6) refers generators to part 262 subpart M

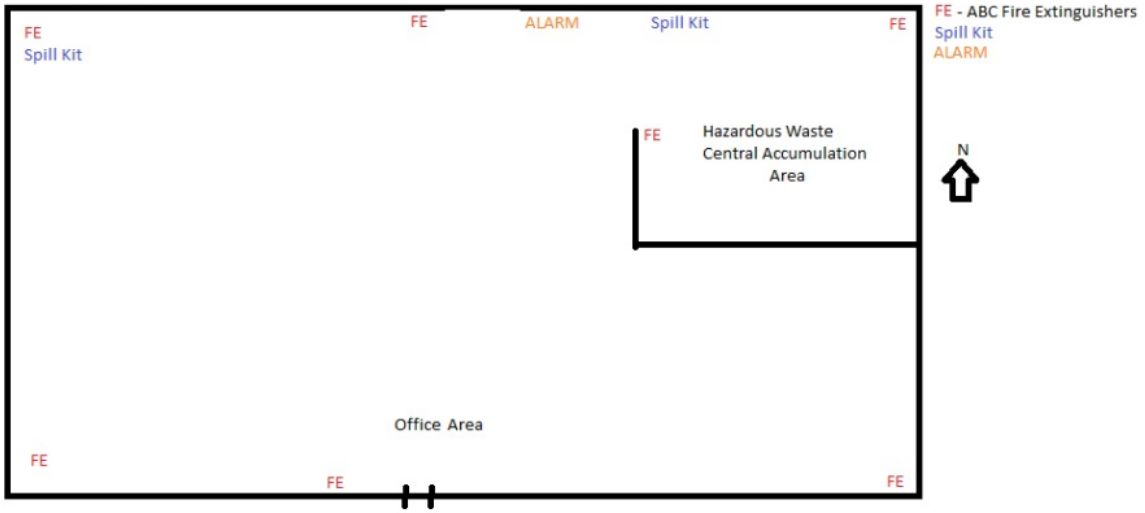
Site Plan

Emergency Information

Emergency Coordinators:

Primary – Joe Black (515) 123-4567 Cell

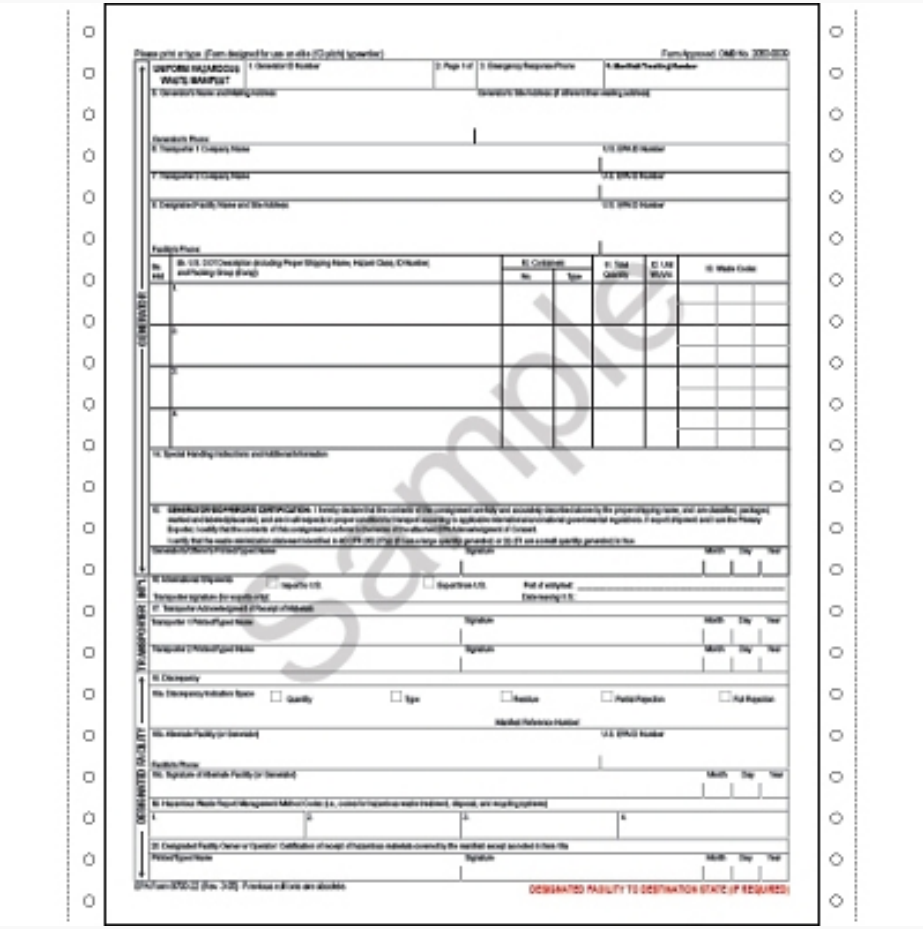
Alternate – Don Shew (515) 765-4321 Cell



