

Technical Paper by Bill Lape, SCS Engineers Getting Knocked Out by the Pendulum: The 2024 EPA RMP Rule Changes and Strategies for Compliance

Abstract

Over the last several years, the regulatory pendulum has swung so far back and forth that facilities that are covered by the Environmental Protection Agency's Chemical Accident Prevention Provisions, otherwise known as the Risk Management Program, have often felt as if they were sitting on a Tilt-O-Whirl carnival ride. This paper is intended to familiarize the readers with the most recent changes that have been made to these regulations and to provide them with basic strategies for compliance.

Introduction

The first thing the reader must be familiar with is a brief history of the regulations in question, including the changes over the last several years and what precipitated them. With this familiarity, the reader is better equipped to understand where the regulations stand today. With this understanding, the reader can then understand the reasons for implementing strategies for complying with these new regulations.

A Brief History of The Primary Regulations in Question

If one has been involved with the ammonia refrigeration industry for any length of time, they are generally aware that the Occupational Safety and Health Administration's (OSHA's) Process Safety Management (PSM) standard became effective in Federal Regulations on May 24, 1992 (OSHA 29CFR1910.119, 2024). In addition, the Environmental Protection Agency's (EPA's) Chemical Accident Prevention Provisions, known colloquially as the Risk Management Program (RMP), became effective in Federal Regulations on June 21, 1999 (EPA 40CFR68, 2024). OSHA's PSM standard has remained unchanged in the 30+ years since. EPA's RMP provisions were modified to a minor extent in 2004. These modifications changed the deadlines for submitting RMP accidents and emergency contact changes and removed the requirement to summarize the Offsite Consequence Analysis (OCA) in the Executive Summary. This removal was due to security concerns after the terrorist attacks on September 11, 2001.

At that time, the two Federal Regulations overlapped significantly. This was intentional based on public comments received when the rules were being considered. Figure 1 shows the overlap between the two regulations as of 2013, when both OSHA and EPA began the process of updating their respective regulations.

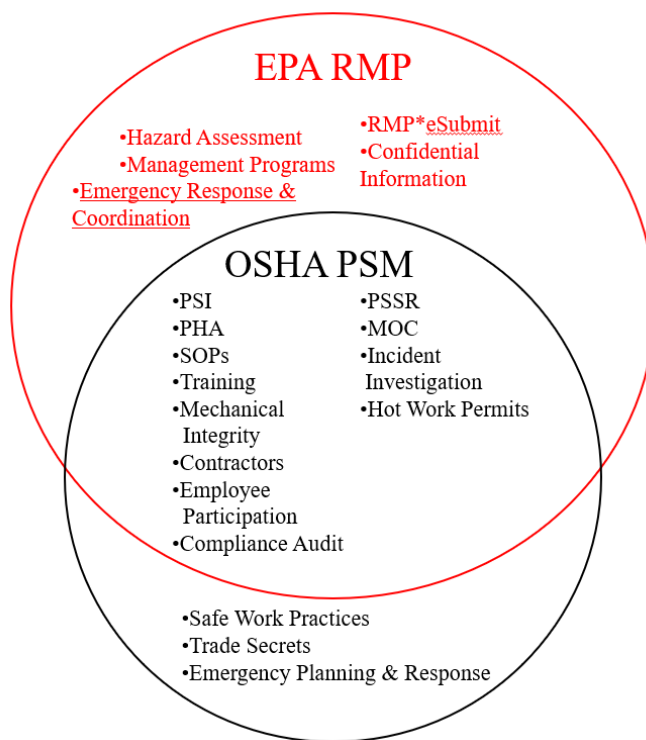


Figure 1. PSM & RMP Regulatory Overlap as of 2013.

