

United States Environmental Protection Agency

EPA ACTIVITES UNDER EO 13650: Proposed Changes to the Risk Management Program (RMP) Rule Questions & Answers

1. Why is EPA proposing amendments to the RMP rule?

Responding to recent catastrophic chemical facility incidents in the US, President Obama issued <u>Executive Order (EO) 13650: Improving Chemical Facility Safety and Security</u> on August 1, 2013. The focus of the EO is to reduce risks associated with hazardous chemical incidents. Reducing risk to owners and operators, workers, and communities may be achieved by enhancing the safety and security of chemical facilities. EO 13650 directed the federal government to:

- Improve operational coordination with state, tribes and local partners
- Enhance federal agency coordination and information sharing
- Modernize policies, regulations and guidance, and
- Work with stakeholders to identify best practices

EPA is proposing to revise its RMP regulations to improve chemical process safety, assist local emergency authorities in planning for and responding to accidents, and improve public awareness of chemical hazards at regulated facilities.

2. How is EPA's proposal related to efforts to implement EO 13650?

The EO established a Workgroup comprised of key federal agencies responsible for chemical facility safety and security. Led by the lead Tri-Agencies for implementing the EO (EPA, the Department of Homeland Security (DHS) and the Occupational Safety and Health Administration (OSHA), (aka, the EO Working Group), the Obama Administration solicited feedback on issues related to chemical facility safety and security. Multiple listening sessions, Webinars, and meetings with stakeholder groups were conducted. Through these outreach methods, along with attending stakeholder conferences and collecting information through public dockets, over 25 states and nearly 1,800 participants across the country contributed feedback.

The EO Working Group reviewed existing programs, recommendations from the safety and security communities, and feedback from the EO listening sessions, as well as investigative reports of major incidents. From this review, the EO Working Group published a preliminary list of options for improving chemical facility safety and security for stakeholder comment. A Progress Update was released in February 2014:

https://www.osha.gov/chemicalexecutiveorder/EO_ProgressUpdate022014.pdf

The May 2014 Progress Report for the President, <u>Actions to Improve Chemical Facility Safety and</u> <u>Security – A Shared Commitment</u>, summarized the federal government's progress. Modernizing the Risk Management Program (RMP) rule was identified as one of the top priorities to improve chemical facility safety and security. The report committed EPA to conduct a request for information (RFI) to gather further input and begin the regulatory process to modernize RMP.

On July 31, 2014, EPA issued an RFI to update the RMP rule. The RFI sought comment on potential revisions to modernize EPA's regulations, guidance, and policies as required under EO 13650. The public comment period closed October 29, 2014. The comments received can be seen in the Regulations.gov docket, <u>EPA-HQ-OEM-2014-0328</u>.

Prior to convening a Small Business Advocacy Review (SBAR) Panel consisting of SBA, OMB and EPA, EPA conducted outreach with small entities that will potentially be affected by these regulations. In 2015, EPA invited SBA, OMB, and 32 potentially affected small entity representatives to a conference call and solicited comments from them on preliminary information sent to them. EPA shared the small entities' written comments with the SBAR Panel as part of the Panel's convening document. After the SBAR Panel was convened, the Panel distributed additional information to the small entity representatives (SERs) for their review and comment and in preparation for another outreach meeting. The Panel received written comments from the SERs in response to the discussions at this meeting and the outreach materials. These comments and concerns have been reflected in the proposed RMP rule. The SBAR Panel Report, which contain comments received and panel recommendations, can be found at docket EPA-HQ-OEM-2015-0725 in the Federal eRulemaking Portal: http://www.regulations.gov. Please note that the docket will not be accessible until the RMP proposed rule is published in the Federal Register.

Thus, EPA's RMP proposal, reflects substantial input from stakeholders on the elements of the proposed rule. This input in advance of EPA's proposed rule is consistent with the commitment made in the EO to actively engage stakeholders.

