THE HAZARDOUS WASTE GENERATOR IMPROVEMENT RULE: The Good, the Bad and the Unexplained

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- ➤ This presentation is provided for informational purposes only and should not be construed as legal or other professional advice on any subject matter.
- ➤ You should not act or refrain from acting on the basis of any content included in this document without seeking advice specific to your circumstances from an attorney or environmental professional.

"Regs. per Ken Ede"

- * These are my recommendations!
- * These are **not** law or regulations!!
- But they are just my <u>recommendations</u> to you.....
- I have been working in the Environmental, Safety, DOT arena since 1984!
- Therefore, every mistake that could be made, I have made it!
- Learn from my mistakes!

Agenda

- The final rule promulgates over 60 revisions and new provisions to the hazardous waste generator regulatory program
- Due to time constraints, I am only going to address the <u>top 10</u> changes

Hazardous Waste Generator Improvements Rule

> 7.85 + year itch!, ≈60 days before leaving office, FR Nov. 28, 2016



President Obama

January 20, 2009 – January 20, 2017



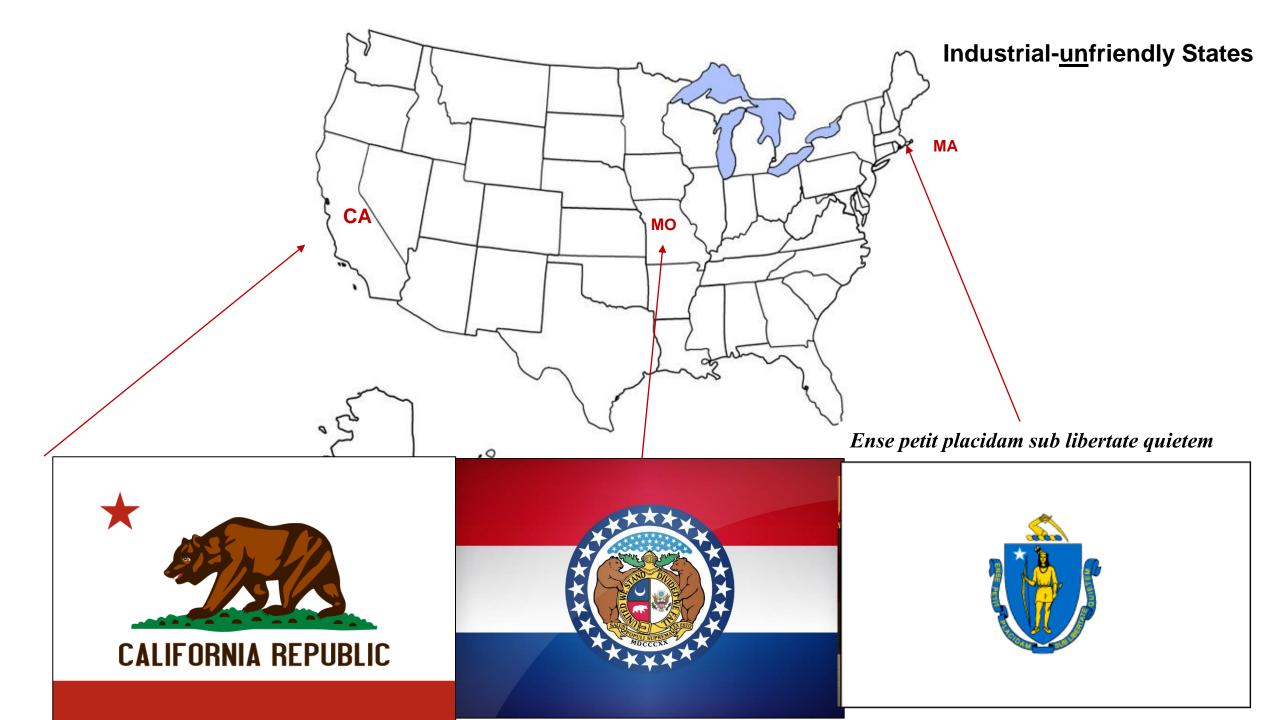
Gina McCarthy Administrator

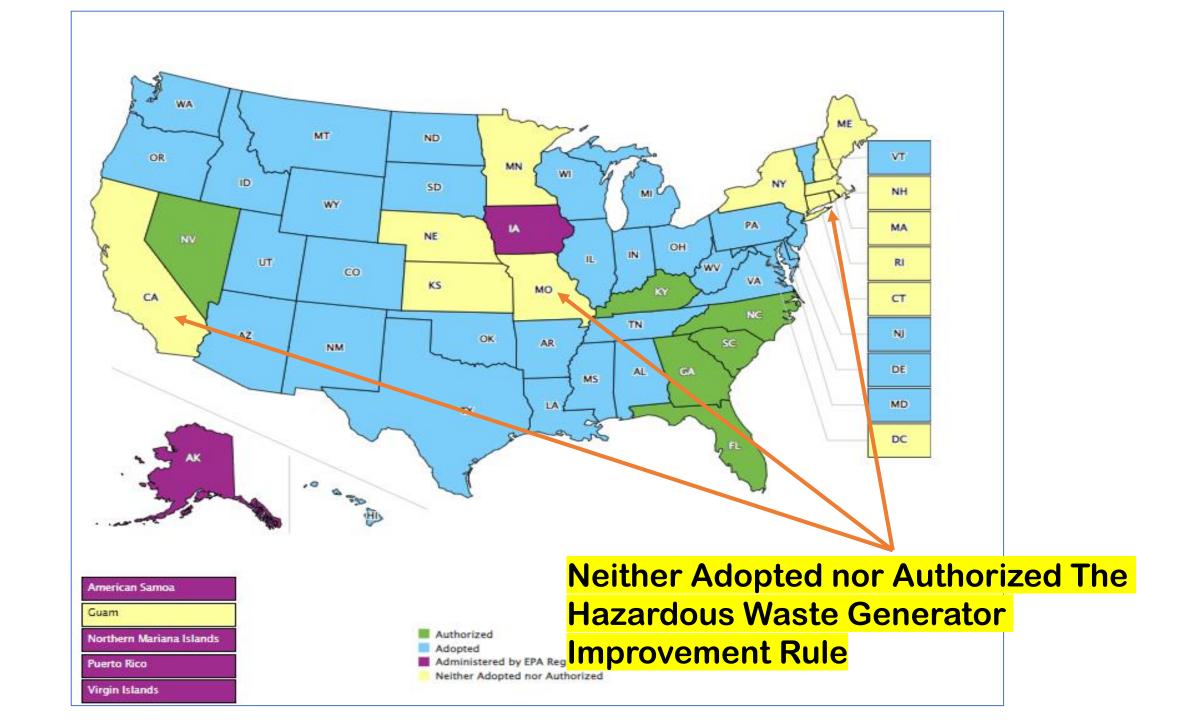


Jim O'Leary Author



- Interesting point, other than lowa and Alaska, all other States can make hazardous waste regulations as strict as they want
- > There is no limit!
- Therefore, under current law, a State could make a "waste" paper clip a hazardous waste!
- Great for industrialfriendly States like Oklahoma!





The Good, the Bad and the Unexplained



Change #1 RCRA: The Three Players: Previous

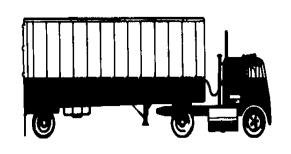
Generator =

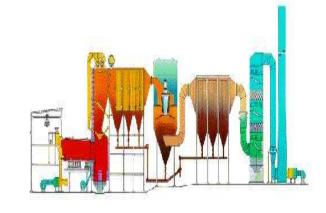
Transporters

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TSDF







EPA

DOT

EPA

Large Quantity Generator:

(LQG)

Part A: Interim Status

Part B: Final Permit

Small Quantity Generator:

(SQG)

Conditionally Exempt Small Quantity Generator (CESQG)

