

More EPA and OSHA Chemical Safety Rules

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Chemical Safety Programs

- 1970 - OSHA & EPA Created
- July 1990 - OSHA Proposed Process Safety Management (PSM) Rules
- November 1990 - Clean Air Act Amendments include EPA Risk Management Plans (RMP) Program
 - Amendments Require EPA to work with OSHA PSM Program

February 1992 – Final PSM Rules

Patterned after DuPont's Process Hazard Management Program (established 1979)

OSHA PSM Program 29 CFR 1910.119

- Includes toxic, reactive, flammable, or explosive chemicals
- List of toxic and reactive chemicals and threshold quantities
- Flammable gases or liquids with flashpoints, below 100°F in a quantity above 10,000 pounds (exemptions for comfort heating, vehicle fuels, liquids in atmospheric tanks, retail facilities, oil and gas drilling and servicing, and unoccupied remote facilities)

PSM Program Components

- Refer to handouts
- Process Hazard Analysis (PHA) every five years
- Impartial PSM Compliance Audit every three years

1990 CAA Amendments - Section 112 (r)

- Authorizes EPA Accidental Release Prevention Rules
- RMPs
- Offsite Consequence Analysis
- EPA and OSHA Coordination

- 1/19/92 EPA Proposed RMP Chemicals
- 2/24/92 OSHA PSM Rules Final
- 1/13/94 EPA RMP Rules Final

