Q. Why are changes to the RMP rule necessary? What are the impacts from accidents at RMP facilities?

A. While numerous chemical plants are operating safely, in the last 10 years, RMP data show that there have been more than 1,517 reportable accidents, 473 of which had offsite impacts. The reportable accidents were responsible for 58 deaths, 17,099 people were injured or sought medical treatment, almost 500,000 people evacuated or sheltered-in-place, and over $2 billion in property damages.

EPA’s changes to the RMP rule will help protect local first responders, community members and employees from death or injury due to chemical facility accidents.

Q. What outreach did EPA do?

A. The final rule is based on extensive outreach, including Executive Order listening sessions, the solicitation of public comment through the “Request for Information” (RFI) and the Notice of Proposed Rule-Making (NPRM), the SBAR panel, and a public hearing.

Between November 2013 and January 2014, nine Executive Order 13650 Improving Chemical Facility Safety and Security listening sessions and webinars were held, which were led by EPA, DHS, and OSHA. On July 31, 2014, EPA published the RFI that solicited comments and information from the public regarding potential changes to the Risk Management Program regulations (79 FR 44604).

While developing the proposed rule, EPA convened a SBAR panel, consisting of the U.S. Small Business Administration (SBA), Office of Management and Budget (OMB), and EPA, and solicited advice and recommendations from Small Entity Representatives (SERs) that potentially would be subject to the rule’s requirements. Prior to convening the SBAR panel, 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 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.

EPA again solicited input from the public in the NPRM published on March 14, 2016 (81 FR 13637).
Over the course of two years of outreach, EPA received a total of 61,555 public comments on the proposed rule. Several public comments were the result of various mass mail campaigns and contained numerous copies of letters or petition signatures. EPA held a public hearing on March 29, 2016, to provide interested parties the opportunity to present data, views, or arguments concerning the proposed action.

Q. How did EPA incorporate feedback when developing the final rule?

A. In developing the final rule, EPA took into consideration feedback and comments received from listening sessions, the request for information (RFI), and the proposed rule. For example, changes were made based on feedback from industry who asked that we consider operational impact and costs; from both industry and security professionals that asked that we strike a balance between information sharing and security; and from local government officials that asked us to factor in the burden to local government, especially in rural cities and towns.

Ensuring Local Responders and Community Residents Are Prepared for an Accident

Q. What Local Coordination requirements are included in the final rule?

A. The final rule increases coordination with Local Emergency Planning Committees (LEPCs) to enhance local emergency preparedness and response planning by requiring facilities to conduct annual coordination with LEPCs or local emergency response officials to clarify response needs, emergency plans, roles, and responsibilities.

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 U.S. Chemical Safety and Hazard Investigation Board (CSB) in accident investigations. States and locals have indicated that some RMP facilities do not adequately engage in meaningful coordination with LEPCs and local emergency responders, leaving the local planners and responders unaware of, or unprepared for, the chemical risks associated with the facility.

The lack of good coordination between facilities and responders can result in increased risk to responders due to inadequate situational awareness, confusion as to who has the lead responsibilities, inadequate or lack of equipment, insufficiently trained personnel arriving on site and ultimately, potential fatalities/injuries. For example, following the August 2008 explosion and fire at the Bayer CropScience facility in Institute, West Virginia, the CSB found that lack of effective coordination between facility and local responders prevented responding agencies from receiving timely information updates about the continually changing conditions at the scene, prevented a public shelter-in-place order from reaching the local community, and may have resulted in toxic exposure to on-scene public emergency responders.

In response to several commenters that supported regular meetings with local authorities, EPA requires qualifying facility owners or operators to request an opportunity to meet with the local emergency planning committee (or equivalent) and/or local fire department, but is not requiring a
meeting to be held if local authorities determine that a meeting is not required. In addition, EPA is requiring the owner or operator to consult with local emergency response official to establish appropriate frequencies and plans for tabletop and field exercises.