<u>Treats = Changes</u> Chemical, Physical or Biological Nature of Waste

Stores = Holds temporarily until doing something else with the waste

<u>Disposes = Destroys</u> (incineration, etc.), or into a permitted landfill

Change #1 RCRA: The Three Players: Today

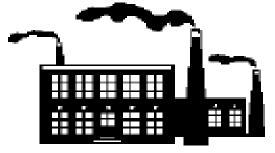


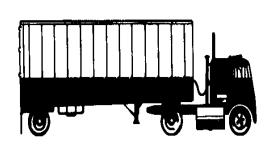


Transporters



TSDF







EPA

Large Quantity Generator:

(LQG)

Part A: Interim Status

Part B: Final Permit

Small Quantity Generator:

(SQG)

Very Small Quantity Generator:

(VSQG)

<u>Treats = Changes</u> Chemical, Physical or **Biological Nature of Waste**

Stores = Holds temporarily until doing something else with the waste

<u>Disposes = Destroys</u> (incineration, etc.), or into a permitted landfill

#2 Reorganization of the CFR for SQG

Regulation	Previous citation	New citation	Comment	
Definition of Small Quantity Generator	§ 262.34(d)	§ 260.10	Moved into new definition of SQG	
Accumulation Time Limit	§ 262.34(d)	§ 262.16(b)	§ 262.16(b) Moved	
Accumulation Limit	§ 262.34(d)(1)	§ 262.16(b)(1)	Moved	
Accumulation in Containers	§ 262.34(d)(2) (references part 265 subpart I)	§ 262.16(b)(2)	Duplicated from part 265	
Marking of Tanks and Containers	§ 262.34(d)(4) (references § 262.34(a)(2) and (3))	§ 262.16(b)(6)	Copied from § 262.34 with some changes	
Preparedness and Prevention	§ 262.34(d)(4) (ref. part 265 subpart C) & 262.34(d)(5)	262.16(b)(8) & (9)	Duplicated from part 265 and moved from § 262.34	
Transporting > 200 Miles	§ 262.34(e)	§ 262.16(c)	Moved from § 262.34	
Accumulation Time Limit Extension	§ 262.34(f)	§ 262.16(d)	Moved from § 262.34	
Rejected Loads	262.34(m)	§ 262.16(e)	Moved from § 262.34	
Episodic Generation	New provision	Part 262 subpart L	New provision	

#2 Reorganization of the CFR for regulations

Regulation	Previous citation	New citation	Comment	
Definitions of Generator Categories	§§ 260.10, 261.5 & 262.34	§ 260.10	Previous definition of SQG in § 260.10 was outdated. Generator categories were based on §§ 261.5 & 262.34	
Hazardous Waste Limits for VSQGs	§ 261.5(a) & (e)	§ 260.10	Included in the new definition of VSQG	
Purpose, Scope, and Applicability	§ 262.10	§ 262.10	Not moved, but expanded significantly	
Hazardous Waste Determination & Recordkeeping	§§ 262.11 & 262.40(c)	§ 262.11	Content in § 262.11 is expanded and § 262.40(c) is incorporated.	
Generator Category Determination	§ 261.5(c), (d), & (h)–(j)	§262.13	New section that explains how to count hazardous waste to determine generator category	
EPA Identification Numbers	§ 262.12	§ 262.18	Re-notification requirements are also in this section	
Landfill Ban for Liquids	§ 258.28	§ 262.35	For SQGs and LQGs.	

