

# Environmental Spills and Release Reporting

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# Agenda

1. Release Reporting Background
2. Clean Air Act Reporting
3. Clean Water Act Reporting
4. CERCLA Reporting
5. EPCRA Reporting
6. State-Level Reporting
7. Summary & Other Regulatory Implications of a Spill/Release

**Introduction:**

# **Release Reporting Background**

# Release Reporting Background

- ▶ Reporting “releases” from your facility can be categorized in two ways:
  - Intentional releases (i.e., permitted or authorized releases)
  - **Accidental releases (spills, malfunctioning equipment, etc.)**
- ▶ Why is your facility’s release information important?
  - Used by EPA and regulatory agencies to assess risk to human health and the environment, and to establish initiatives
    - ◆ National Emissions Inventory
    - ◆ Water Monitoring Network
    - ◆ Environmental Justice Initiative
    - ◆ National Compliance and Enforcement Initiatives
  - Required to be quantified and reported!
  - Public data
    - ◆ Environmental NGOs
    - ◆ Competitors
    - ◆ Residential/Public Groups

# Not Today's Focus – “Intentional” Release Reporting

- ▶ Annual Emissions Inventory
- ▶ RCRA Annual Hazardous Waste Report
- ▶ Toxics Release Inventory Reporting
- ▶ Stormwater Discharge Monitoring Reports
- ▶ POTW Discharge Monitoring Reports
- ▶ NSPS Semiannual Monitoring Reports
- ▶ NESHAP Semiannual Monitoring Reports
- ▶ ... and more! (permit-specific, industry-specific, etc.)

# Release/Spill Reporting Background

- ▶ State and federal rules for reporting spills were passed in the mid-80s after a poisonous cloud of toxic gas escaped from a Union Carbide facility in Bhopal, India killing 3,500 people
  - To reduce the likelihood of such a disaster here, the U.S. Congress and some state general assemblies imposed reporting requirements on regulated facilities
- ▶ Several State and federal environmental laws require that “releases of hazardous substances to the environment” above certain threshold amounts be reported



January 1988: Boat on the Monongahela River in the aftermath of a four million gallon diesel tank collapse in Floreffe, PA. **The “dark patches” in this case are those of water, the rest is spill.**

Photo, Pittsburgh Post-Gazette

# What is a “release” or “discharge”?

- ▶ Numerous definitions!
  - CWA Oil Discharges – 40 CFR 110.3
  - CWA Hazardous Substance Discharges – 40 CFR 117.21
  - CERCLA Hazardous Substance Releases – 40 CFR 302.3
  - State-Specific Discharges
  - ... and more!

## EPCRA Definition (40 CFR 355.61)

**Release** means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous chemical, EHS, or CERCLA hazardous substance.

## Merriam-Webster's Definition

**release** 1 of 3 verb (1)

re·lease ri-ˈlēs

released; releasing

[Synonyms of release >](#)

*transitive verb*

**1** : to set free from restraint, confinement, or servitude  
| release hostages  
| release pent-up emotions  
| release the brakes  
also : to let go : **DISMISS**  
| released from her job

**2** : to relieve from something that confines, burdens, or oppresses  
| was released from her promise

**3** : to give up in favor of another : **RELINQUISH**  
| release a claim to property

**4** : to give permission for publication, performance, exhibition, or sale of  
also : to make available to the public  
| the commission released its findings  
| release a new movie



# Spill Summary

- ▶ Step 0 – be prepared. Know your materials, RQ's and who to report to **before a release**
- ▶ Step 1 – inform appropriate personnel, **make sure area is safe**
- ▶ Step 2 – **contain the spill**, try to keep the spill from going offsite
- ▶ Step 3 – determine the **type and amount of chemical released**, and complete required **agency notifications**
- ▶ Final Step – complete **remediation** and any **follow-up notifications/reports**
- ▶ Additional considerations – confirm spill does not affect other reports or contents of spill plans