Fire Department Phone Number: 911

This example was created by EPA Region 7 to be used as a guide to assist the regulated community with compliance. It does not substitute for or replace any regulatory requirements.

Hazardous Waste Manifest



Recordkeeping and Reporting

- Manifests, biennial report, exception reports, test results, analysis, and HW determination records must be kept three years
- LQGs must submit biennial report by March 1 of each even numbered year for waste generated in the previous year
- Problems with manifests must be reported to EPA or state

Best Practices

- Search and discover all HWs
- Determine which wastes are hazardous
- Obtain chemical analysis of wastes
- Collect in approved and labeled containers
- Avoid over-accumulation
- Inspect sites, clean up any spills and dispose of properly
- Maintain site, containment areas, and safety equipment
- Manifest shipments using proper forms
- Use only EPA-registered haulers/disposers, check for ID number
- Prepare emergency, contingency, and training plans for site(s)

Lesson 4: Hazardous Waste Rules for Generators

Topic 4 - Managing Contaminated Soil, Debris, Spills, and Spill Residues

Liz Blackburn, WEMM, EPA R7

Contamination Sources

- Brownfield cleanups
- Natural disaster events
- Construction & building improvement projects
- Soil removal projects
- Spills & spill cleanups
- Other

Managing Contaminated Soil, Debris, Spills, & Spill Residues

The first and most critical question to answer:

Should the waste must be managed under Subtitle C regulations because it exhibits a hazardous waste characteristic or contains a RCRA-listed HW?

- Don’t forget to incorporate waste management into the cleanup plan!

Am I Dealing with Hazardous Debris or Soil Waste?