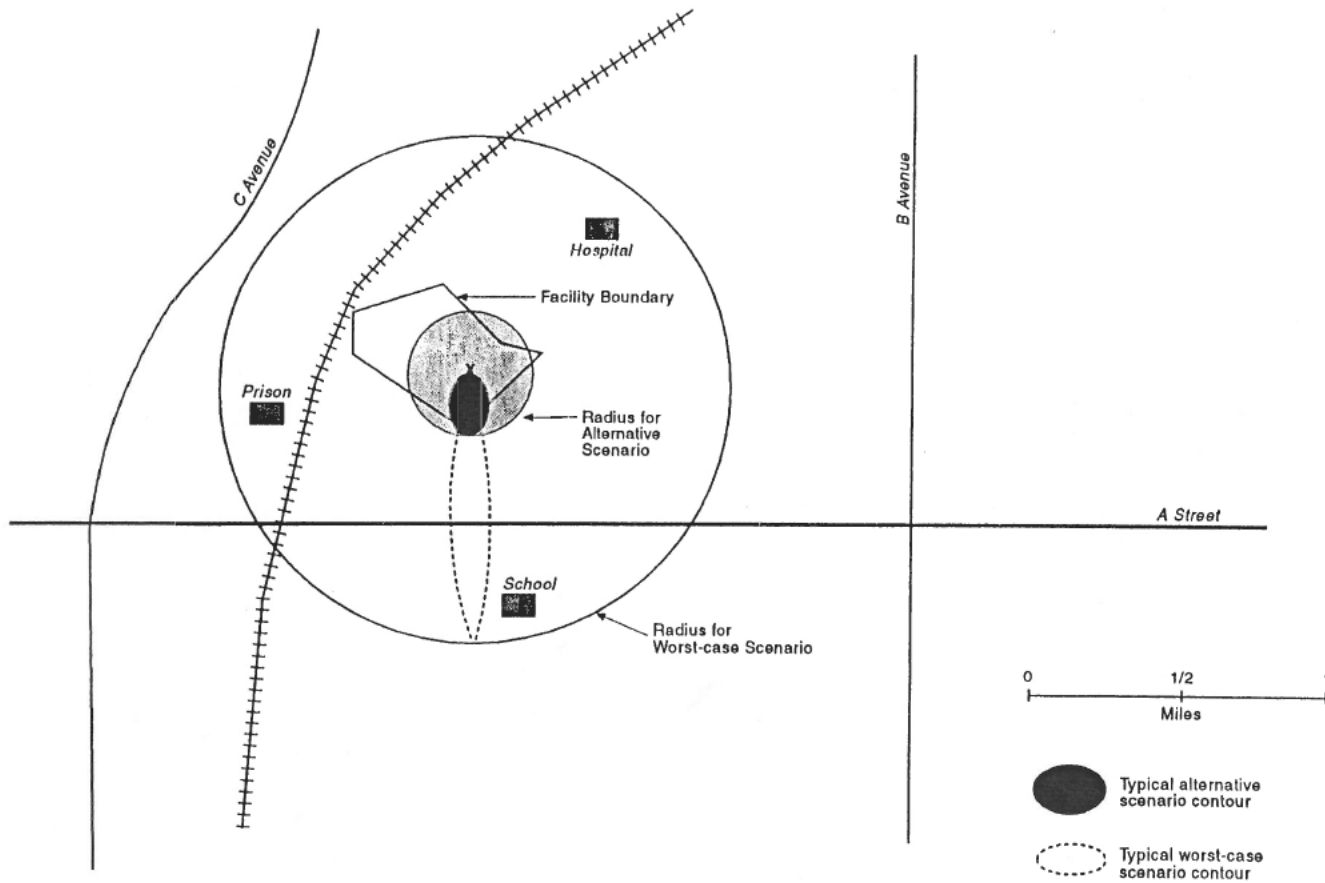
RMP Chemicals

- List of Toxic Substances
- List of Regulated Flammable Substances

The Risk Management Plan

- Hazard Assessment (every five years)
- Worst-Case Release Scenario Analysis
- Alternative Release Scenario Analysis
- Offsite Consequence Analysis

Figure 2-2. Simplified Presentation of Worst-Case and Alternative Scenarios on a Local Map



RMP Accident Prevention Programs

- Program 1 – Worst-case release does not impact a public receptor and no significant accidental release within five years
- Program 2 – All others except Program 3 (mini PSM program)

RMP Accident Prevention Programs

- Program 3 – Processes which do not qualify for Program 1 and if the process:
 - a) Is subject to OSHA PSM rules; or
 - b) Is on a list of NAICS codes including:
 - Pulp and Paper
 - Petroleum Refineries
 - Fertilizer Manufacturing
 - Pesticide Manufacturing
 - Chemical Manufacturing

1999 Chemical Safety Information Site Security and Fuels Regulatory Relief Act (112r Amendments)

- Defined Public Access to Worst-Case and Alternative Release Scenarios
- Required Public Meetings for Programs 2 and 3 RMP Facilities
- Removed Flammable Fuels at Retail Facilities for RMP Coverage

RMP Inspections (ECCI Experiences)

- EPA Use of Contract Inspectors
- 21-Page Inspection Checklist
- Program 3 Inspections Become PSM Program Inspections

Arkansas RMP Picture

- 223 facilities listed on websites
- 30% are water/wastewater utilities
- 30% have been deregulated
- 53 accidental releases from 28 facilities
- 57% of reported releases are from two facilities

Changes to Both Programs

August 1, 2013

- Executive order to improve chemical facility safety and security
- Expand EPA RMP and OSHA PSM programs as appropriate to reduce the risks associated with hazardous chemicals

Changes to Both Programs

July 31, 2014

- EPA publishes request for information related to potential RMP changes
- Adding substances
- Expand mechanical integrity
- Require third party audits
- Expand mandatory Program 3 NAICS codes

Changes to Both Programs

June 5, 2015

- OSHA adopts EPA's 1% concentration threshold in mixtures

July 22, 2015

- OSHA limits the PSM retail exemption to NAICS 44-45 (retail), NAICS 42 wholesale and NAICS 48-49 transportation and warehousing exemptions from PSM disappear

Changes to Both Programs

October 20, 2015

- OSHA provides the retail facilities enforcement discretion through July 22, 2016

November 24, 2015

- EPA publishes extension on compliance date for RMPs for retail facilities until January 22, 2017

Changes to Both Programs

November 4, 2015

The small business advisory panel is formed for the executive order to improve chemical safety and security.

Panel membership includes:

- 32 Small Business Representatives
- EPA's Director of Emergency Management Implementation
- OMB's Administrator of Regulatory Affairs
- SBA's Chief Counsel for Small Business Advocacy

Changes to Both Programs

December 23, 2015

- OSHA publishes new interim enforcement policy to not cite retail facilities for PSM violations through September 30, 2016

Changes to Both Programs

February 19, 2016

- Small Business Advisory Panel submits recommendations to EPA Administrator on RMP changes under the Executive Order

Changes to Both Programs

Panel Recommendations:

- I. Audits – Limit independent criteria to individuals rather than entire companies
- II. Root Cause Analysis – Do not require for near misses, only for reportable releases

Changes to Both Programs

Panel Recommendations (continued):

- III. Local Coordination – Classify a “good faith effort” to coordinate as acceptable
- IV. Emergency Response Exercises – participation by local responders should not be required

Changes to Both Programs

March 14, 2016

- EPA proposed RMP rule changes
- Root cause analysis required as part of incident investigations
- Independent third-party auditors are required to complete a compliance audit after a reportable release

Changes to Both Programs

March 14, 2016 (continued)