The Push that Started the Pendulum Swinging: Explosion in West, TX

On April 17, 2013, in West, TX, a fire broke out at the West Fertilizer Company. Less than 20 minutes after being reported, while local firefighters attempted to fight the blaze, approximately 30 tons of fertilizer grade ammonium nitrate detonated, killing 15 people, twelve of whom were first responders, and injuring more than 260 others. Over 150 offsite buildings, including nearby homes and business were severely damaged. Many were condemned as unrepairable.



Figure 2. Video Stills of West Fertilizer Company Explosion (USCSB, 2016).

The U.S. Chemical Safety Board investigated the accident but was unable to identify a cause of the fire. It did, however, highlight gaps in both EPA's and OSHA's regulations governing highly hazardous chemicals, as well as in reporting of such chemicals under the Emergency Planning and Committee Right to Know Act (EPCRA).

Presidential Action

The incident in West, TX, led then President Obama to issue Executive Order #13650 (Exec. Order No. 13,650, 2013). In this Executive Order, the President called upon OSHA, EPA, and the Department of Homeland Security (DHS) to improve coordination and communication. In addition, it called upon these agencies to improve coordination and communication with local first responders. Most importantly, it called upon OSHA and EPA to update the PSM and RMP regulations respectively, and for DHS to update their Chemical Facility Anti-Terrorism Standard (CFATS) rule.

OSHA's Response

OSHA issued a Request for Information (RFI) to solicit public input on updates under consideration for the PSM standard on December 9, 2013 (OSHA, 2013). Following the public comment period, OSHA conducted a Small Business Review as required by the Occupational Safety and Health (OSH) Act that created OSHA. After this, progress on regulatory changes to PSM stalled for a variety of reasons.

DHS' Response

DHS issued a Request for Information (RFI) to solicit public input on updates under consideration for the CFATS rule on August 18, 2014 (DHS, 2014). Following the public comment period, progress on regulatory changes to CFATS also stalled for a variety of reasons.

EPA's Response

EPA issued a Request for Information (RFI) to solicit public input on updates under consideration for the RMP rule on July 31, 2014 (EPA 2014 RFI, 2014). Following the public comment period, draft rules were issued for further comment on March 14, 2016 (EPA 2016 Proposed Rule, 2016). Final rule changes were issued on January 13, 2017 (EPA 2017 Final Rule, 2017).

Swing to the Left: An Overview of the January 2017 RMP Rule Changes

There were several minor changes to the Prevention Program rules, including establishing deadlines for incident investigations, explicitly requiring that the Process Hazard Analysis (PHA) address industry accidents, and establishing a requirement that supervisors of employees working on the covered process must also be trained to the same standards as the employees themselves.

The rule changes also incorporated some major changes, including a requirement to have compliance audits conducted by an independent third party in the event that a facility experienced an RMP reportable accident. In addition, a requirement to make information available to the public upon request was included in the January 2017 rule.

Finally, there were several major changes to the Emergency Response Provisions of the RMP rules. The requirement to coordinate with the Local Emergency Planning Committee (LEPC) was expanded to include specific topics to be discussed, along with requirements for documenting the coordination meetings. A requirement was also implemented for any facility subject to the RMP rules to conduct notification exercises annually to ensure that personnel are trained to make the appropriate calls should local response be necessary, or the release exceeds the reporting thresholds established under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and EPCRA. EPA also stated in the rule changes that in order to be considered a “non-responding” facility, both the coordination and notification exercise requirements must be met. For “responding” facilities, the rule changes implemented requirements to conduct tabletop and field response exercise with local first responders within specific time frames, every three years for tabletop exercises and at least every ten years for field exercises.

Political Upheaval

After the Trump administration took office at the end of January 2017, there were attempts to rescind the December 2017 RMP rules changes under the Congressional Review Act (CRA). This act, which is codified in 5 U.S.C §§801-808 is designed to strengthen Congress' oversight of

Federal agencies. The CRA allows Congress to pass a joint resolution of disapproval, which, if signed by the President, or if Congress successfully overrides a Presidential veto, prevents the rule from going into effect or from continuing to be in effect. Ultimately, these attempts failed. On June 14, 2017 (EPA Delay, 2017), the EPA administration published a rule delaying enforcement of the rule changes indefinitely. Lawsuits were then filed against the EPA, and on December 3, 2018 (EPA Enforcement Renewal, 2018), the original dates of enforcement were reestablished.