3. What are the impacts from accidents at RMP facilities?

The RMP regulations have been effective in preventing and mitigating chemical accidents in the United States and protecting human health and the environment from chemical risks and hazards. However, while numerous chemical plants are operating safely, in the last 10 years, RMP data show that there have been more than 1,500 reportable accidents, about 500 of which had off-site impacts. These accidents are responsible for nearly 60 deaths, some 17,000 people were injured or who sought medical treatment, almost 500,000 people evacuated or sheltered-in-place and more than \$2 billion in property damages. These impacts highlight the importance of reviewing and evaluating current regulatory requirements and applying lessons learned to continuously advance process safety. The regulatory changes being proposed are a major step in improving chemical safety and addressing these impacts.

4. What requirements are included in the proposal?

EPA is proposing updates to the RMP rule to improve chemical facility risk management. These changes will modernize the rule and incorporate comments received from the Request for Information (RFI) and lessons learned from RMP implementation.

The Notice of Proposed Rulemaking includes the following elements:

- *Third Party Audits* This provision would require a facility that has an RMP reportable accident to use an independent third party to conduct its next scheduled audit. The proposal contains criteria for auditor competence and independence.
- *Incident Investigations and Root Cause Analysis* The proposal would require an incident investigation after any incident that resulted in or could have resulted in a catastrophic release. The facility would identify the root cause of (i.e., the fundamental reason for) the incident and submit a report.
- *Safer Technology Alternatives Analysis* Program 3 facilities in three industry categories (paper manufacturing, coal and petroleum products manufacturing, and chemical manufacturing) would be required to evaluate safer technology and alternatives when conducting the process hazard assessment already required by the current RMP rule.
- *Local Coordination* The proposal would increase communication with Local Emergency Planning Committees (LEPCs) by requiring annual coordination by facilities with LEPCs to clarify response needs, emergency plans, roles, and responsibilities.
- *Emergency Response Exercises* The proposal would require responding facilities to conduct annual tabletop emergency response exercises with a field exercise every 5 years. All facilities would perform annual notification exercises.
- *Information Sharing to LEPC's* The proposal would add new disclosure requirements for facilities to LEPCs. LEPCs would receive Incident Investigation Reports, a summary of inherently safer technology adopted according to a Safer Technology Alternatives Analysis, and emergency response exercise reports. The public would receive chemical hazard information, summaries of emergency response exercises, and LEPC contact information.
- *Increasing Access to Existing Public Information* The proposal seeks input on increasing the public's access to existing public information to assist participation in accident preparedness planning, including chemical hazard information, summaries of emergency response exercises, and LEPC contact information.

The proposal reflects commitments made in the Report for the President regarding modernizing the RMP requirements to address chemical facility safety.

5. Has EPA discussed these proposed changes with stakeholders or other federal agencies?

EPA has ongoing communications with implementing agencies about the RMP program and rules. Several of the proposed changes reflect feedback received from those stakeholders based on their experience in implementing and enforcing the RMP rule and from lessons learned after incidents have occurred at regulated facilities.

EPA will continue to conduct outreach to encourage parties to submit comments on the proposal.

6. How will EPA engage stakeholders regarding the proposed RMP rule?

EPA plans to hold a public hearing to allow states and local officials, regulated entities, the public, and other stakeholders to attend and provide comment on the RMP proposed rule. Information about the date, times, location, and procedures for this public hearing can be found in the RMP proposed rule. Registration of the public hearing will be open when the RMP proposed rule is published in the Federal Register.

7. How do I comment on this proposed regulation?

Anyone can comment on the proposal by submitting written comments. Written comments may be submitted online, via the docket EPA-HQ-OEM-2015-0725 in the Federal eRulemaking Portal: <u>http://www.regulations.gov</u>. Please note that the docket will not be accessible until the RMP proposed rule is published in the Federal Register. The comment period will be 60 days.

To maximize the effectiveness of your comments, please consider the following when providing comments:

- Organize all comments by topic as raised in the proposal
- Provide specific rationale and data for any recommendations for changes to the proposed provisions
- Provide specific facility-level cost information for any provisions
- The proposal raises questions about alternative approaches. Any suggested alternatives need to be clearly defined, with accompanying specific rationale, so that we could act on it in a final rule. Mere suggestions of an alternative cannot be the basis for finalization.
- Submit comments as early as possible in the comment period.