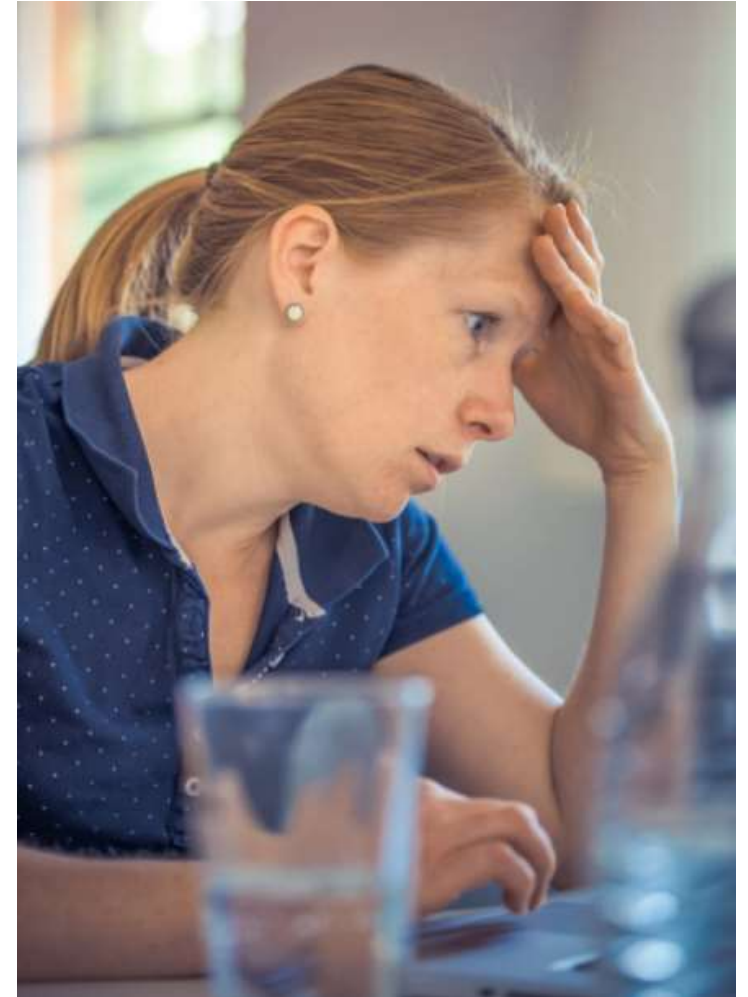


# Spill/Release Reporting Requirements

- ▶ **Clean Air Act (CAA), Chemical Safety Board (CSB) – 40 CFR 1604**
- ▶ Resource Conservation & Recovery Act (RCRA), Large Quantity Generators (LQGs) – 40 CFR 262.265
- ▶ **Clean Water Act (CWA), Section 311**
  - Oil discharges – 40 CFR 110, 40 CFR 112
  - Hazardous substance discharges – 40 CFR 117
- ▶ **Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Section 103 – 40 CFR 302**
- ▶ **Emergency Planning and Community Right-To-Know Act (EPCRA) – 40 CFR 355**
- ▶ CWA, Section 402, Publicly Owned Treatment Works (POTW) Dischargers – 40 CFR 403

## ... and More!

- ▶ CWA, Section 402, National Pollutant Discharge Elimination System (NPDES) Permits – 40 CFR 122.41
- ▶ CAA, Excess Emissions
  - New Source Performance Standards (NSPSs) – 40 CFR 60 (various by Subpart and pollutant/monitoring type)
  - National Emission Standards for Hazardous Air Pollutants (NESHAPs) – 40 CFR 63 (varies by Subpart and pollutant/monitoring type)
- ▶ **State-specific Requirements**



# **Federal Release & Spill Reporting:**

## **Clean Air Act – Chemical Safety Board**

# CSB Accidental Release Reporting

- ▶ Final rule published in Federal Register on 2/21/2020 and effective 3/23/2020
  - 40 CFR 1604
  - <https://www.federalregister.gov/documents/2020/02/21/2020-02418/accidental-release-reporting>
- ▶ Requires “owners and operators of stationary sources to report accidental releases **that result in a fatality, a serious injury, or substantial property damage**” to CSB