EPA then began a new, formal rulemaking process to “correct” many of the changes made in the January 2017 rule.

Swing to the Right: An Overview of the December 2019 RMP Rule Changes

With the new rulemaking process complete, a “reconsideration” final rule was issued on December 19, 2019 (EPA 2019 Changes, 2019). This “reconsideration” rescinded all of the minor Prevention Program rule changes from January 2017. It removed the third-party audit requirements. It replaced the requirement to make information available to the public upon request with a requirement to hold a public meeting if the facility experienced an RMP Reportable Accident with known offsite consequences. The Emergency Response rule changes from January 2017 remained largely intact except for the removal of the minimum required frequency for field exercises.

More Political Upheaval

With the change in administration at the end of January 2021, the Biden Administration tasked the EPA with reconsidering the “reconsideration.” The EPA held Public “Listening” sessions in 2022 to obtain feedback and direction from public input. Draft rule changes were published on August 31, 2022, and a “reconsideration part 2” final rule was published on March 11, 2024 (EPA 2024 Final Rule, 2024).

The March 2024 RMP Rule Changes & Strategies for Compliance

With the publication of these “final” rule changes in March 2024, the regulatory landscape is not as clearly defined. Figure 3 shows the overlap between the PSM and RMP regulations as of May 2024.

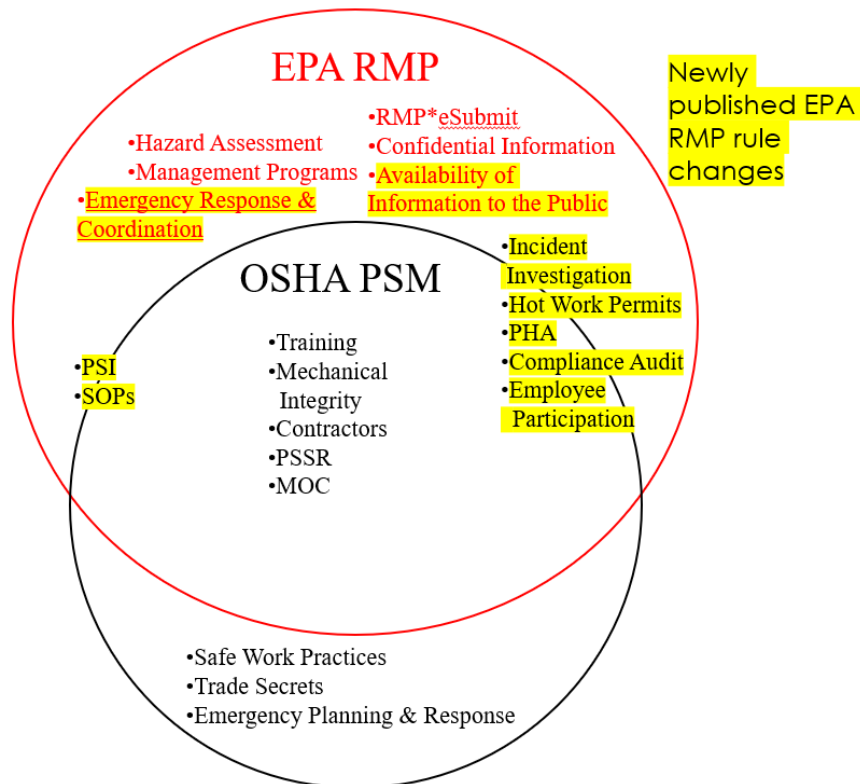


Figure 3. PSM & RMP Regulatory Overlap as of May 2024.