Qualifying facilities must develop an emergency response plan, develop procedures for the use, inspection, and testing of emergency response equipment, conduct training for employees in relevant procedures, and update the emergency response plan to reflect changes at the facility.

The final rule modifies the emergency response plan provision that requires the plan to include procedures for informing the public and local emergency response agencies about accidental releases, to also require these procedures to inform appropriate Federal and state emergency response agencies about accidental releases. This provision will be complementary to notification requirements under EPCRA and CERCLA, however the lists of regulated substances and notification triggers are not identical.

EPA had originally proposed to require the owner or operator to review and update the emergency response plan annually, or more frequently if necessary, to incorporate recommendations and lessons learned from emergency response exercises, incident investigations, or other available information. Several commenters stated that annual updates are unnecessary. Taking into consideration the comments received, the final rule requires the owner or operator to review and update the emergency response plan as appropriate based on changes at the facility or new information obtained from coordination activities, emergency response exercises, incident investigations, or other available information, and ensure that employees are informed of the changes.

Q. How are changes to local coordination requirements advancing local preparedness and assisting local response officials?

A. The emergency response coordination requirements in the final rule improve the information available to emergency planners and responders, making it more relevant and accessible, to help ensure responders understand the risks at the facility so they can better prepare for a safe and timely response.

The final rule includes revised language to avoid the implication that ‘local coordination’ means that the facility and LEPCs are assessing capabilities. EPA removed this provision because numerous commenters expressed concern that there is no accepted standard for community emergency response capability applicable nationwide, and that response resources and capabilities can only be evaluated in the context of the overall community’s response plan.

The owner or operator of a facility must coordinate response needs with local emergency planning and response organizations to determine how the facility is addressed in the community-wide emergency response plan and to ensure that local response organizations are fully aware of the regulated substances at the facility; their quantities; the risks presented by covered processes; and the resources and capabilities at the facility to respond to an accidental release of those substance. Coordination will also clarify the roles and responsibilities of local, state and federal responders and facility personnel in the case of an accidental release.
The final rule requires qualifying facilities to perform notification exercises and to perform tabletop and field exercises. Such exercises are widely acknowledged as a ‘best practice’ among public and private emergency response professionals. Exercises can increase emergency response readiness, both for facility owners or operators and local responders, by testing emergency plans and communications systems, and by ensuring local and facility response personnel know what actions to take during various accident scenarios.

The final rule includes additional language as part of the coordination with local emergency response officials, specifying that the owner or operator must consult with local officials to establish an appropriate frequency for field and tabletop exercises, with a minimum timeframe of one notification exercise per year, one tabletop exercise every three years, and at least one field exercise every 10 years.

The changes to the rule can help advance local preparedness and assist local response officials by improving the ability of planners and responders to make appropriate decisions concerning equipment, training, and procedures, and improve local contingency planning which may result in more efficient allocation of community public response resources and training.

Public comments generally supported EPA’s proposal for annual notification exercises, and therefore EPA is finalizing these provisions as proposed. Many commenters also supported incorporating requirements for field and tabletop exercises into the RMP rule, but some of these commenters also recommended various changes to the proposed provisions. The greatest number of comments related to the required frequency for exercises. These commenters stated that requiring field exercises every five years and tabletop exercises every year would be overly burdensome on facilities and local responders. In response to these comments, the final rule allows owners and operators to work with local authorities to establish field and tabletop exercise schedules that work for both parties. EPA decided to leave the timing and level of complexity of these exercises to the discretion of the facilities and first responders so as not to pose a potential burden of undue costs, time or stresses on resources.

Q. What Information Sharing requirements are included in the final rule?

A. The rule will preserve security and help enable local communities to protect themselves. It requires facilities to share emergency planning information with LEPCs during annual coordination activities.

The rule also requires facilities to provide certain, existing chemical information to the public upon request. The information includes: chemical hazard information, accident history, dates of past emergency response exercises, emergency response program information, and LEPC contact information. In response to comments received regarding security concerns, the rule does not require that this information be posted on the internet.