#2 Reorganization of the CFR for all Generators

Topic	Acronym	Presently	New
Very Small Quantity Generators	VSQG	40 CFR 261.5(a)	40 CFR 262.14
Satellite Accumulation Areas	SAAs	40 CFR 262.34(c)	40 CFR 262.15
Small Quantity Generators	SQGs	40 CFR 262.34(d)	40 CFR 262.16
Large Quantity Generators	LQGs	40 CFR 262.34(a)	40 CFR 262.17

#3: RENOTIFICATION FOR SQGS & LQGS

- ➤ SQGs must re-notify every four years beginning September 1, 2021
- > Renotifications will be due every four years on September 1st of that year.
- > LQGs re-notify when they submit their biennial report (every March 1st of even numbered years)

40 CFR § 262.12 EPA Identification Numbers

- Quickest way to obtain an EPA ID number
- Quickest way to make changes
- Quickest way to request Episodic Events

> Myrcraid

https://rcrainfo.epa.gov/rcrainfoprod/action/secured/login

#4: Definition of Central Accumulation Area (40 CFR 260.10)

- > EPA codified the term <u>Central Accumulation Area</u> (CAA)
- Over the years, generators have used different terms to refer to these on-site generator accumulation areas, including: "generator accumulation area," "hazardous waste accumulation area" "less-than-90-day areas," "90day pad," "less-than-180-day areas"
- The word Central does not mean in middle of your facility

5: Quick Reference Guide (LQGs only)

- Rules require LQGs submitting new contingency plans or making updates to also include a "Quick Reference Guide" (i.e.) Executive Summary)
- > Two Contingency Plan approaches!





Environmental Incident Call Out List

CALL ALL NUMBERS <u>LEFT TO RIGHT</u> BEFORE PROCEEDING TO NEXT CONTACT

START		Office Number Cell Number Alt. Number		
1	Environmental Services-Supervisor Jane Doe (Incident Commander)	(918) 555-1111	(918) 444-1111	(918) 333-1111
2	Environmental Engineer Jim Doe (1st Alternate Incident Commander)	(918) 555-2222	(918) 444-2222	(918) 333-2222
3	Environmental Engineer Jack Doe (2nd Alternate Incident Commander)	(918) 555-3333	(918) 444-3333	(918) 333-3333
4	Environmental Engineer Betty Doe (3rd Alternate Incident Commander)	(918) 555-4444	(918) 444-4444	Use Cell Number
5	Environmental Services-Manager John Doe	(918) 555-5555	(918) 444-5555	Use Cell Number
6	Environmental Engineering-Manager Kim Doe	(918) 555-6666	(918) 444-6666	Use Cell Number
7	Environmental Services-Crew Chief Steph Doe	(918) 555-7777	(918) 444-7777	Use Cell Number
8	Environmental Services-Crew Chief Anita Doe	(918) 555-8888	(918) 444-8888	Use Cell Number

Quick Reference Guide

Must contain the following 8 elements:

- 1. Types/names of hazardous waste and associated hazards
- 2. Estimated maximum amounts of hazardous wastes
- 3. Hazardous wastes requiring unique/special treatment
- 4. Map showing where hazardous wastes are generated, accumulated or treated at the facility
- 5. Map of facility and surroundings to identify routes of access and evacuation
- 6. Location of water supply
- 7. Identification of on-site notification systems
- 8. Name of emergency coordinator(s) or listed staffed position(s) and 7/24-hour emergency telephone number(s)

#6 Episodic Generation (GREAT)

- ➤ 40 CFR Part 262, <u>Subpart L</u> allows both VSQGs and SQGs to maintain their existing generator category in the event of <u>planned</u> or <u>unplanned</u> episodic generation events
- ➤ Therefore, these generators do NOT have to count hazardous waste managed as part of the episodic event when making their monthly generator-category determination (§262.13(c)(8))

What is an "Episodic Generation"

"...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"

Planned vs. Unplanned Episodic Events

Planned Episodic Event:

An episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and <u>removal of</u> <u>excess chemical inventory</u>

Unplanned Episodic Event:

An unplanned event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or "acts of nature," such as a tornado, hurricane, or flood

Regs. Per Ken Ede

ODEQ

Kevin Courtney

Environmental Programs Specialist
Hazardous Waste Compliance
Land Protection Division
Oklahoma Department of Environmental Quality

Kevin.Courtney@deq.ok.gov (405)702-5194

NOTIFICATION: Episodic Generation

- > Regs per Ken Ede:
- > If I was a SQG or VSQG, I would register electronically
- > Myrcraid

https://rcrainfo.epa.gov/rcrainfoprod/action/secured/login

- Rather than wait until it is too late, I would register tomorrow
- > No more snail mail

The Good, the Bad and the Unexplained

>2nd "The Bad"

7 CENTRAL & SATELLITE ACCUMULATION AREAS Labeling

VSQG: 40 CFR 262.232(a)(4)(iii)

LQG & SQG: 40 CFR 262.15.