Employee Participation

Rule Changes to 40 CFR 68.83 (EPA 40CFR68 Subpart D, 2024)

There are multiple changes that have been made to 40 CFR 68.83. First, two additional requirements were added to paragraph (a). The first one instituted a requirement that written or electronic notices be distributed annually to employees and their representatives, indicating that the plan is readily available to view and how to access the information.

The second one established that training must be provided as often as necessary to ensure employees and their representatives, and management involved in the ammonia refrigeration system, are informed of the details of the plan.

An additional paragraph (paragraph (c)) was added that states that the owner or operator shall consult with employees knowledgeable in the process, on addressing, correcting, resolving, documenting, and implementing recommendations and findings of process hazard analyses (PHAs), compliance audits, and incident investigations.

A new paragraph (d) implements a requirement that the owner or operator establish a stop work authority. Any employee knowledgeable in the process, including their representatives, must be able to recommend to the operator in charge of the ammonia refrigeration system that it be partially or completely shut down. The qualified operator in charge must be able to

partially or completely shut it down in accordance with established operating procedures based on the potential for a catastrophic release

Finally, a new paragraph (e) requires that the owner or operator must develop and implement a process to allow employees and their representatives to report to either or both the owner or operator and the EPA unaddressed hazards that could lead to a catastrophic release, RMP reportable accidents that were not reported, and any other noncompliance with this part. This paragraph allows employees to report either anonymously or with attribution, but that records of any such reports made to the owner or operator must be kept for three years.

Strategies for Compliance

To comply with the changes to paragraph (a), develop an awareness flyer or training that will be used on an annual basis. Set up a recurring reminder to distribute or post the flyer or conduct the training annually. A training session is a preferred method, as it can be coupled with a quiz at the end to capture an employee's understanding of their rights to access the information and how to do so. Be sure to update the Employee Participation program to detail how the facility is handling these new requirements for awareness. Ensure that the awareness training includes details of the new Stop Work Authority and Reporting Rights.

Many facilities are likely already complying with the requirements in paragraph (c). However, it is advisable to try to schedule your recommendation review sessions, or PSM/RMP Team /Committee meetings so that all employees who work on the ammonia refrigeration system are given the opportunity to review and discuss open recommendations. If the meetings cannot be scheduled to facilitate this, consider distributing the open recommendations to all refrigeration operators so that they can review them and ask questions, or make suggestions on how to address them. Update the Employee Participation program to identify how the facility is going to involve all of the employees in the addressing of recommendations.

When implementing a Stop Work Authority in compliance with paragraph (d), be sure to identify which employee or employees are considered "operators in charge." Conduct documented training with all employees who work on the ammonia refrigeration system on their rights to recommend partial or complete shutdown based on hazards that could lead to a catastrophic release. In addition, make sure that these employees understand who has the authority to shut down the system. Update the Employee Participation program to establish the Stop Work Authority, detailing the "operators in charge," as well as the refrigeration operators with the authority to recommend shutdowns to those "operators in charge."

For the reporting system that must be established to comply with paragraph (e), update the program to identify:

1. How the employees are to report unaddressed hazards to the facility owner or operators.
2. How the employees may report unaddressed hazards or unreported RMP accidents to the EPA.

3. That the employees may report these hazards, or unreported accidents anonymously should they choose to do so.
4. The retention time of three years for such reports to the owner or operator.

The deadline to establish compliance with these changes to 40 CFR 68.83 is May 10, 2027.

Process Hazard Analysis

Rule Changes to 40 CFR 68.67 (EPA 40CFR68 Subpart D, 2024)

There have been several details added to some of the topics that the PHA must address. In addition, there are several new topics that must be discussed and included in the PHA report.

First, in the requirement to address the engineering and administrative controls applicable to the hazards of the ammonia refrigeration system and how one can affect the other, consideration of standby or emergency power systems must explicitly be included. In addition to this consideration, 40 CFR 68.67(c)(3) now includes the following requirement: “The owner or operator shall ensure monitoring equipment associated with the prevention and detection of accidental releases from covered processes has standby or backup power to provide continuous operations.”