The rule also requires all facilities to hold a public meeting for the local community within 90 days of an RMP reportable accident. The information and level of detail shared at a public meeting is for the facility to decide.
Q. What Information Sharing requirements are changed from the proposed to final rule?

A. For LEPCs, the final rule eliminated the proposed requirements for information sharing with LEPCs and instead added language to the emergency response coordination section (provisions under § 68.93) to emphasize existing Emergency Planning and Community Right-to-Know Act (EPCRA) authority.

For the public, the final rule eliminated the proposed requirement to share chemical hazard information on the facility’s website. Instead the requirement is to provide existing public information directly to community members that request the information so that they can plan to properly protect themselves by ensuring plans are in place to effectively shelter in place, and evacuate.

As proposed, EPA is requiring facilities to hold a public meeting after a reportable accident, but, in response to comments received, changed the timeframe for the public meeting from within 30 days of the accident, to 90 days. It is for the facility to determine the agenda and depth of detail to be discussed at the public meeting(s).

Q. What information does the final rule require sharing with the LEPC and emergency response officials?

A. As part of the local coordination activities, the final rule specifies what information must be provided to local emergency planning and response organizations, including:

- emergency response plan if one exists;
- emergency action plan;
- updated emergency contact information;
- and any other information that local emergency planning and response organizations identify as relevant to local emergency response planning.

EPA proposed that owners and operators of all RMP-regulated facilities provide certain information to LEPCs or local emergency response officials upon request. Many commenters did not support the requirement, citing various reasons such as: a lack of data supporting the Agency’s concern that LEPCs are not receiving the information they need to develop local emergency response plans; unnecessary redundancy with existing requirements, such as data reported under the Emergency Planning Community Right-to-Know Act (EPCRA); data proposed is too broad and does not provide useful information pertinent to emergency response planning; the data may overwhelm LEPCs with technical information with concern that most LEPCs lack the expertise needed to use this information to develop local emergency response plans; and security concerns regarding how the information is maintained and handled by the LEPC or emergency response officials.

Based on these comments, EPA decided NOT to finalize the proposed requirement and instead added language to the emergency response coordination provisions of the rule, which requires the
owner or operator to provide “any other information that local emergency planning and response organizations identify as relevant to local emergency planning.” This allows LEPCs and other local emergency officials to obtain the information they require to meet their emergency response planning needs. It also allows local emergency planners and response officials to ask questions of facility personnel about the risks associated with the chemical hazards at the facility and about appropriate mitigation and response techniques to use in the event of a chemical release. Additionally, it further allows the facility owner or operator and the LEPC to identify information that may need to be maintained securely and discuss strategies to secure the information or to provide only information that is pertinent to emergency response planning without revealing security vulnerabilities.

Q. How does EPA’s final rule preserve security while enhancing the ability to local communities to be prepared for an accident?

A. The current rule requires that the risk management plan (also referred to as an RMP) be available to the public; however, access to this information is currently restricted to Federal Reading Rooms or through Freedom of Information Act (FOIA) requests. EPA proposed, and is finalizing with modifications, a requirement for information relevant to public awareness of safety risks to be available to the public upon request. Residents of the nearby community will need relevant information for their emergency preparedness including effective notification of accidental release, and evacuation and shelter-in-place information. The information required to be provided under the final rule includes publicly available information that community residents, owners and managers of health and day care facilities, and other community members need in order to properly respond to chemical plant accidents with appropriate actions such as evacuation or sheltering-in-place. EPA believes that this approach to notifying the public that information is available upon request strikes an appropriate balance between various concerns, including information availability, community right-to-know, minimizing facility burden, and minimizing information security risks.

EPA is also requiring owners or operators to provide instructions for requesting the information elements and the location of other available information related to community emergency preparedness.

The final rule will uphold security, increase relevant, shared knowledge for first responders and improve accessibility for community awareness and self-protection. The final rule will not jeopardize security and/or CBI by utilizing the internet as a means of information sharing.