You may also submit comments at the public hearing described above. If you have questions about how to comment on this rule, please go to <u>http://www.epa.gov/dockets</u>.

8. Is EPA proposing requirements for a Safer Alternatives Analysis?

The current RMP regulations requires a facility owner or operator with a Program 3 process (a process that poses a greater potential impact should a release occur) to conduct a Process Hazard Analysis (PHA) to identify, evaluate, and control process hazards involving regulated substances. However, the PHA does not currently require the owner or operator to evaluate safer technologies and alternatives (including inherently safer technologies (IST)) that could prevent or minimize the effects of chemical accidents.

EPA is proposing a modification to the rule to require the owners or operators of a subset of facilities with Program 3 processes to analyze potential safer technologies and alternatives and evaluate the feasibility of implementing any inherently safer technologies considered. However, as noted in the Report for the President, the proposed requirement would not mandate implementation of a specific technology, design, or process selection by chemical facility owners or operators.

The subset of facilities being proposed to be included in the modification are Program 3 facilities in NAICS codes 322 (paper manufacturing), 324 (petroleum and coal products manufacturing), and 325 (chemical manufacturing) because these facilities operate complex processes and had high accident rates during the 10-year period analyzed for this proposed rule (2004-2013).

In addition, the EPA is requesting comment on a number of alternatives including:

- Whether the proposal to limit the STAA provisions to Program 3 regulated processes in NAICS 322, 324, and 325 is appropriate and/or whether batch toll manufacturers should be exempt from this requirement.
- Whether the Agency should further limit applicability of the STAA provisions to apply only during the design stage of new processes or facilities.
- Whether to require facility owners or operators to implement any of the feasible options identified in the facility's analysis and what factors EPA should consider when determining whether to require implementation of feasible options.
- Whether either EPA or a third-party should create a "clearinghouse" of safer technology and alternatives that allow source owners or operators to share useful information and/or consult to identify technologies to evaluate for their process.
- Whether this provision should be eliminated.

9. Why is EPA Proposing Requirements for Third Party Audits?

In previous accident investigations, both EPA and the Chemical Safety Board have identified a lack of a rigorous audit, which failed to identify key safety deficiencies, as a contributing factor at facilities which have performed compliance audits and also had accidents, including the BP Texas City refinery and Citgo Corpus Christi refinery accidents. Some research indicates that without sufficient independence, audit reports are more lenient or more likely to fail to identify problems or violations. For these reasons, and only for Program 2 or Program 3 facilities that have a RMP reportable accident, EPA is proposing to require an audit by an independent third party who meets competency and independence criteria described in the proposal.

In addition, the EPA is requesting comment on a number of alternatives including:

- Whether to eliminate or further limit applicability of the third-party audit provision
- Whether there are other criteria that could require RMP facilities to perform third-party compliance audits
- Whether the requirement that owners and operators of RMP facilities be responsible for determining and documenting the competency, independence, and impartiality of their auditors is appropriate
- Whether to require additional accreditation criteria for auditors and how to best establish and structure an accreditation program within the context of the RMP rule
- Whether the proposed auditor independence criteria are appropriate and sufficient
- Whether to eliminate the independence requirement, in its entirety, and retaining existing requirement for compliance audits

- Whether to delete the current Professional Engineer (PE) requirement and considering other independent accreditation for third-party auditors which also carry ethical requirements, such as Certified Safety Professionals (CSP), Certified Industrial Hygienists (CIH), Certified Fire Protection Specialists (CFPS), Certified Hazardous Materials Managers (CHMM), Certified Professional Environmental Auditors (CPEA) or Certified Process Safety Auditors (CPSA)
- Whether to increase owner or operator flexibility for the proposed independence and competence criteria when third-party auditors who meet the proposed independence and competence criteria are not available
- The impacts a third-party auditor may have on a facility's security and the measures that should be included in the rule provision to protect facilities from terrorism or release of Confidential Business Information (CBI) from a third-party auditor

Today's proposal is consistent with other EPA, federal, and state requirements that require third party audits or third party compliance verification.

10. Why is EPA Changing Incident Investigation Requirements?

EPA is strengthening the Incident Investigation provisions by requiring identification of the underlying cause of an incident (the "root cause") as a critical basis to prevent future catastrophic releases.