Second, when considering stationary source siting, otherwise known as facility location, 40 CFR 68.67(c)(5) now includes the requirement to include consideration of the placement of processes, equipment, and buildings within the facility, and hazards posed by proximate stationary sources, and accidental release consequences posed by proximity to the public and public receptors.

Third, 40 CFR 68.67(c) now includes items 8-10. Item 8 requires that the PHA shall address natural hazards that could cause or exacerbate an accidental release. Item 9 requires that the PHA shall address a safer technology and alternative risk management measures applicable to eliminating or reducing risk from process hazards. At this time, this provision only applies to NAICS code 324, Petroleum or Coal Products Manufacturing, and 325, Chemical Manufacturing. Since it does not apply to the vast majority of facilities with ammonia refrigeration systems, this paper will not address strategies for compliance with this provision. Item 10 requires that the PHA shall address any gaps in safety between the codes, standards, or practices to which the process was designed and constructed and the most current version of applicable codes, standards, or practices.

Strategies for Compliance

The new PHA requirements have several due dates, some of which have already passed. Covered facilities were required to comply with the following provisions as of the effective date of the changes to the regulations, which was May 10, 2024:

1. Addressing the new items as part of stationary source siting
2. Addressing natural hazards that could cause or exacerbate an accidental release

3. Addressing gaps between applicable codes and standards

To comply with items one and two as quickly as possible, hold a short PHA session to address the stationary source siting by reviewing other RMP facilities close by and whether or not they can affect the facility. In this session, review the nearby public receptors, including schools, places of business, places of worship, prisons & jails, and residential neighborhoods. Finally, review a list of possible natural hazards. The following is a list of web site links that will aid the team in evaluating these new topics.

- Stationary Sources
 - <https://cdxapps.epa.gov/olem-rmp-pds/>
- Nearby public receptors – 2020 census data
 - <https://ejscreen.epa.gov/mapper/>
 - <https://geopub.epa.gov/myem/efmap/>
- Natural Hazards – National Risk Index
 - <https://hazards.fema.gov/nri/map>
- Natural Hazards – Earthquakes
 - </home/webmap/viewer.html?webmap=7d987ba67f4640f0869acb82ba064228#!>
- Natural Hazards – Tornados
 - <https://mrcc.purdue.edu/gismaps/cntytnrn>
- Natural Hazards – Floods
 - <https://msc.fema.gov/portal/home>
- Natural Hazards – Snowfall
 - <https://www.ncei.noaa.gov/access/monitoring/snowfall-extremes/US/1>

To address the requirement of evaluating the gaps between the codes and standards to which the ammonia refrigeration system was constructed and modified and the current applicable codes and standards, the first step is ensuring that the applicable codes and standards have been identified for the ammonia refrigeration system. While a lot of facilities have this information, there are many that have no idea of what they are. Once the applicable codes and standards have been identified, the next step is to do a gap analysis. In ammonia refrigeration, IIAR Standard 9 identifies the minimum safety requirements for existing systems. This standard requires that a gap analysis be conducted to evaluate the compliance of the facility's system against its requirements. Due to a lack of clarity when the standard was first published, an Addendum A was published in 2024, which established a deadline of January 1, 2026, for conducting the gap analysis. It is important to note that if a facility's system was constructed after the publication of IIAR9 in 2020, it does not have to do this gap analysis for the 2020 edition, but rather needs to ensure that it is fully following IIAR2-2014, Addendum A, or IIAR2-2021, whichever applied to the design and construction of the system. It is also important to note that if a facility or its parent company chooses to comply fully with each new edition of IIAR2, then IIAR9 would also not apply to their system, but they must perform a gap analysis

with each new edition of IIAR2. Bear in mind that this is if the facility upgrades to be in FULL compliance with the new edition of IIAR2, which may not be possible, depending upon the changes in a particular edition. Once the chosen applicable gap analysis has been performed, step three is to review the gap analysis as part of the PHA and evaluate and address hazards due to the gaps. Needless to say, complying with this requirement will take some time if a facility has not already completed steps one and two.