Q. What is the process for responding to information requests from the public?

A. The facility owner or operator must provide ongoing notification that certain chemical hazard information is available upon request and provide instructions on how to submit a request for information. After receiving a request, the facility owner or operator must provide the information to the requestor within 45 days of the request.

Preventing Catastrophic Accidents
Q. What Incident Investigations and Root Cause Analysis requirements are included in the final rule?

A. The final rule requires additional reporting elements to investigations that are required after any incident that resulted in or could reasonably have resulted in a catastrophic release. The facility must identify the fundamental reason (“root cause analysis”) for the incident, and prepare a report within 12 months of the incident that includes consequences of the accident and any emergency response actions taken.

EPA modified the proposed definition of “root cause” to eliminate the phrase “that identifies a correctable failure(s) in management of systems” so there would be no implication that all incidents include a correctable management system failure.

Also, in the final rule, EPA clarifies which near-miss incidents (i.e., incidents that could reasonably have resulted in a catastrophic release) must be investigated.

Q. What Incident Investigations and Root Cause Analysis requirement have changed from the proposed to final rule?

A. Changes to the proposed rule regarding incident investigations and root cause analysis requirements include:
   - eliminating the proposed revisions to the definition of catastrophic release;
   - requiring the incident investigation report to include the consequences/impacts of the incident and emergency response actions taken;
   - modifying the definition of “root cause” to eliminate the phrase “that identifies a correctable failure(s) in management systems.”
   - adding to the Preamble, guidance on the meaning of “near-misses” and conveying deference to industry practices.

As part of this effort, EPA had proposed to clarify the definition of catastrophic release. The RMP rule (see 40 CFR 68.60(a) and 40 CFR 68.81(a)) currently requires investigation of an incident that “…resulted in, or could reasonably have resulted in a catastrophic release.” EPA had proposed to modify the definition of catastrophic release to be identical to reportable accidents under the five-year accident history requirement. Public comments received stated that the proposed definition created a potential burden by inadvertently expanding the number of investigated accidental releases. Subsequently, in the final rule EPA retained the existing definition of catastrophic release based on public comments describing the burden created by the revised definition.

Q. What is Safer Technology and Alternatives Analysis (STAA)?

A. “Safer technology and alternatives” refer to risk reduction strategies developed using a hierarchy of controls that are considered inherent, passive, active, and procedural. This strategy can be applied initially to all design phases and then continuously throughout a process’s life cycle. STAA includes concepts known as inherently safer technologies (IST) or inherently safer design (ISD), which reduce or eliminate the hazards associated with materials and operations used in a
process. IST, ISD, and inherent safety are interchangeable terms that are used in the literature and in the field. The four major inherently safer strategies are:

- Minimization—using smaller quantities of hazardous substances;
- Substitution—replacing a material with a less hazardous substance;
- Moderation—using less hazardous conditions or a less hazardous form, or designing facilities that minimize the impact of a release of hazardous material or energy; and
- Simplification—design facilities to eliminate unnecessary complexity and make operating errors less likely.

Process Hazard Analyses (PHAs) are already part of the existing rule requirements. As part of the PHA, qualifying programs in three industry categories (paper manufacturing; coal and petroleum products manufacturing; and chemical manufacturing) are required to thoroughly evaluate safer technology and alternatives when conducting their Process Hazard Analysis, however implementation is not mandatory. These categories were selected because of highest frequency of accidents.

### Third Party Audits

**Q. What are the third-party audit requirements?**

**A.** This provision requires an independent third-party to conduct a compliance audit at a facility if there has been a reportable accident, or if an implementing agency determines that a third-party audit is necessary, based on information about the facility or about a prior third-party audit at the facility. The final rule contains criteria for auditor competence and independence.

The owner or operator must also engage a third-party auditor, and complete the audit within 12 months of when:

- an implementing agency determines that conditions at the facility could lead to an accidental release of a regulated substance; or
- when a previous third-party audit failed to meet the competency or independence criteria specified in the rule.