# CSB Accidental Release Report



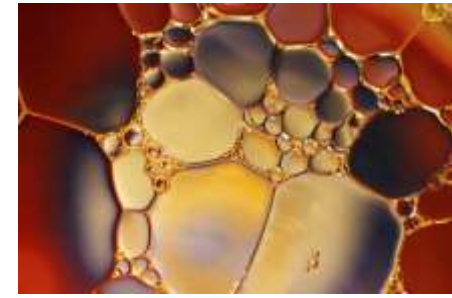
- ▶ Report accidental releases using **screen-fillable PDF form** at [csb.gov](https://www.csb.gov) or via email to [report@csb.gov](mailto:report@csb.gov)
  - Submitting NRC identification to CSB within 30 minutes of NRC report submittal, OR
  - Submit a report to CSB within 8 hours of the accidental release that includes information listed in 40 CFR 1604.4
  - Option to call in report at 202-261-7600
- ▶ Multiple owners/operators' situations may agree to a single, consolidated report, and it should include information from/about all relevant owners/operators
- ▶ Can update/correct submitted report within 30 days
  - Can correct up to 90 days after incident date if site can defend why not able to update within 30 days

# **Federal Release & Spill Reporting:**

## **Clean Water Act – Oil & Hazardous Substances**

# Clean Water Act - Oil Discharges

40 CFR 110.6 & 112.4



- ▶ Any discharge of oil from such vessel or **facility in violation of section 311(b)(3)** of the Act, **immediately** notify the National Response Center (NRC) 1-800-424-8802. Includes oil discharges that:
  - Violate applicable water quality standards; or
  - Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines
- ▶ Whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge, or discharged more than 42 U.S. gallons of oil in each of two discharges, occurring within any twelve-month period, submit a report to the Regional Administrator **within 60 days of the incident**



# CWA Hazardous Substance Discharges

40 CFR 117.21



## ► Under the Clean Water Act 40 CFR 117.21

*Any person in charge of a vessel or an onshore or an offshore facility shall, as soon as he has knowledge of any discharge of a designated hazardous substance from such vessel or facility in quantities equal to or exceeding in any 24-hour period the reportable quantity determined by this part, immediately notify the appropriate agency of the United States Government of such discharge.*

## ► **Hazardous Substance List found in 40 CFR 117.3**

- Note: Each substance in Table 117.3 that is listed in Table 302.4 (CERCLA), is assigned the reportable quantity listed in Table 302.4 for that substance

- *Immediately* means not to exceed 15 minutes
- No follow-up written report required

# **Federal Release & Spill Reporting:**

## **CERCLA – Hazardous Substances**

# CERCLA Hazardous Substance Releases

40 CFR 302.4



- ▶ Hazardous Substance Release under CERCLA  
*Any person in charge of a vessel or an offshore or an onshore facility shall, as soon as he or she has knowledge of any release (other than a federally permitted release or application of a pesticide) of a hazardous substance from such vessel or facility in a quantity equal to or exceeding the reportable quantity determined by this part in any 24-hour period, immediately notify the National Response Center [(800) 424-8802 or via on-line reporting tool].*
- ▶ **Hazardous Substance List found in 40 CFR 302.4**
- ▶ *Immediately* means not to exceed 15 minutes
- ▶ No follow-up written report required

## Common CERCLA HSs & RQs

Acetone...	5,000 lbs
Ammonia...	100 lbs
Amm. Hydroxide...	1,000 lbs
Benzene...	10 lbs
Chlorine...	10 lbs
HCl...	5,000 lbs
MEK...	5,000 lbs
Nitric Acid...	1,000 lbs
Phosphoric acid...	5,000 lbs
Sodium Hydroxide..	1,000 lbs
Sulfuric Acid...	1,000 lbs

