Risk Management Modernization Rule

STATE/LOCAL CONSULTATION

MAY 4, 2016

Agenda

Background

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State/local government impact

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Background

On August 1, 2013, President Obama issued Executive Order *(EO) 13650: Improving Chemical Facility Safety and Security* following several catastrophic chemical facility incidents in the United States

- Focus is to reduce risks associated with hazardous chemicals to owners and operators, workers, and communities by enhancing the safety and security of chemical facilities

The keys areas of emphasis under the EO are:

- Strengthening community planning and preparedness,
- Enhancing federal operational coordination,
- Improving data management, and
- *Modernizing policies and regulations*
  - EPA issued a request for information (RFI) on July 31, 2014, and
  - Convened a Small Business Advocacy Review panel on November 4, 2015

Existing regulatory framework

The Risk Management Program is one of several programs that address chemical facility safety and security:

- OSHA Process Safety Management (PSM) standard - Management program for highly hazardous chemicals aimed at preventing and minimizing occupational/onsite exposure
- Emergency Planning and Community Right-to-know (EPCRA) requirements - Local emergency planning and preparedness, emergency release notification, community right-to-know: provision of hazardous chemical storage inventory and toxic chemical release inventory to the community and first responders
- CAA Section 112(r)(1) general duty clause - Facility owner/operators have a general duty to prevent and minimize releases
- Chemical Facility Anti-terrorism Standards (CFATS) - DHS security requirements
- ATF requirements for explosives
- State/local requirements (e.g., NJ, Contra Costa County, CA regulations)

Risk Management Program rule

- Promulgated in 1996 under Section 112(r) of the Clean Air Act Amendments
- Applies to all stationary sources with processes that contain more than a threshold quantity of a regulated substance (approx. 12,500 sources)
  - Includes a wide variety of industry sectors including: refining, chemical manufacturing, energy production, ammonia refrigeration, water treatment, bulk storage, chemical distribution, agricultural retail, and chemical warehouses
- Requires the source to develop a Risk Management Plan (RMP)
  - Addresses elements aimed at preventing accidental releases and reducing the severity of releases that occur
  - Prepare and submit an RMP to EPA at least every 5 years
- Covered processes fall within one of three prevention program levels based on:
  - The potential for offsite consequences from a worst-case accidental release;
  - Accident history; and
  - Regulation under OSHA PSM

Program levels

PROGRAM 1
642 Facilities

Processes that would not affect the public in the event of a worst-case release & no accidents with offsite consequences in the last five years

- Small quantities of flammables, less volatile toxics
- Limited accident prevention including hazard assessment and emergency response requirements

PROGRAM 2
1,272 Facilities*

Processes not eligible for Program 1, not subject to Program 3

- Mainly water & wastewater treatment in Federal OSHA states
- Additional hazard assessment, accident prevention, management, and emergency response requirements

PROGRAM 3
10,628 Facilities*

Processes subject to OSHA's PSM or in one of 10 specified NAICS codes

- Larger facilities or those with complex processes
- Examples include: refining, chemical manufacturing, energy production, water treatment
- Covered by OSHA's PSM accident prevention program and include additional hazard assessment, management, and emergency response requirements

*Analysis reflects OSHA change to PSM retail exemption issued July 2015. See OSHA PSM Retail Exemption Policy at: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=2_9528

Program level comparison

PROGRAM 1	PROGRAM 2	PROGRAM 3
• Worst case analysis • 5-year accident history • Document management system	• Worst case analysis • 5-year accident history • Document management system	• Worst case analysis • 5-year accident history • Document management system
Prevention Program		
Certify no additional prevention steps needed	• Safety information • Hazard review • Operating procedures • Training • Maintenance • Incident investigation • Compliance audit	• Process safety information • Process hazard analysis (PHA) • Operating procedures • Training • Maintenance • Incident investigation • Compliance audit • Management of change • Pre-startup review • Contractors • Employee participation • Hot work permits
Emergency Response Program		
Coordinate with local responders	Develop plan/program and coordinate with local responders	Develop plan/program and coordinate with local responders

Overview of Proposed Revisions

	P1	P2	P3
Third-party audits (applies to the next scheduled audit after an accident) [Estimated 150 accidents/year]		√	√
Incident Root Cause Analysis (only for facilities with accidents/near misses) [Estimated 300 incidents/year]		√	√
Safer Alternatives Analysis (applies to a subset of P3 in certain NAICS codes*) [Estimated 1,692 Facilities/4,308 Processes]			√
Coordinating Emergency Response Program Requirements with Local Responders		√	√
Emergency Response Exercises		√	√
Information Sharing	√	√	√

**Applies to paper manufacturing, petroleum and coal products manufacturing, and chemical manufacturing facilities*

Third-party compliance audits

*Proposed revisions require all P2 and P3 facilities to conduct a third-party audit in lieu of a compliance audit following an RMP reportable accident.**

- Must be completed within 12 months of an RMP reportable accident or within 3 years of completion of the previous compliance audit, whichever is sooner.
  - Note that this audit and its schedule are independent of the incident investigation requirement and its schedule.
- Same scope as the current compliance audit provisions (i.e., audit prevention program implementation for all covered processes).
- EPA is proposing criteria for auditor independence, impartiality, and competence.