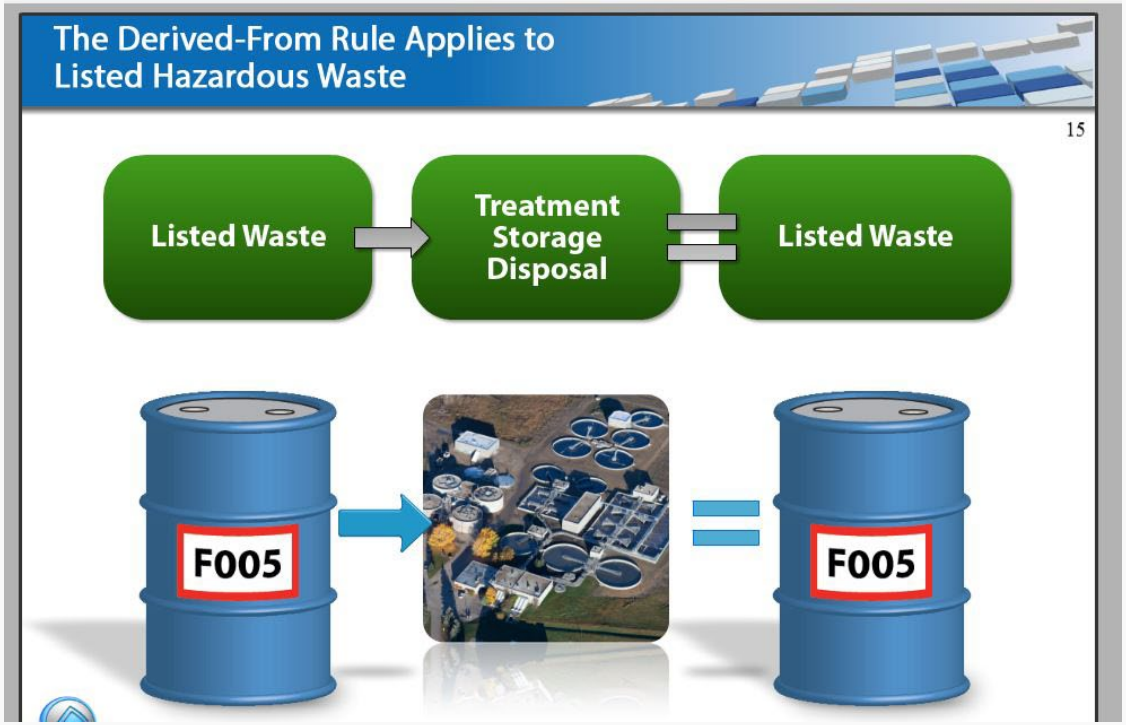
- Generator must determine if waste is hazardous
- Definition of remediation waste - 40 CFR 260.10
  - Is it a hazardous waste?
  - Is it a media that:
    - Exhibits a characteristic?
    - Contains a listed waste?

- The **mixture rule** governs mixtures of listed or characteristic hazardous waste with non-hazardous solid waste.
- The **derived-from rule** governs residues resulting from treatment, storage, and disposal of listed HW.

