Risk Management Program
Regulatory Updates

Laura Brewer, EPA

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Today’s Agenda

• Introductions
• Brief background
  • Emergency Planning and Community Right-to-Know Act (EPCRA)
  • Clean Air Act (CAA) 112(r)
• Common Region 7 inspection/case findings
• Status of changes to the Risk Management Program regulation
Union Carbide

- Bhopal, India December 2, 1984
  - Massive release of methyl isocyanate gas from Union Carbide pesticide plant
  - Killed 3,800 and injured tens of thousands
- Institute, West Virginia August 11, 1985
  - Cloud of methylene chloride and aldicarb oxime released (used in pesticide manufacture)
  - Six workers injured; > 100 residents hospitalized
EPCRA Goals

- Tailor a chemical emergency program to community needs
- Provide public with “right-to-know” attitude and information
- Included
  - Formation of emergency planning framework
  - Facilities report
    - Inventories (Tier II)
    - Releases that are occurring (accidental and routine)

*Industry involvement is key to a successful Local Emergency Planning Committee (LEPC)*
From Response to Prevention

Clean Air Act Amendments of 1990

- General Duty Clause - Section 112(r)(1)
  - No thresholds, no list of regulated substances
  - Facilities must identify hazards, design and maintain a safe facility to prevent releases, and minimize consequences of releases that do occur

- OSHA’s Process Safety Management (PSM) - 1992

- EPA’s Risk Management Program - Section 112(r)(7)
  - 40 CFR 68 regulation - 1999

- Established Chemical Safety Board (CSB) to investigate incidents
  - Became operational in 1998
Clean Air Act 112(r) Purpose – Prevent Accidents Which Cause Harm
Region 7 Risk Management Program Accidents 2004-2014

![Bar chart showing the number of accidents in different categories for each year from 2004 to 2014. The categories are Other, Food, and Ag.]

- **2004**: 8 (Other), 12 (Food), 10 (Ag)
- **2005**: 4 (Other), 13 (Food), 7 (Ag)
- **2006**: 14 (Other), 4 (Food), 11 (Ag)
- **2007**: 3 (Other), 18 (Food), 11 (Ag)
- **2008**: 6 (Other), 8 (Food), 10 (Ag)
- **2009**: 4 (Other), 13 (Food), 11 (Ag)
- **2010**: 3 (Other), 9 (Food), 9 (Ag)
- **2011**: 2 (Other), 11 (Food), 5 (Ag)
- **2012**: 3 (Other), 6 (Food), 12 (Ag)
- **2013**: 1 (Other), 12 (Food), 9 (Ag)
- **2014**: 1 (Other), 11 (Food), 11 (Ag)
Key to Accident Prevention

Utilize industry standards or recognized and generally accepted good engineering practices (RAGAGEP)
Elements of a Risk Management Program

• Management system

• Hazard assessment

• Prevention program
  • Level 1 – No potential impact to offsite receptors
  • Level 2 – Not program level 1 or 3
  • Level 3 – Facilities in listed NAICS codes or subject to OSHA PSM

• Emergency response planning

• Risk Management Plan (RMP) submission
  • Electronically submit to EPA via the Central Data Exchange
EPA Region 7 Risk Management Program Facilities

1.28 million tons of anhydrous ammonia
Quick Ways to Be Added to Our Inspection List

• Have accidents or releases, especially where
  • Several people need treatment or someone dies
  • Public is impacted
  • Significant off-site environmental impact
• Miss a five year Risk Management Plan (RMP) submittal update
• Have >10,000 pounds anhydrous ammonia and no RMP
Issues Cited Relating to Safety Information 40 CFR 68.48/68.65

• Utilize **current** Safety Data Sheet
• Document maximum inventory, temperatures, pressure, flow, and composition
• Document equipment specifications
• Ensure the process is designed in compliance with recognized and generally accepted good engineering practices (RAGAGEP)

Most common Region 7 citation – nearly 75% of facilities
Industry Standards Citations at Region 7 Facilities

Insufficient/Nonexistent Vehicle Barriers

Improper Saddle Configuration

Absent Bulkheads
Expired pressure relief valves or hoses

Tests or internal/external inspections not conducted timely
- Pressure vessels
- Underground piping
Issues Cited Relating to Compliance Audits 40 CFR 68.58/68.79

- Not completed every 3 years
  - Play inspector for a day
  - Consider changes at facility and in industry standards
  - Are you doing what you say you are doing?
    - Standard Operating Procedures
    - Maintenance
- Not certified

Second most common citation for Region 7 facilities
Is Your Facility Subject to the General Duty Clause Clean Air Act 112(r)(1)?

• Stationary source

• **No thresholds, no lists of regulated chemicals**
  • Produce, process, handle, or store a regulated substances or other extremely hazardous substance
  • “Other extremely hazardous substances”
    • Any chemicals listed in 40 CFR part 68
    • Any other substance which may due harm due to its toxicity or flammability

How Does a Facility Meet its General Duty Obligations?

• Identify hazards, design and maintain processes to prevent releases, minimize consequences of releases that do occur
OSHA’s Attempt to Redefine “Retail”

• July 25, 2015
  • Letter of interpretation announcing a redefinition of “retail”
  • New interpretation would have resulted in all facilities in NAICS codes 44 and 45 being covered under OSHA’s PSM Standard

• September 23, 2016
  • D.C. court ruled OSHA could not change the definition through a letter of interpretation

Agriculture facilities remain

Program Level 2 Risk Management Program facilities
40 CFR 68  Rule Modernization Time Line

• July 31, 2014 - Request for information
• November 4, 2015 – Small business advocacy review panel
• March 14, 2016 – Proposed rule published
• January 13, 2017 - Final rule published in federal register
  • Original Effective Date: March 14, 2017
• January 26, 2017 – Regulatory Pause
  • In accordance with the Presidential directive entitled “Regulatory Freeze Pending Review”
  • March 21, 2017 - New effective date
Major Changes to 40 CFR 68 Include

- Conduct root cause analysis
- Perform third party audits after accidents
- Hold public meeting within 90 days of an accident
- Complete annual notification exercises
- Coordinate annually with local emergency response agencies
- Facility information is made available to public upon request
- Changes made to investigations
- Revisions to Risk Management Plans
Important Notes About Risk Management Program Rule Change

- Compliance with emergency response coordination activities required by one year after the effective date

- Risk Management Plans need to reflect new and revised data elements by five years after the effective date

- Final rule and background
  https://www.epa.gov/rmp/final-amendments-risk-management-program-rmp-rule

- Questions and answers:
For More Information
EPA Chemical Risk Website - www.epa.gov/rmp

Your Speaker
Laura Brewer, brewer.laura@epa.gov, (913) 551-7767

Additional Program Contacts
Pat Reitz, CAA 112(r) & EPCRA non313 Program Coordinator reitz.patricia@epa.gov, (913) 551-7674
Terri Blunk, Outreach Coordinator blank.terri@epa.gov, (913) 551-7013