Mark the container:

"HAZARDOUS WASTE"

And the "other words that identify the contents of the containers"

"WASTE PAINT THINNER"
AND....

Either one of four different labeling options

- 1. An indication of the <u>RCRA hazards</u> of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic) <u>OR</u>
- 2. A hazard communication consistent with the <u>Department of Transportation</u> requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding) OR
- 3. A hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200 OR
- 4. A chemical hazard label consistent with the <u>National</u> <u>Fire Protection Association (NFPA) code 704)</u>

Why Label? (Federal Register Volume 81, Number 228)

The regulatory changes as to the marking and <u>labeling for waste</u> accumulation units are <u>designed</u> to enhance three critical areas:

- 1. Risk communication,
- 2. Emergency preparedness and prevention, and
- 3. Accuracy of hazardous waste determinations
- The goal was to inform non-EHS professionals of the risks associated with the contents of the drum!



GOAL: TO INFORM NON-EHS PROFESSIONALS



SATELLITE ACCUMULATION AREAS (SAA) Labeling as per Department of Transportation

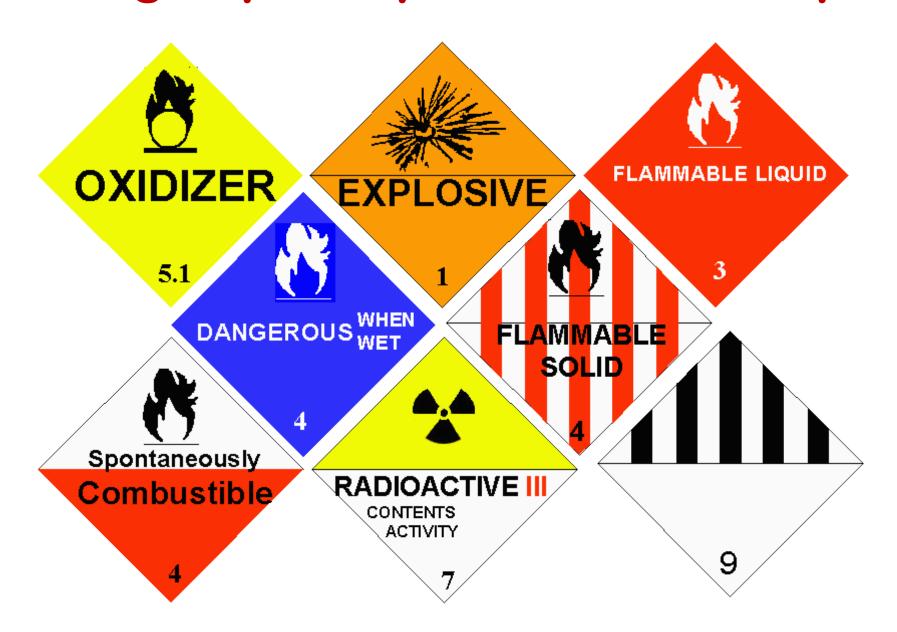
2. A hazard <u>communication</u> consistent with the <u>Department of Transportation</u> requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding)

The problem is that I always forget what these mean??