Mixture Rule for Characteristic Wastes

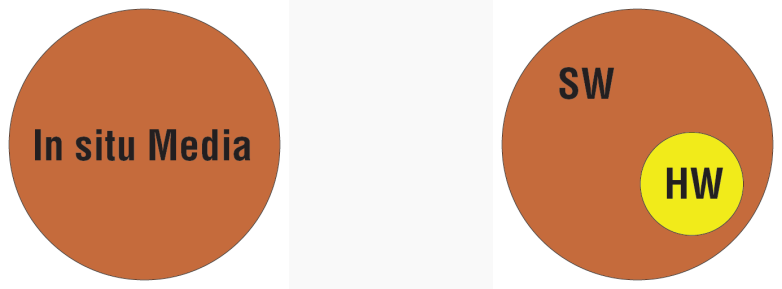
Mixture Rule for Listed Wastes

Derived-From Rule



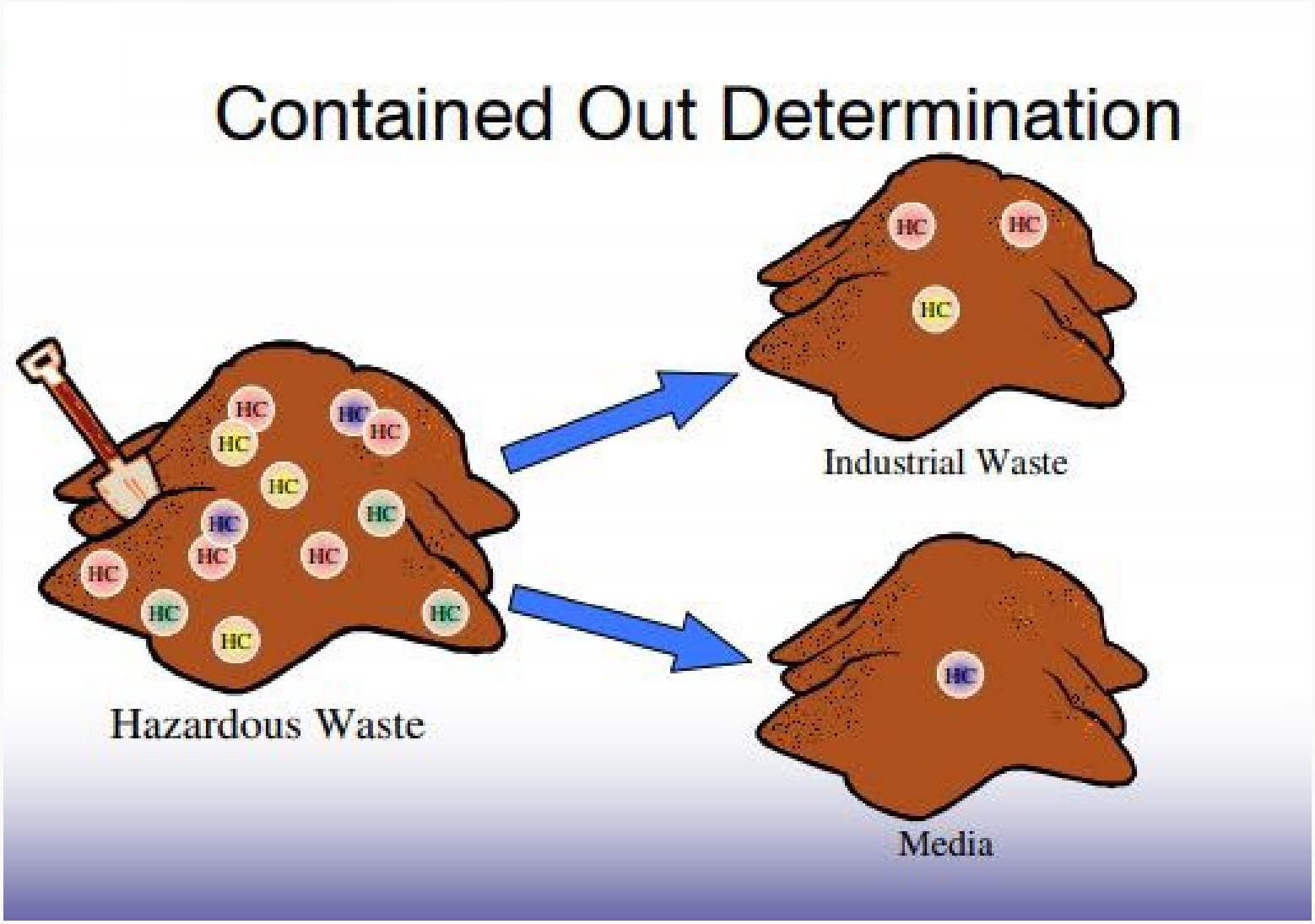
Contained-In Policy

Contaminated environmental media are not ***presumptively hazardous waste***



Contaminated Environmental Media Must be Handled as HW when:

- Exhibits a characteristic
- Contains listed HW (based on source)