# **Federal Release & Spill Reporting:**

## **EPCRA – Extremely Hazardous Substances**

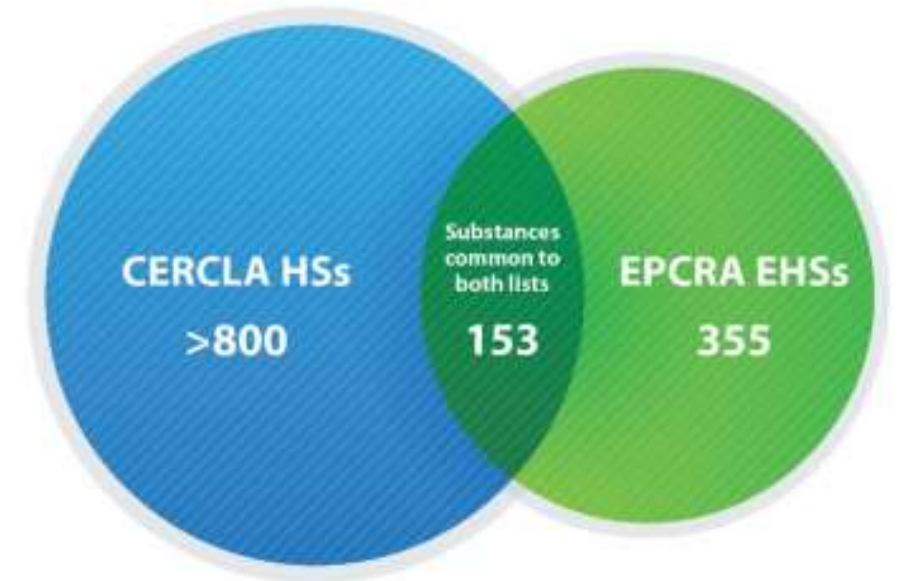
# EPCRA EHS Releases

40 CFR 355 Subpart C

- ▶ Applies to any facility:
  - at which a hazardous chemical is produced, used or stored, and
  - at which there is (off-site) release of a reportable quantity (RQ) of any EHS or CERCLA hazardous substance unless exempt per 40 CFR 355.31
- ▶ **Extremely Hazardous Substance List found in 40 CFR 355 Appendix A & B**



## Comparison of CERCLA HSs and EPCRA EHSs



Source: *Guide to EPCRA*, EPA Office of Chemical Safety & Pollution Prevention, EPA Office of Land & Emergency Management (Fall 2020)

# EPCRA – Key Definitions (1/2)



- ▶ *Environment* includes water, air, and land and the interrelationship that exists among and between water, air, and land and all living things
- ▶ *Extremely Hazardous Substance* means a substance listed in Appendices A and B of this part
- ▶ *Reportable Quantity* (RQ) means:
  - For any CERCLA hazardous substance, the quantity established in Table 302.4 of 40 CFR 302.4, for such substance
  - For any EHS, reportable quantity means the quantity established in Appendices A and B of this part for such substance
  - Unless and until superseded by regulations establishing a reportable quantity for newly listed EHSs or CERCLA hazardous substances, a weight of 1 pound shall be the reportable quantity

## Common EPCRA EHSs & RQs

Ammonia...	100 lbs
Chlorine...	10 lbs
Cyclohexylamine...	10,000 lbs
HCl (gas)...	5,000 lbs
Nitric Acid...	1,000 lbs
Phenol...	1,000 lbs
Sulfuric Acid...	1,000 lbs

# EPCRA – Key Definitions (2/2)



**Release** means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous chemical, EHS, or CERCLA hazardous substance.

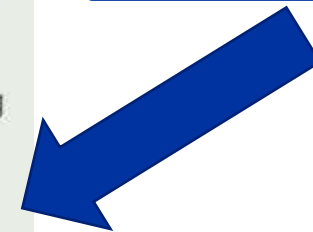
**Note the “onsite exemption”  
- found in 40 CFR 355.31**

**§ 355.31 What types of releases are exempt from the emergency release notification requirements of this subpart?**

You do not have to provide emergency release notification under this subpart for any of the following six types of releases of EHSs or CERCLA hazardous substances that occur at your facility:

- (a) Any release that results in exposure to persons solely within the boundaries of your facility.