The third-party audit may be conducted by a third-party auditor or a team of auditors led by a third-party auditor. This final rule requirement brings a level of independence to the audit process while the audit team flexibility provides due consideration to a facility’s professional personnel involvement in the audit. The team must be led by an independent third-party but may include experts from the company who understand the chemical plant design and processes.

The benefit of the third-party audit is to provide the owners and operators information to determine whether or not facility procedures and practices to comply with the prevention program requirements of the RMP rule, are adequate and being followed.

EPA notes that some qualifying facilities are already required to conduct compliance audits every three years. The rule does not change the requirement that RMP facilities regularly conduct RMP
compliance audits. It does, however, specify that, in specific situations, those audits be performed by a third-party or a team led by a third-party (pursuant to the schedule in §§ 68.58(h) and/or 68.79(h) of the rule).

Q. What Third Party Audit requirements are changes from the proposed to final rule?

A. In response to comments, EPA changed the third-party audit criterion for determining the implementation to be based on conditions at the facility that could lead to an accidental release of a regulated substance, rather than on non-compliance. An implementing agency may determine that a third-party audit is necessary following inspections, audits, or facility visits, if conditions are observed at the facility that could lead to an accidental release of a regulated substance.

Other changes to this provision of the final rule include:
- allows third-party audit teams to be comprised of third-party auditor personnel as well as other personnel, including facility staff;
- revising the proposed auditor qualification criteria by removing the Professional Engineer (PE) requirement;
- eliminating the requirement to submit all auditor reports and third-party audit findings response reports to implementing agencies; and
- reducing the required timeframe for independence from three years, to two years.

In an effort to reduce the burden for facility owners and operators and to increase the availability of potential independent third-party auditors, EPA reduced the timeframe that limits the relationship between the owner/operator and the third-party auditor from three years to two years, and provides that retired employees may qualify as independent third parties.

Additional Information

Q. When does the rule become effective?

A. The effective date of this action has been delayed to February 19, 2019.

Q. When do I have to comply with the new rule provisions?

A. EPA has established the following dates for facility owners and operators to comply with the revised rule requirements:
- Comply with emergency response coordination activities within one year of the effective date of the final rule;
- Within three years of when the owner or operator determines that the facility is subject to the emergency response program requirements of § 68.95, the owner or operator of a qualifying facility must develop an emergency response program in accordance with § 68.95;
- Correct or resubmit RMPs to reflect new and revised data elements within five years of the effective date of the final rule; and
• Comply with the following new provisions within four years of the effective date of the final rule,
  o Third-party compliance audits,
  o Root cause analysis as part of incident investigations,
  o STAA,
  o Emergency response exercises,
  o Information availability provisions, and
  o Public meetings.

Q. How did EPA coordinate with the Department of Homeland Security and the Occupational Safety and Health Administration?

A. President Obama’s Executive Order 13650, “Improving Chemical Facility Safety and Security,” established the Chemical Facility Safety and Security Working Group (“Working Group”), that was co-chaired by the Assistant Secretary of Homeland Security, the Assistant Administrator of EPA, and the Deputy Administrator of OSHA. The Working Group conducted extensive inter-agency coordination. EPA’s coordination efforts included discussions with DHS and OSHA on potential changes to the Risk Management Program rule. Additionally, DHS and OSHA had representatives attend the SBAR panel, which discussed the development of the proposed rule.

Q. Why didn’t EPA revise the RMP list of regulated substances to include Ammonium Nitrate?

A. Because of the hazardous nature of ammonium nitrate (AN), there are existing federal regulations for its safe handling and storage. The Occupational Safety and Health Administration’s (OSHA) Explosives and Blasting Agents Standard (29 CFR 1910.109) includes coverage of fertilizer grade AN. OSHA is considering whether or not to modify this standard or to add AN to their list of chemicals subject to their Process Safety Management (PSM) standard, which could result in the standard applying to processes at fertilizer mixers, distributors and wholesalers who store and handle AN. The DHS is also considering potential modifications of its CFATS regulation involving modification of screening threshold quantities (TQs) for chemicals of interest, which includes AN.