Contained Out Determination
HC
Industrial Waste
Hazardous Waste
Media

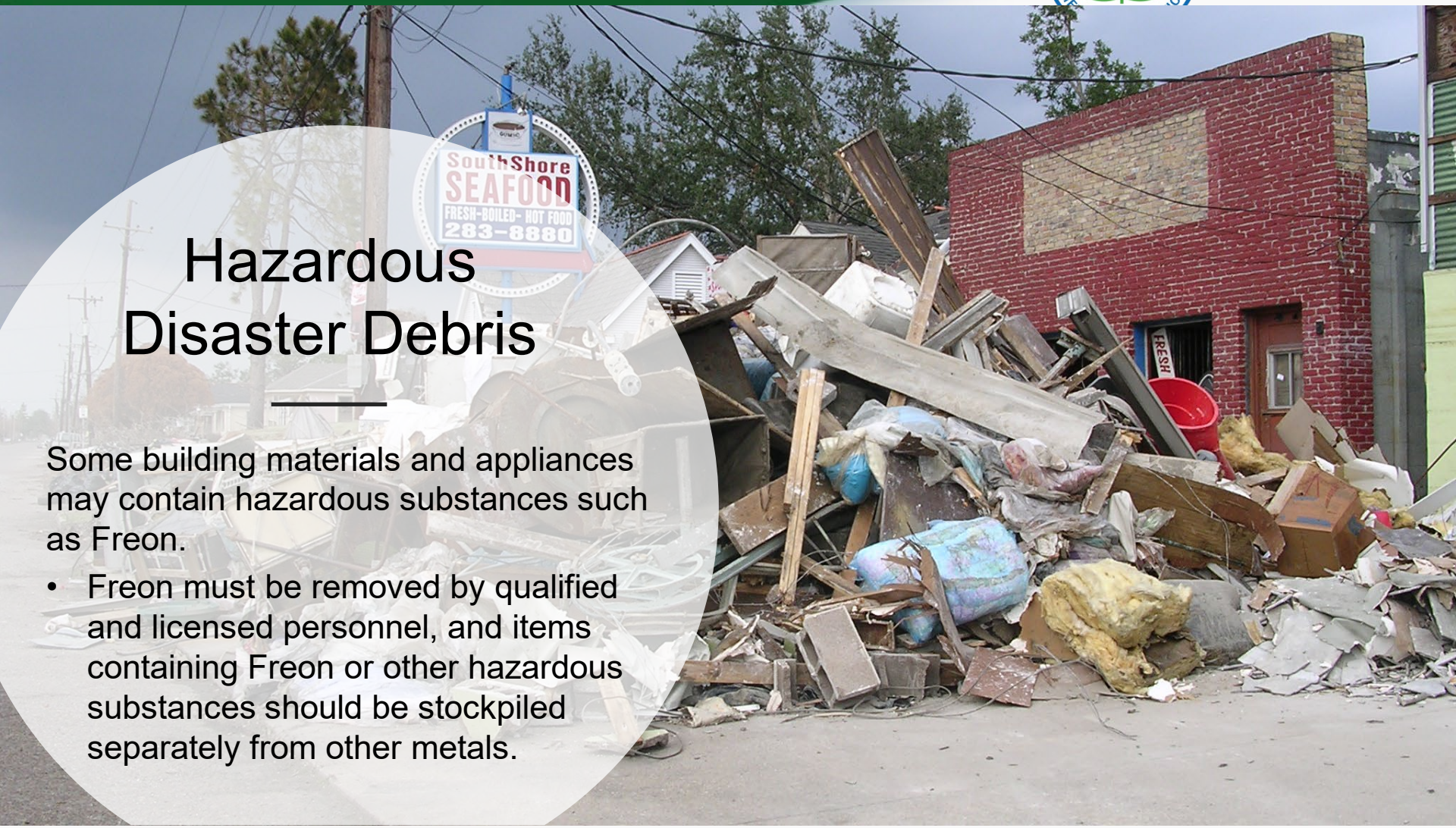
Applying LDRs to Remediation Waste

- At the point of generation
- When first actively managed

Hazardous Disaster Debris

Some building materials and appliances may contain hazardous substances such as Freon.

- Freon must be removed by qualified and licensed personnel, and items containing Freon or other hazardous substances should be stockpiled separately from other metals.



HHW Accumulated During Katrina

EPA workers use plastic bags, black metal drums, and kitty litter to dispose of toxic materials from the New Orleans Police Dept. Crime Lab facility.