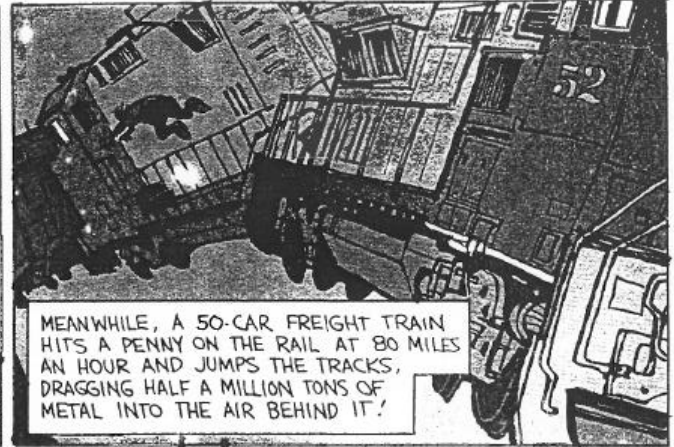
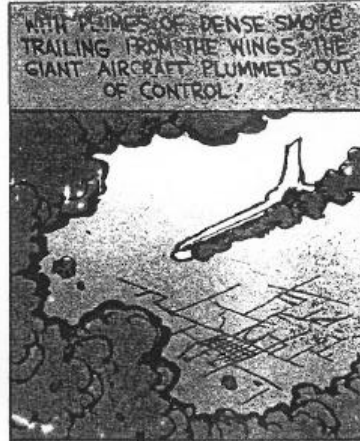
- Requirements to coordinate with local emergency response agencies at least once per year and conduct annual emergency notification exercises
- Facility chemical hazard information required to be provided to the public on a facility website or through local public meetings following a reportable release

EPA Estimated Number of Affected Facilities 12,542

- Agricultural chemical distributors/wholesalers
- Food and beverage manufacturing
- Chemical manufacturing
- Warehouse and storage

EPA Recognizes the OSHA Retail Exemption Interpretation will result in “many” agricultural chemical distributors and warehouses who sell bulk ammonia will no longer be exempt from PSM requirements and that RMP Program 3 requirements will also apply

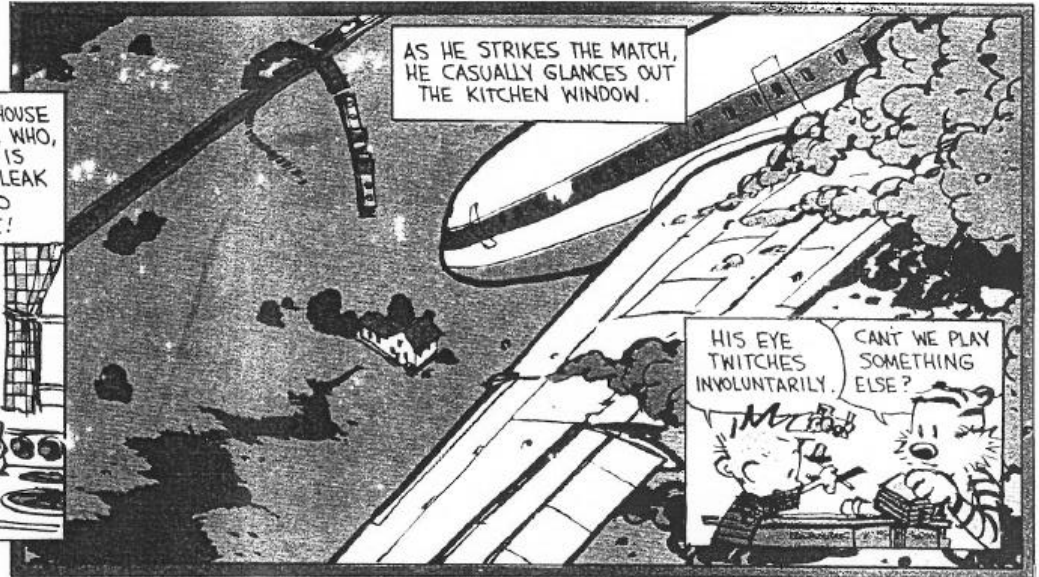
Worst-Case Scenario



calvin and hobbes by WATSON

IN A FREAK COINCIDENCE, BOTH THE JET AND THE TRAIN ARE CONVERGING ON *ONE SPOT*...WHERE TECTONIC PLATES IN THE EARTH'S CRUST HAVE JUST BEGUN TO SHIFT!

THAT SPOT IS THE HOUSE OF FARMER BROWN, WHO, AT THIS MOMENT, IS UNAWARE OF A GA' LEAK AS HE ATTEMPTS TO LIGHT HIS STOVE!



HIS EYE TWITCHES INVOLUNTARILY. CAN'T WE PLAY SOMETHING ELSE?



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