But this is my second favorite option



Labeling as per Department of Transportation



Labeling as per OSHA (GHS: Globally Harmonized System)

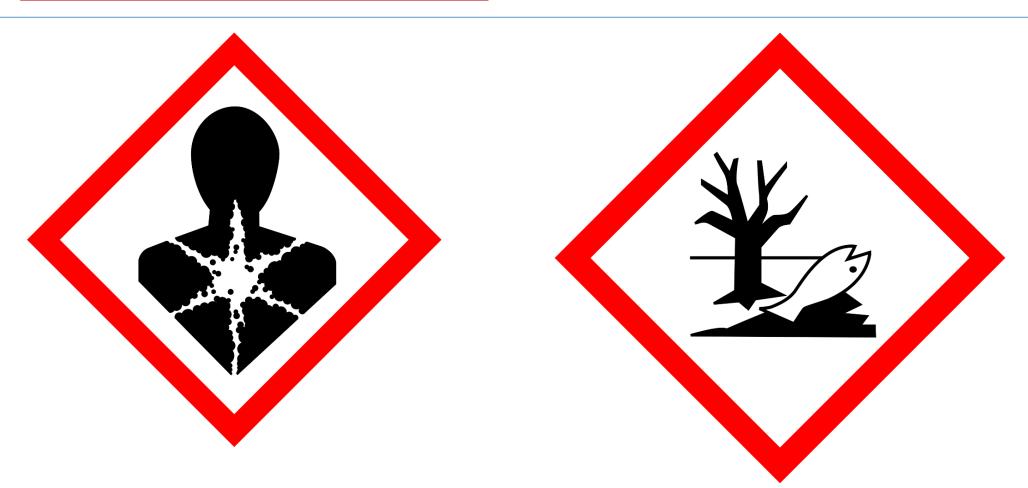
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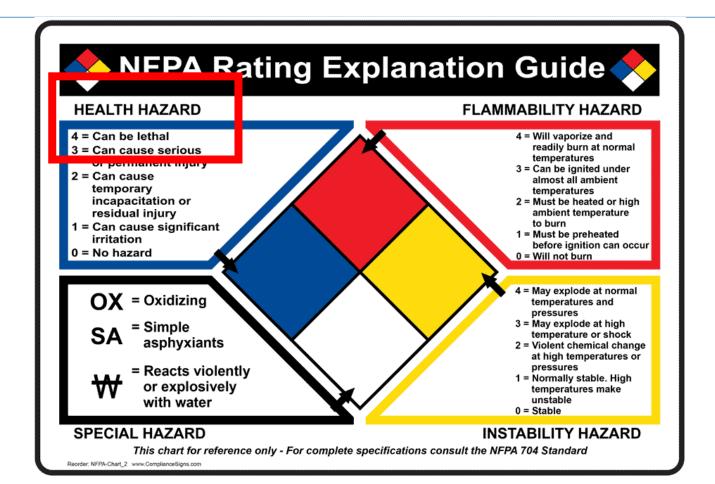


Labeling as per OSHA (GHS: Globally Harmonized System)

- In addition, from a legal perspective; the (m)sds only describes the dangers associated with the virgin products, not the waste!
- Therefore, You are now accepting responsibility that you are aware of all the health hazardous associated with a hazardous waste!
- Unless you are a degreed toxicologist, be very careful accepting this legal responsibility

SATELLITE ACCUMULATION AREAS (SAA) Labeling as per NFPA

4. A chemical hazard label consistent with the <u>National</u> Fire Protection Association (NFPA) code 704)



National Fire Protection Association (NFPA) code 704)

- Again, from a legal perspective; the (m)sds only describes the dangers associated with the virgin products, not the waste!
- Therefore, You are now accepting responsibility that you are aware of all the health hazardous associated with a hazardous waste!
- Unless you are a degreed toxicologist, be very careful accepting this legal responsibility

My favorite: RCRA Labeling

1. An indication of the <u>RCRA hazards</u> of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic

Advantage: Generally, this is already been completed!