As part of this effort, EPA is also proposing to clarify the definition of catastrophic release and clarifying which near miss incidents must be investigated, which has been misunderstood and misinterpreted. The RMP rule (see <u>40 CFR 68.60(a)</u> and <u>40 CFR 68.81(a)</u>) currently requires investigation of an incident that "...resulted in, *or could reasonably have resulted in* a catastrophic release." EPA is proposing to modify the definition of catastrophic release to be identical to reportable accidents under the five year accident history requirement. A catastrophic release would mean a major uncontrolled emission, fire, or explosion, involving one or more regulated substances that results in deaths, injuries, or significant property damage on-site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.

11. Why is EPA proposing to change local coordination requirements?

Currently the RMP rule requires that all Program 2 and Program 3 facilities develop an emergency response plan unless (1) the community emergency response plan addressed the toxic chemicals at the facility, and (2) the facility has coordinated response plans for flammable materials with the local fire department. Instances of poor coordination between RMP facilities and local planners and responders have been identified by States, local communities, and first responders to EPA and by CSB in accident investigations. States and locals have indicated that some RMP facilities do not adequately engage in meaningful coordination with Local Emergency Planning Committees (LEPCs) and local emergency responders, leaving the local planners and responders unaware of, or unprepared for, the chemical risks associated with the facility.

12. What changes is EPA proposing regarding local coordination requirements?

EPA is proposing to require coordination between facilities and local emergency responders to occur annually. Additionally, the proposal requires documentation of coordination efforts, including documentation of:

- Names and contact information for individuals involved
- Dates of coordination
- Conclusions
- Any next steps identified

In addition, the EPA is requesting comment on a number of alternatives including:

- Whether to require owners and operators of all stationary sources with Program 2 or Program 3 processes to comply with the full emergency response program requirements
- Whether to provide further clarification on what is necessary for RMP facility owners or operators to adequately coordinate their emergency response program with local authorities
- Whether coordination activities and emergency plan updates should be required annually, or is some other frequency appropriate
- Whether to identify procedures for how disagreements between local authorities and the source owner or operator concerning which party should provide for an emergency response to releases of regulated substances at the source should be resolved
- Whether the LEPC should be required to provide a rationale for the request that meets certain criteria, to ensure that the request is reasonable and what criteria should be established for this rationale

13. What are the proposed requirements for emergency response exercises?

The current RMP rule has no requirement for facilities to conduct exercises of their emergency response program or plan. Chemical Safety Board (CSB) accident investigations indicate that poor emergency response planning and execution by RMP facility owners/operators has increased the severity of accidents. Requiring exercises is likely to improve emergency response by facilities and community responders and reduce the consequences of an accident on the community. EPA is proposing to require all Program 2 and Program 3 facilities to test their emergency response plans through notification, tabletop, and field exercises.

- All facilities both responding and non-responding would conduct annual notification exercises.
- Responding facilities would conduct annual tabletop exercises, except that every five years a field exercise would be required instead of a tabletop exercise.

The proposed rule defines which elements of an emergency response program need to be included in a tabletop or field exercise and requires an exercise evaluation report within 90 days.

14. What information would the proposed rule require sharing with the LEPC and emergency response officials?

EPA is proposing to require certain information to be made available, upon request, to LEPCs and emergency response officials to help them understand the potential risks at RMP regulated facilities, as well as aid them in emergency planning and response activities. All information required to be shared excludes CBI (Confidential Business Information) or trade secrets.

The LEPCs would receive:

- Names of regulated substance on-site
- Compliance audit summary reports
- Summaries of incident investigation reports with root cause findings
- A summary of Inherently Safer Technology implemented or planned to be implemented
- Reports on emergency response exercises or drills

In addition, the EPA is requesting comment on a number of alternatives including:

- Whether facilities should periodically submit information to the LEPC or local responders.
- Whether more or less information should be shared with LEPCs or emergency response officials.
- Whether a standard format for summary information should be specified in order to make it easier for local officials to interpret the information.