**Key Exemption**





# EPCRA Releases

40 CFR 355.40(b)

- ▶ A follow-up written report due as soon as practicable (typically within 30 calendar days) that includes:
  - Oral Report info
  - Actions taken to respond to and contain the release
  - Known or anticipated health risks
  - Advice regarding medical attention for exposed persons
- ▶ Written report may be updated with new info



# **State Release & Spill Reporting:**

**EPA Region 7**

# Kansas Spill Reporting – KAR 28-16-27

- ▶ Emergency or accidental discharge of **sewage, substances, materials, or wastes (regardless of phase or physical state)** which are, or threaten to contaminate or alter any of the properties of the **waters of the state or pollute the soil** in a detrimental, harmful, or injurious manner or create a nuisance
- ▶ Notify KDHE immediately at 785-291-3333 (24-hour number)



# Iowa Spill Reporting

567 IAC 131



- Report any situation involving the actual, imminent, or probable spillage, leakage, or release of a hazardous substance onto the land, into a water of the state or into the atmosphere which **creates an immediate or potential danger to the public health or safety or to the environment.**
- ▶ Verbal report: Notify as soon as possible but not later than 6 hours after occurrence or discovery:
  - Department (515) 725-8694
    - ◆ IDNR will assign spill number
  - Local police department or office of sheriff
- ▶ Written report due within 30 days to IDNR

# Missouri Spill Reporting

*RSMO 260.500.6.b*



- ▶ Any release of hazardous substances at or above its reportable quantity, **per CERCLA 103 or EPCRA 304**
- ▶ Any petroleum product mentioned in the **oil spill reporting table**
- ▶ Any release of a hazardous waste reportable pursuant to sections **RSMO 260.350 to 260.430**
- ▶ Any release of a hazardous substance requiring immediate notice pursuant to 49 CFR 171 (Department of Transportation regulations)
- ▶ Verbal report to 24-hour Environmental Emergency Response Spill Line at 573-634-2436

# Nebraska Spill Reporting

*Title 126, Chapter 18*



- ▶ Immediate notification is required **regardless of the quantity** of an oil or hazardous substance release which occurs beneath the surface of the land or **impacts or threatens waters of the state or threatens the public health and welfare.**
- ▶ Oil spills must be reported if **25 gallons or more** is released
- ▶ Contact NDEE at 402-471-2186 if during business hours (8AM-5PM, M-F)
- ▶ If spill occurs outside of business hours, contact the Nebraska State Police at 402-479-4921
- ▶ After remediation is complete, send a written report to NDEE
- ▶ Report must be submitted within 15 days of completion of clean-up.

# Summary & Other Regulatory Implications



# Where can I find this information?

- ▶ Site-specific Spill Reporting Plan
- ▶ Storm Water Pollution Prevention Plan (SWPPP)
- ▶ Spill Prevention, Control, and Countermeasures (SPCC) Plan
- ▶ Facility Response Plan (FRP)
- ▶ Slug Control Plan
- ▶ Internet
  - Google it!
  - Agency websites
- ▶ Regulations
  - Code of Federal Regulations (CFR)
  - State regulations
  - POTW regulations (i.e., City Ordinances/Codes)

# Spill Summary

- ▶ Step 0 – be prepared. Know your materials, RQ's and who to report to **before a release**
- ▶ Step 1 – inform appropriate personnel, **make sure area is safe**
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- ▶ Additional considerations – confirm spill does not affect other reports or contents of spill plans

# Practical Advice

- ▶ Know the states and counties that your company does business in and keep an easy-to-reach file of the NRC, SERC, LEPC, and state agency emergency phone numbers
- ▶ Pre-screen all environmental response contractors in advance of an emergency situation
- ▶ If you are not sure whether an RQ has been met, it is always better to report the spill than being wrong and facing a civil enforcement action or criminal prosecution



# How does a spill affect other environmental programs?

## Ongoing Compliance

- Air emissions tracking
- Hazardous waste generator classification and tracking
- **Spill Plans**
  - ◆ FRP
  - ◆ SPCC Plan
  - ◆ SWPPP
  - ◆ Slug Control Plan

## Periodic Environmental Reports

- Air Reports
  - ◆ Emissions Inventory Reports
  - ◆ Semiannual Deviation/Monitoring Reports
  - ◆ Annual Compliance Certifications
- Annual/Biennial Hazardous Waste Reports
- **Toxics Release Inventory Reports**

# Questions?

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