For example: Ignitability: D001, Corrosivity: D002, Reactivity: D003, Toxicity: D004 → D043

Labeling: My Preference: RCRA

"Regs per Ken Ede"

Every hazardous waste drum label with the following:

- 1. Mark the container: "HAZARDOUS WASTE"
- 2. Identify the contents: "WASTE PAINT THINNER"
- 3. List the applicable hazardous waste characteristic(s):

(Ignitability: D001, Corrosivity: D002,

Reactivity: D003, Toxicity: D004 → D043)

Satellite Accumulation Drum Label (w/o date)

HAZARDOUS WASTE



CONTENTS: WASTE PAINT THINNER

WASTE CODES: <u>D001, D035, F003, F005</u>

ACCUMULATION STATE DATE:

HANDLE WITH CARE!

HAZARDS: (check all that apply)

Ignitable





Corrosive





Reactive





Toxic





Label used by permission from Mr. David W. Smith, CHMM

Central Accumulation Drum Label (w date)

HAZARDOUS WASTE



CONTENTS: **WASTE PAINT THINNER**

WASTE CODES: D001, D035, F003, F005

ACCUMULATION STATE DATE: October 3, 2022

HANDLE WITH CARE!

HAZARDS: (check all that apply)





Ignitable Corrosive





Reactive





Toxic





Label used by permission from Mr. David W. Smith, CHMM

Note: Date is blank until container is full

HAZARDOUS WASTE



Container ID

CONTENTS: WASTE PAINT THINNER

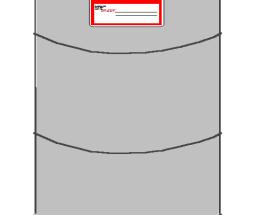
ACCUMULATION START DATE:

WASTE CODES: D001, F003, F005, D035

CONTAINS: X Ignitable: Corrosive: Reactive: X Toxic

(Check all that apply)

HANDLE WITH CARE!