It is important to evaluate the hazards associated with power loss and to consider standby or emergency power systems. This should be done during the PHA session described earlier. Regarding the requirement that monitoring equipment associated with prevention and detection of accidental releases from covered processes has standby or backup power to provide continuous operation, several questions come to mind.

First, what is included in this requirement? Even EPA is unclear as at least one of their inspectors has stated that the emergency ventilation system for ammonia refrigeration machinery rooms is included in this requirement. Now, it can easily be argued that the emergency ventilation system neither detects, nor prevents an ammonia release. It remains to be seen how this will play out as facilities are inspected by the various EPA regional personnel. However, it is safe to say that the ammonia detectors installed within a facility are covered under this requirement. However, it also needs to be asked what exactly is acceptable?

IIAR2-212, in Section 16.1.4, states that “a means shall be provided for monitoring the concentration of an ammonia release in the event of a power failure for all systems where leak detection is required in accordance with this standard.” In Appendix A, IIAR2 clarifies its position by stating “One possible means of monitoring ammonia concentration resulting from a leak during a power failure is a portable ammonia monitoring device.”

So IIAR2 allows for requiring personal ammonia detectors to be carried or worn by employees entering areas with ammonia refrigeration equipment or piping during a power failure. Is this acceptable to the EPA? When asked, the EPA pointed to the PHA. So, it is up to the PHA team to thoroughly evaluate and document the hazards during a power failure and determine if backup power in the form of batteries or generators are warranted.

It also has to be asked that if generators or battery backups are installed, how long is acceptable? They cannot be expected to operate indefinitely. One place to look is NFPA72-2022, the National Fire Alarm and Signaling Code. This code defines the amount of time that a fire alarm needs to be able to detect a fire during a power failure, as well as how long its alarm devices are required to be able to operate. It is a fairly safe position that if it is good enough for the fire alarm system, it should be good enough for ammonia detection. Regardless, any backup power installed to address this requirement must be completed by May 10, 2027.

Operating Procedures

Rule Changes to 40 CFR 68.69 (EPA 40CFR68 Subpart D, 2024)

There is one addition to the information that is required in the operating procedures detailing the safety systems and their functions. The new requirement in the regulation states that the safety system description must include documentation when monitoring equipment associated with prevention and detection of accidental releases from covered processes is removed due to safety concerns from imminent natural hazards.

Strategies for Compliance

Apparently, some chemical facilities have disabled monitoring equipment when natural hazards have approached. The easiest method to achieve compliance with this requirement without further clarification from the EPA is to add a statement to the Safety Systems section of each operating procedure that states: *"It is company policy NOT to disable monitoring equipment in the event of notification of imminent natural hazards. If the natural hazard causes a power failure that disables the monitoring equipment, manual monitoring using handheld detection will be used as long as it is safe to return to work."* Bear in mind that the facility must discuss the use of handheld detectors during power failures in their PHA and document how it deals with the possible hazards. Without such documentation, it is unlikely that an inspector will accept such a method of backup power. It may also be a good idea to include a list of facility specific backup power capabilities for detection either within the operating procedure itself or using a reference to a list in the Process Safety Information.

Hot Work

Rule Changes to 40 CFR 68.85 (EPA 40CFR68 Subpart D, 2024)

The new regulations add a paragraph (c) to the Hot Work program requirements that state that "the permit shall be retained for three years after the completion of the hot work operations.