* ***RMP reportable accident*** means an accidental release meeting the criteria in §68.42(a) from a covered process at a stationary source (i.e., includes accident with deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage).

Incident investigations and root cause analysis

Proposed revisions (Applies to P2 and P3):

- Revise incident investigation requirements to:
  - Clarify that it applies to a catastrophic release (i.e., an RMP reportable accident) or an incident that could reasonably have resulted in a catastrophic release (i.e., a near miss)
  - Require a root cause investigation (i.e., identify the fundamental reasons why an incident occurred and the correctable failures in management systems)
  - Require a report be completed within 12 months (unless extension approved, in writing, by implementing agency)
- Clarify the definition of catastrophic release to be consistent with reportable accidental release (i.e., an accident with deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage)
- Add a definition of root cause to mean a fundamental, underlying, system-related reason why an incident occurred that identifies correctable failure(s) in management systems

Safer technology and alternatives analysis (STAA)

Proposed revisions to require the source to conduct a STAA and determine feasibility of inherently safer technologies and designs considered:

Would apply to P3 facilities in NAICS codes:

- 322 (paper manufacturing),
- 324 (petroleum and coal products manufacturing), and
- 325 (chemical manufacturing)

The STAA would consider, in the following order of preference:

- Inherently safer technology (IST) or design,
- Passive measures,
- Active measures, and
- Procedural measures

ISTs are those measures that reduce or eliminate the hazards and include minimization, substitution of less hazardous chemical, moderation of the process, and simplification of the process/procedures

Owner/operator would not be required to implement any prescribed technology; however EPA is requesting comment on whether the rule should require implementation

EPA is proposing several definitions including feasible

Local coordination

Proposed revisions require all P2 and P3 facilities to:

- Coordinate annually with the Local Emergency Planning Committees (LEPCs)/emergency responders and ensure response capabilities exist
- Document coordination
- LEPCs/emergency responders can request source to prepare an emergency response (ER) program

What is "coordination"?

- Facility and local responders meet and discuss response needs, capabilities, and roles:
  - Determine resources needed to appropriately respond to regulated substance releases at facility
  - Determine resources available from facility and local responders
  - Identify capability gaps and develop plans to address
  - Decide whether facility or local responders will respond to releases of regulated substances
  - Assign response action roles and responsibilities

What are the outcomes of "coordination"?

- *"Non-responding" source* – coordination indicates that local public response capabilities are adequate to respond, appropriate notification mechanisms are in place, and local authorities have not requested that owner develop ER program
- *"Responding" source* – coordination indicates that local public response capabilities are not adequate to respond, or local authorities request that owner develop ER program
  - Facility must develop an emergency response program following § 68.95

Exercises

Proposed revisions: Require facilities to test their emergency response program through notification, tabletop, and field exercises (Applies to all P2 and P3)

- Require "responding" and "non-responding" facilities to conduct an annual notification exercise
- Require "responding" facilities to conduct the field and tabletop exercises and invite local responders to participate:

Field exercise

- *Frequency*: Every 5 years and within one year following a reportable accident
- *Scope*: Test procedures for notification, evacuation, medical treatment, communications systems, emergency response personnel mobilization (including contractors, if appropriate), coordination with local responders, equipment deployment, and other actions identified in ER program as appropriate

Tabletop exercise

- *Frequency*: Annually except in the year of a field exercise
- *Scope*: Same as field exercise without actual mobilization of personnel & equipment

An exercise evaluation report must be completed within 90 days of each exercise.

Information sharing

Proposed revisions add new disclosure elements for all facilities:

- To LEPCs and emergency responders
- To general public
- Public meetings within 30 days of an RMP reportable accident

The information should be conveyed without revealing CBI or trade secret information

Any summary information should adequately explain the findings, results, or analysis being provided while avoiding technical jargon

Information sharing-LEPC

Require summaries of chemical hazard information to be provided to LEPC or local emergency response official, upon request:

- Information on RMP regulated substances−names and quantities of regulated substances held in a process
- Five-year accident history information (reported under §68.42)
- Compliance audits
- Incident investigation reports (with root cause findings)
- IST implemented or planned to be implemented, if applicable
  - No requirement to implement, but if a source does implement ISTs it is useful information for LEPCs/first responders to have in their local emergency planning efforts
- Exercises, including schedules and reports