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.

Q. What has EPA done to further the safe storage and handling of Ammonium Nitrate?

A. The EPA has taken a number of actions to further the safe storage and handling of AN.

  • Under Emergency Planning and Community Right-to-Know Act (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 (such as 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 Executive Order (EO) 13650 Improving Chemical Facility Safety and Security, EPA is actively working to enhance local emergency preparedness and first responder capabilities.

• EPA, OSHA, DHS and the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) issued a comprehensive safety advisory August 2013, and a follow-up Advisory June 2015 on safe storage and handling of AN with additional 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); and

• 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 appropriate emergency response.

Q. What has EPA done to further the safe storage and handling of reactives?

A. The Agency has taken a number of actions to improve the safe storage and handling of reactive chemicals.

• EPA worked with the American Institute for Chemical Engineers (AIChE) Center for Chemical Process Safety (CCPS) to develop guidance on the safe handling of reactive materials. CCPS issued a safety alert entitled Reactive Material Hazards, which describes what facilities should do to fully understand the reactive properties of chemicals. CCPS also published Essential Practices for Managing Chemical Reactivity Hazards, which provides guidance on management systems and hazard assessment protocols for reactive materials. EPA staff not only participated in both of these efforts but also worked to make the guideline widely available to chemical facilities.

• EPA worked with the National Oceanic and Atmospheric Administration (NOAA) to produce the Chemical Reactivity Worksheet (CRW), a free software program that allows users to identify most chemical reactivity hazards associated with their chemical processing and support operations. A recently released update of the program was downloaded more than 30,000 times on the first day of release. With the release of CRW 4.0 in March 2016, the ongoing management and distribution of the CRW has been transitioned to Center for

- EPA also collaborated with OSHA and various industry associations to form the Chemical Reactivity Hazards Management Alliance. The Alliance provided education and outreach materials and conducted safety workshops for reactive chemical users with the objective to improve the overall safety of reactive chemical hazards within U.S. industry. Our work with CCPS, NOAA, OSHA, and various industry groups has helped increase public knowledge of reactive hazards and the means to abate those hazards. These efforts promote the design and maintenance of safer facilities as addressed by the Clean Air Act General Duty Clause (CAA GDC).

Q. How will the RMP rule impact changes to OSHA’s PSM update?

A. It won’t. Both the OSHA PSM standard and the EPA RMP rule aim to prevent or minimize the consequences of accidental chemical releases through implementation of management program elements that integrate technologies, procedures, and management practices. In addition to requiring implementation of management program elements, the RMP rule requires covered sources to submit (to EPA) a document summarizing the source’s risk management program – called a Risk Management Plan (or RMP). The OSHA PSM standard and EPA RMP regulation are closely aligned in content, policy interpretations, Agency guidance, and enforcement. Since the inception of these regulations, EPA and OSHA have coordinated closely on their implementation in order to minimize regulatory burden and avoid conflicting requirements for regulated facilities. This coordination has continued throughout the development of this rule and on OSHA’s initial steps toward proposing potential changes to the PSM standard. The preamble to the final rule describes topics where EPA’s approach was specifically coordinated with other agencies including OSHA, such as the regulation of AN and the use of the term “practicability” in lieu of “feasibility” for the STAA provision.

EPA received several comments requesting that EPA withdraw its rulemaking and coordinate more closely with OSHA. EPA has coordinated with OSHA in the development of the proposed and final rules, in which OSHA participated in EPA’s Small Business Advocacy Review (SBAR) panel and EPA participated in OSHA’s SBAR panel. OSHA has completed this SBAR panel as an initial step toward proposing potential changes to the PSM standard, which may include some changes that are similar to those in the final RMP rule. However, EPA does not believe it is necessary to conduct its rulemaking on exactly the same timeline as OSHA. The 1990 CAA Amendments contained separate timelines for the initial OSHA and EPA rulemakings and has no provisions restricting timeframes for either agency amending its rules.