Spills & Managing Spill Residues

Spill & Spill Residues

1. Conduct a waste determination to understand what hazards have been released
2. Prevent the spread of dusts and vapors
3. Neutralize acids and bases, if possible
4. Control the spread of the liquid
5. Absorb the liquid
6. Collect and contain the cleanup residues
7. Dispose of the wastes

Does this waste count towards your generator status?

Lesson 4: Hazardous Waste Rules for Generators

Topic 8 – EPA Hazardous Waste Enforcement

Liz Blackburn, WEMM, EPA R7

EPA RCRA Enforcement Process

Investigation/Negotiations Phase

- Inspection occurs
  - Notice of Violation
- Review of Inspection, Case Determination, Proposed Penalty
  - Penalty Policy
- Pre-filing is an Informal Letter
  - Opportunity to talk about violations/proposed penalty
- Informal negotiations period: 60 days
  - Facts of case
  - Answer questions
  - Ability to pay

Settlement or Complaint Phase

- If a settlement is reached
  - Consent Agreement and Final Order
  - Penalty
  - Compliance action
- If a settlement is **not** reached
  - Formal Complaint may be filed
  - 40 CFR Part 22
  - Complaint served
  - 30 days to respond to Complaint
  - Alternative Dispute Resolution
  - Administrative Hearing

Lesson 4: Hazardous Waste Rules for Generators

Topic 9 – Compliance Assistance Resources

Liz Blackburn, WEMM, EPA R7

Self-Audit Policy

EPA Compliance Assistance Visits

This program is designed to provide technical assistance to hazardous waste generators to help them achieve and maintain compliance with applicable hazardous waste regulations.

- Facilities can receive free technical assistance regarding applicable regulations.
- Facilities can identify areas of non-compliance.
- New environmental staff at facilities can receive help as they assume new compliance responsibilities.
- New management can determine the current state of compliance of their facility.

Compliance Assistance Centers help businesses, colleges and universities, local governments, tribes, and federal facilities understand and comply with environmental requirements and save money through pollution prevention techniques.

Nebraska Department of Environmental Quality (NDEQ) RCRA Program

Activities performed under the RCRA program include:

- Helping hazardous waste generators maintain compliance through a Compliance Assistance Program
- Performing compliance inspections and enforcement actions
- Investigating complaints
- Maintaining data systems to support decision-making and make information available to the public.

Kansas Department of Health & the Environment (KDHE) RCRA Program

- Offers Compliance Assistance Visits
- Provides the Kansas Generator's Handbook & Compliance Calendar
- Hosts Free HHW Training
- Houses hazardous waste guidance documents on KDHE's website
- Distributes & manages waste management grants

EPA P2 Program

EPA promotes source reduction to eliminate or reduce pollution at its source. Pollution prevention as the preferred alternative to pollution control and waste disposal.

- **Need help? Call the Pollution Prevention hotline at: (202) 566-0799**

K-State Pollution Prevention Institute

Environmental Regulations Assistance	Pollution Prevention Assistance	Intern Program	Resources, Training, and Workshops
K-State PPI operates the Kansas Small Business Environmental Assistance Program, whose goal is to assist small businesses with understanding and complying with environmental regulations.	Funded through various grants from EPA, KDHE, USDA, and Department of Energy, PPI serves as great resource for assisting in furthering your pollution prevention goals.	The PPI intern program pairs top-level engineering and environmental science students with Kansas business and industry. PPI recruits, hires, trains, and mentors interns who work on-site at the Kansas facility for 10 weeks during the summer.	Each year, PPI hosts various webinars and workshops on specific environmental regulations and pollution prevention. PPI also develops and updates environmental tools and publications, hosted on their website.

University of Nebraska-Lincoln Partners in Pollution Prevention Program

College of Engineering RESEARCH

Undergraduate student interns provide one-on-one Pollution Prevention assistance to Nebraska businesses by performing waste assessments or other waste reduction and resource conservation projects.

Includes small businesses from dry cleaners and auto body shops to large manufacturing plants and agriculture producers.