Information sharing-public

Require chemical hazard information to be provided in an easily accessible manner (i.e., posting on a company website, public file sharing website, or social media website, or placing a file at a public library or local government office)

- Names of RMP regulated substances held in a process
- Safety data sheets (SDS) for all RMP regulated substances located at the facility
- Emergency response program summary information
- Five-year accident history information reported under §68.42
- Exercise summary information
- LEPC contact information

Information sharing- public meetings

Proposed revisions would require a public meeting to be held within 30 days of an RMP reportable accident. The meeting would address:

- Information about the accident;
- Other relevant chemical hazard information (such as what would be provided to the public)

Can be held in concurrence with a regularly scheduled LEPC meeting that is open to the public

Facilities must notify the community about the public meeting and can use various methods including:

- Publishing a notice in a local paper,
- Social media, and/or
- Fliers in public places, like the local library

Estimated unit costs (in actual $)*

Type of Cost	Estimated Compliance Cost*	Notes
Third-party Compliance Audits	$18,000 to $49,000	Applies to facilities with P2 and P3 processes after an RMP reportable accident.
Incident Investigation Root Cause Analysis	$2,000 to $5,000	Applies to facilities with P2 and P3 processes only after an RMP reportable accident or a near miss.
STAA	$29,000 to $49,000 per process	Applies to facilities in select NAICS codes with P3 processes. Occurs once every 5 years.
Coordination with local responders	$300 to $400	Applies to P2 and P3 facilities. Occurs annually.
New Responder Costs *(estimated costs that may apply if a current non-responding facility becomes a responding facility as a result of local coordination activities)*		
Develop Plan	$2,000 to $8,000	Initial year costs. New responders will also be subject to exercises costs below.
Train employees	$11,000 to $65,000	
Purchase equipment	$50,000 to $60,000	
Emergency Response Exercises *(P2 and P3)*		
Notification drills	$100 to $200	Applies to both responders and non-responders. Occurs annually.
Tabletop exercises	$5,000 to $24,000	Applies to responding facilities. Tabletop exercises occur annually except in the year of a field exercises which occurs once every five years.
Field exercises	$8,000 to $66,000	
Information Sharing *(All RMP facilities)*		
LEPC/TEPC/local responders	$4,000 to $10,000	These ranges represent the combined costs for all required reports. Costs will vary on an annual basis upon occurrence of regulatory requirements (e.g., compliance audits, incident investigations).
Public	$200 to $1,600	Update annually.
Public meetings	$2,000 to $4,000	After an RMP reportable accident.

* Sources for estimates include technical literature, public comments, other similar programs, RMP database, and EPA labor models

How Could This Proposed Rule Impact State and Locals?

Governments could be impacted by this proposal in 2 ways:

- **As a local government** when conducting emergency response or emergency preparedness activities under EPCRA
  - LEPCs or local emergency responders would coordinate with RMP-regulated facilities for community planning and preparedness activities
  - The LEPC or local emergency response officials would be able to request specific information from the facility for planning purposes
  - The local emergency responders may be requested to participate in exercises by RMP-regulated facilities
- **As an owner or operator of an RMP-regulated facility**

LEPCs can also request RMP-regulated facilities to develop an emergency response program as described in Subpart E of the rule (40 CFR 68.95)

Non-federal Emergency Response Entities Under EPCRA

SERCs	TERCs	LEPCs	TEPCs
State Emergency Response Commissions	**Tribal Emergency Response Commissions**	**Local Emergency Planning Committees**	**Tribal Emergency Planning Committees**
SERCs are appointed by the governor of each state to establish LEPCs.	TERCs are established by the Chief Executive Officer of the tribe. TERCs have the same responsibilities as SERCs in the Tribal region.	LEPCs are established by the SERC in each state.	TEPCs are established by the TERC. They have the same responsibilities as LEPCs in the tribal region.
Responsibilities • Establish and supervise LEPCs / TEPCs • Review local emergency plan • Establish mechanisms to collect hazardous chemical inventories and information on chemical releases from facilities • Establish procedures to process public information requests		**Responsibilities** • Prepare and review chemical emergency response plan • Coordinate responses to emergency releases, serving as a focal point in the community for information and holding discussions about chemical risks in the community • Establish procedures to process public information requests	

Additional resources

RMP proposed rule webpage: http://www.epa.gov/rmp/proposed-changes-risk-management-program-rmp-rule

Submit comments: www.regulations.gov

Docket ID# EPA-HQ-OEM-2015-0725

Comments close May 13, 2016

EO activities under EO 13650: http://www.epa.gov/rmp/executive-order-improving-chemical-facility-safety-and-security

EO 13650: https://www.osha.gov/chemicalexecutiveorder/index.html

Report for the President: *Actions to Improve Chemical Facility Safety and Security–A Shared Commitment*: https://www.osha.gov/chemicalexecutiveorder/final_chemical_eo_status_report.pdf

Questions?