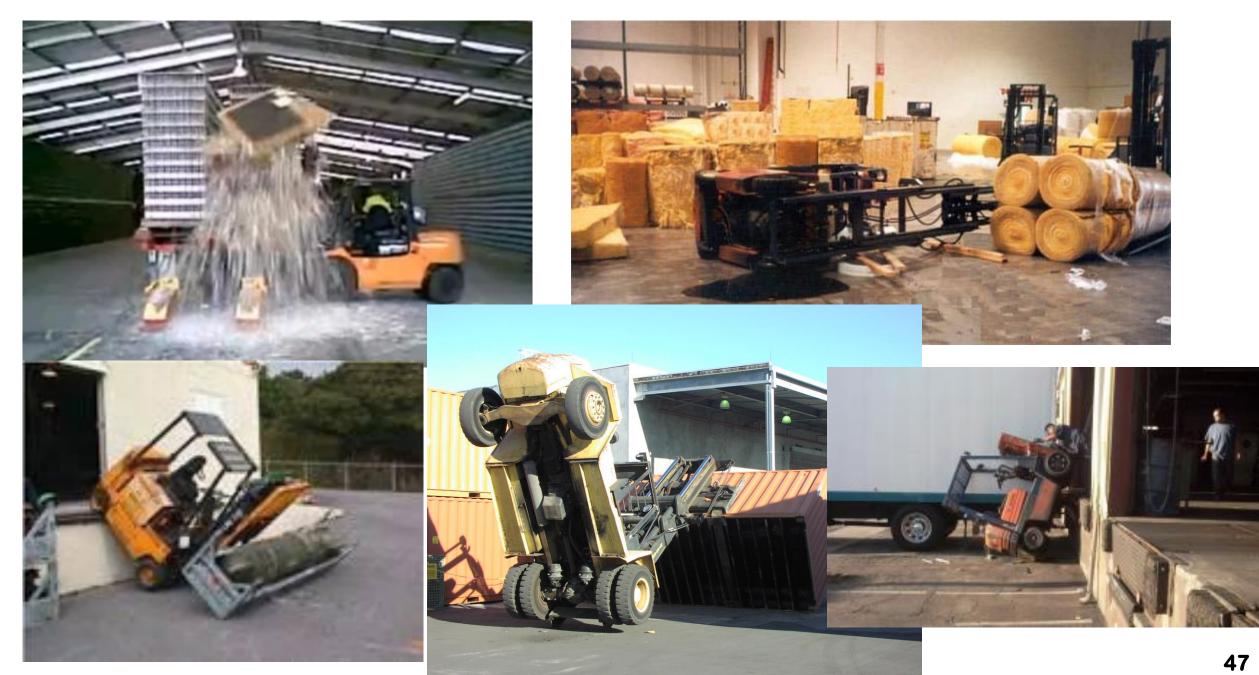
#8 CONSOLIDATE WASTE AT A LQG

- VSQG can "consolidate" their waste at an LQG as long as they are both under the control of the same person (same ownership)
- VSQG standards: Marks and labels waste containers with "Hazardous Waste" and the <u>hazards</u> of the contents
- No hazardous waste manifest is required and hazardous waste transporters do not have to be used
- > Problem: Regs per Ken Ede
- > The more you handle the drum, the higher the probability it will leak

Forklift-related injuries: 2020 (COVID)

- > Forklift-related injuries in 2020:
- > 78 work-related deaths and
- > 7,290 nonfatal injuries

VSQG Waste Consolidation at LQGs



The Good, the Bad and the Unexplained

>The Unexplained?

You are a large quantity generator of HW

Three Scenarios:

A: Close just one CAA

- You have two Central Accumulation Areas at your facility (North & South)
- Business has been poor, therefore you want to consolidate both CAAs into one
- o OR

North Central Accumulation Area



South Central Accumulation Area

B. Your company just wants to move a CAA

o OR

Central
Accumulation
Area



- C. Close all the CAAs and sell your entire facility
- * What are the legal issues regarding these scenarios?

Central Accumulation Area

- > A large quantity generator must perform one of the following when closing a waste accumulation unit:
- > Notification for closure of the facility:
- 1. Notify EPA using form 8700-12 no later than 30 days prior to closing the facility
- 2. Place a notice in the <u>operating record</u> within 30 days after closure identifying the location of the unit within the facility;
- 3. After "Clean Close" of the area, you must notify EPA using form 8700-12 within 90 days after closing the facility that it has complied with the closure performance standards

The Unexplained

- > What is "clean closure?"
- "Removes or decontaminates all contaminated equipment, structures and soil and any remaining hazardous waste residues from waste accumulation units including containment system components (pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste....."
- ➤ If the facility cannot meet the closure performance standards (clean closure), the generator must notify EPA using form 8700-12 that it will close as a landfill!!

LQG Closing a Central Accumulation Area CAA

- ➤ And perform <u>post-closure care</u> in accordance with the closure and post-closure care requirements that apply to landfills (40 CFR 265.310)
- ➤ In addition, for the purposes of closure, postclosure, and financial responsibility, and the generator must meet all of the requirements for landfills specified in subparts G and H of 40 CFR part 265.
- > 265.117 Post-closure care and use of property:
- > "...must begin after completion of closure of the unit and continue for 30 years after that date"

LQG Closing a Central Accumulation Area CAA

- > In addition, may need to install:
- > Groundwater monitoring wells
- Both upgradient and downgradient from the container area
- ➤ If groundwater is contaminated, may need to monitor groundwater for 30 years or longer during a post-closure care groundwater monitoring program, etc.

#9 The Unexplained

- ➤ Place a notice in the <u>operating record</u> within 30 days after closure identifying the location of the unit within the facility
- > Problem: Lack of legal precedent
- > Generators of hazardous wastes do NOT have an operating permit
- > Only TSDFs have operating permit

#10 The Unexplained

- > What is "clean closure?"
- Today Chemists can analyze to parts per quadrillion (PPQ)
- > Water: Picogram per liter (pg/L)
- > Soil: Picogram per kilogram (pg/kg)
- > If we find 1 pg/kg of toluene in the soil, does this now make the CAA a landfill?

ODEQ & OSU

- Just like the PFAS sampling guidelines, ODEQ & OSU will partner to develop guidelines for the closure of Central Accumulation Areas
- Cost impact to taxpayers: Zero
- Cost impact to Saba: Another lunch