EPA Compliance Assistance

- RCRAonline & ECHO
- Call us! It's part of our job

Emergency numbers:

- **EPA Region 7 Environmental Action Line: 1-800-223-0425**

Lesson 5: Hazardous Waste Management Capacity Building

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Hazardous Waste Program Capacity Indicators

1. Tribe has established a staffing plan (position description and recruitment/retention/promotion plan) for who will serve as tribal hazardous waste management program coordinator(s).

2. Staff has completed appropriate training and acquired baseline knowledge and skills related to the relevant areas of RCRA (become familiar with the major goals, programs, and requirements of RCRA; the national structure for implementing RCRA; and the EPA regional personnel and organization).

Hazardous Waste Program Capacity Indicators

3. Tribe has established a program to meaningfully participate in waste management programs administered by other tribal, federal, state, or local governments (including reviewing and commenting on waste disposal facility permits and applicable waste management regulations).

4. Tribe is receiving funding under RCRA or other related EPA media-specific program.

Hazardous Waste Program Capacity Indicators

5. Tribe has an understanding of where hazardous waste is generated on tribal lands and what the hazardous waste is.
6. Tribe has conducted a hazardous waste assessment [e.g., a waste stream characterization study of the hazardous waste management practices, facilities, and issues in the community; effectiveness of current waste management system(s); waste collection and disposal options; and associated costs].

Hazardous Waste Program Capacity Indicators

7. Tribe has established a program to provide hazardous waste minimization, possible recycling, universal waste collection, used oil collection; and hazardous waste collection, transportation, and legal disposal as permitted facilities.

Hazardous Waste Plans

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Hazardous Waste Plans

Developing a holistic hazardous waste management plan as a component to your ISWMP allows you to outline your tribe's overall long-term approach for managing waste and serves as a roadmap for developing an effective waste management program. This will allow you to better understand the hazardous waste compliance needs of your tribal operations, as well as to better plan for emergency and disaster events.

Haz Waste Plans Outline

- Entities that generate hazardous waste - Departments, areas, buildings
- Brief description of activity that generates the waste
- Type of hazardous waste that is generated
- Rough monthly amount of hazardous waste generated
- Overall management plan
- Financial planning - Funding of the HW program
  - identify waste management funding needs, investigate potential funding sources, and allocate resources accordingly
- Hazardous waste minimization goals
- Short-term goals
- Long-term goals

Example

Article 5. Temporary Storage, Collection and Disposal of Hazardous and Toxic Waste

1. Hazardous Waste and Toxic Wastes shall be handled, collected, stored and disposed of in a manner that is safe and complies with all federal regulations involving handling and disposal of Hazardous Waste, including CERCLA and the "Cradle-to-Grave" rule established under Subtitle C of the Resource Conservation and Recovery Act (RCRA).
2. Hazardous Waste and Toxic Wastes shall be handled, collected, stored and disposed of in a manner that is safe and complies with all federal regulations involving handling and disposal of hazardous waste, including CERCLA and the "Cradle-to-Grave" rule established under Subtitle C of the Resource Conservation and Recovery Act (RCRA).
3. All Hazardous and Toxic Wastes shall be collected, transported, stored, processed and disposed of in a method that has been approved by the Tribal Council.
4. Facilities on the Reservation which plan to dispose of hazardous materials must obtain a Hazardous Waste Generator permit and identification number through the U.S. EPA.
5. A copy of the Hazardous Waste Generator permit must be provided to the Tribal EPA.

Waste Determination Resources

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Kansas Waste Determination App

ERG & WISER Apps

Other Resources

- EPA Waste Identification Guide
- EPA RCRA Orientation Manual
- Haz Waste code lookup tool: http://idrenvironmental.com/rcra-hazardous-waste-determination-tool/
- Workshops & Newsletters: http://www.kdheks.gov/waste/workshops/works10/presentations/rudeen-howtomakeahazwastedetermination-2010.pdf