15. How does EPA's proposal make existing public information more accessible to local communities?

EPA is proposing to amend the information sharing provisions for the public to make existing information more easily accessible to communities to encourage them to prepare for an emergency. All information required to be shared would only be information that is already publicly available and excludes CBI (Confidential Business Information) or trade secrets.

Information that would be made easily available to the public would include:

- Names of hazardous chemicals
- Safety data sheets for all regulated substances held at the facility
- Five-year accident history
- Summary of the facility's emergency response program
- Summary of upcoming and completed emergency response exercises
- LEPC contact information

In addition, the EPA is requesting comment on a number of alternatives including:

- Whether more or less information should be shared with the public.
- Whether there are other ways that the data could be made available.
- Whether there are any challenges facility owners or operators would have in providing the information or challenges public stakeholders would have in obtaining the information.

16. Why didn't EPA revise the RMP List of Regulated Substances to include Ammonium Nitrate (AN)?

Because of the hazardous nature of ammonium nitrate (AN), there are existing federal regulations for its safe handling and storage. OSHA's Explosives and Blasting Agents Standard (29 CFR 1910.109) includes coverage of fertilizer grade AN. OSHA is considering whether to modify this standard or whether to add AN to their list of chemicals subject to their Process Safety Management (PSM) standard, which could expand the standard's applicability to include processes at fertilizer mixers, distributors and wholesalers who store and handle AN. The DHS is considering potential modifications of its Chemical Facility Anti-Terrorism Standards (CFATS) regulation, including reviewing the applicability and/or modification of screening threshold quantities (TQs) for chemicals of interest in Appendix A in 6 CFR part 27, which include AN.

Under EPCRA, facilities storing AN must submit a Safety Data Sheet (SDS) and annually report inventories to state and local entities and first responder organizations for emergency preparedness and planning. Facilities, local entities (e.g. LEPCs), and first responders are obligated to work together to understand facility hazards and to prepare for, and respond to, emergencies in that community. Under the Executive Order for Improving Chemical Facility Safety and Security, EPA is actively working to enhance local emergency preparedness and first responder capabilities. Further, EPA, OSHA, DHS and ATF issued a comprehensive safety advisory August 2013, and a follow-up Advisory June 2015 on safe storage and handling of AN in addition to details on emergency response practices.

These advisories detail AN's physical and chemical properties, hazards, recommended bulk storage practices, hazard reduction, pre-incident and emergency action planning, and appropriate fire emergency response. The advisories, along with Chapter 11 of the National Fire Protection Association (NFPA) 400-2016 Hazardous Materials Code which contains comprehensive information on AN hazards and hazard mitigation techniques, Safety and Security Guidelines for AN from the Institute for Makers of Explosives (IME), Safety and Security Guidelines for the Storage and Transportation of Fertilizer Grade AN at Fertilizer Retail Facilities from the Agricultural Retailers Association and the Fertilizer Institute, serve to make facility owners and operators, emergency planners and first responders and communities aware of AN's hazards, appropriate storage and handling practices, and emergency response.

Given these factors, EPA will continue to work closely with OSHA and DHS to determine whether additional EPA action is necessary. Although EPA is not proposing to add AN to the list of substances subject to the RMP rule at this time, the Agency may elect to propose such a listing at a later date.

17. Why is EPA not revising the list of chemicals under the RMP rule?

The May 2014 Progress Report for the President, Actions to Improve Chemical Facility Safety and Security – A Shared Commitment, summarized the federal government's actions, both short- and long-term. Modernizing the Risk Management Program (RMP) rule was identified as one of the top priority actions to improve chemical facility safety and security. EPA stated in the Report that they would publish a Request for Information (RFI) to identify priority amendments to the RMP requirements which could be accomplished in the short-term. Using the results from this effort as well as information collected through implementing the RMP, EPA is proposing revisions to the RMP rule to advance chemical facility safety. These proposed amendments include revisions to the accident prevention program requirements, as well as enhancements to the emergency response requirements, and improvements to the public availability of chemical hazard information. However, this proposed rule does not address all of the topics included in the RFI. EPA is not proposing any revisions to the list of regulated substances. EPA may propose listing additional hazardous substances in a separate action.