Strategies for Compliance

It is a simple matter to add a paragraph to the Hot Work Program, stating that "Hot Work Permits for hot work conducted on or around the ammonia refrigeration system are retained for three years following completion of the hot work operations." However, one of the question marks is what exactly would be covered in "around." The easy answer would be anything within 35 feet of the ammonia refrigeration system or its piping, as this is the radius defined in 29 CFR 1910.252, the fire prevention precautions standard. However, this is not always desirable, depending upon the types of equipment or materials that are within that radius but are not explicitly part of the ammonia refrigeration system, and the nature of the hot work activities taking place. If a facility does not wish to include all hot work near the ammonia refrigeration system under their PSM-RMP hot work program, they could make the following statement that "Permits for hot work conducted within 35 feet of the ammonia refrigeration system

equipment or its piping are not retained unless the ammonia equipment or its piping cannot be protected by the use of a welding screen or blanket, and it has been positively determined that no heat can be transmitted to the ammonia refrigeration system through conduction.” Note that implementing such a provision would require that a proper hazard analysis/risk assessment has been completed and documented for the hot work in question. Be sure to also update the hot work program to state where the completed permits are kept on file.

Emergency Response

Rule Changes to 40 CFR 68.90 (EPA 40CFR68.90, 2024)

Several changes have been made to the requirements for identifying as a “non-responding” source. These explicitly list items that were typically inferred as being required previously.

The first adds text to the requirement that appropriate mechanisms are in place to notify emergency responders when there is a need for a response, including providing timely data and information detailing the current understanding and best estimates of the nature of the accidental release. The owner or operator may satisfy the requirement in this [paragraph \(b\)\(3\)](#) through notification mechanisms designed to meet other Federal, State, or local notification requirements, provided the notification meets the requirements of this [paragraph \(b\)\(3\)](#), as appropriate;

The second adds an additional requirement to be considered as “non-responding.” 40 CFR 68.90(b)(6) states: “The owner or operator maintains and implements, as necessary, procedures for informing the public and the appropriate Federal, State, and local emergency response agencies about accidental releases and partnering with these response agencies to ensure that a community notification system is in place to warn the public within the area potentially threatened by the accidental release. Documentation of the partnership shall be maintained in accordance with [§ 68.93\(c\)](#).”

Strategies for Compliance

To comply with these changes, the facility’s Emergency Action Plan (EAP) needs to be reviewed, and possibly updated. First, ensure that all agencies that may need to be notified are included in the emergency notification list. This includes the National Response Center, the State Emergency Response Commission (SERC), as defined in each state, and the Local Emergency Planning Committee (LEPC), as defined by each state, and often by each county or city. It is important to bear in mind that if a facility is located close to a border, there may be multiple SERCs or LEPCs that would potentially need to be notified. In addition, some states have additional reporting requirements, often Department of Natural Resources or some other environmental related agency. Also, the triggers for notifying the U.S. Chemical Safety Board (CSB) and how to do so should also be included. A flowchart detailing the triggers for CSB notification is included in Figure 4.

Second, when to call must also be clearly defined in the EAP. The first option would be to simply identify the triggers set by the Federal government for calling the NRC, and as set by the state for calling the SERC and the LEPC. For instance, the EAP for a facility could state that the NRC must be called if the incident has released more than 100 pounds of ammonia in less than 24 hours. If the facility is in Massachusetts, the state and local calls would be triggered if more than 10 pounds of ammonia was released in less than 24 hours.

How to determine those amounts? It is often difficult, if not impossible, to have an accurate idea of how much has been released. Option 2 would be to call every time ammonia is released. However, with these calls being public record, it would not reflect well on the facility's owner or operator if every nuisance packing leak was reported. A better option would be to create easy to follow guidelines for calling that ensure that all reportable releases are reported but limits how many incidents that don't require notification are reported.

Some example criteria that could be used to trigger notification are as follows:

- Measured PPM over the IDLH, or over the limits of the facility's PPE, whichever is lower.
- Pool or a spray of liquid ammonia
- Visible cloud of ammonia (not including wisps from a valve packing)
- Leak does not meet the above criteria but lasts longer than a pre-determined number of minutes

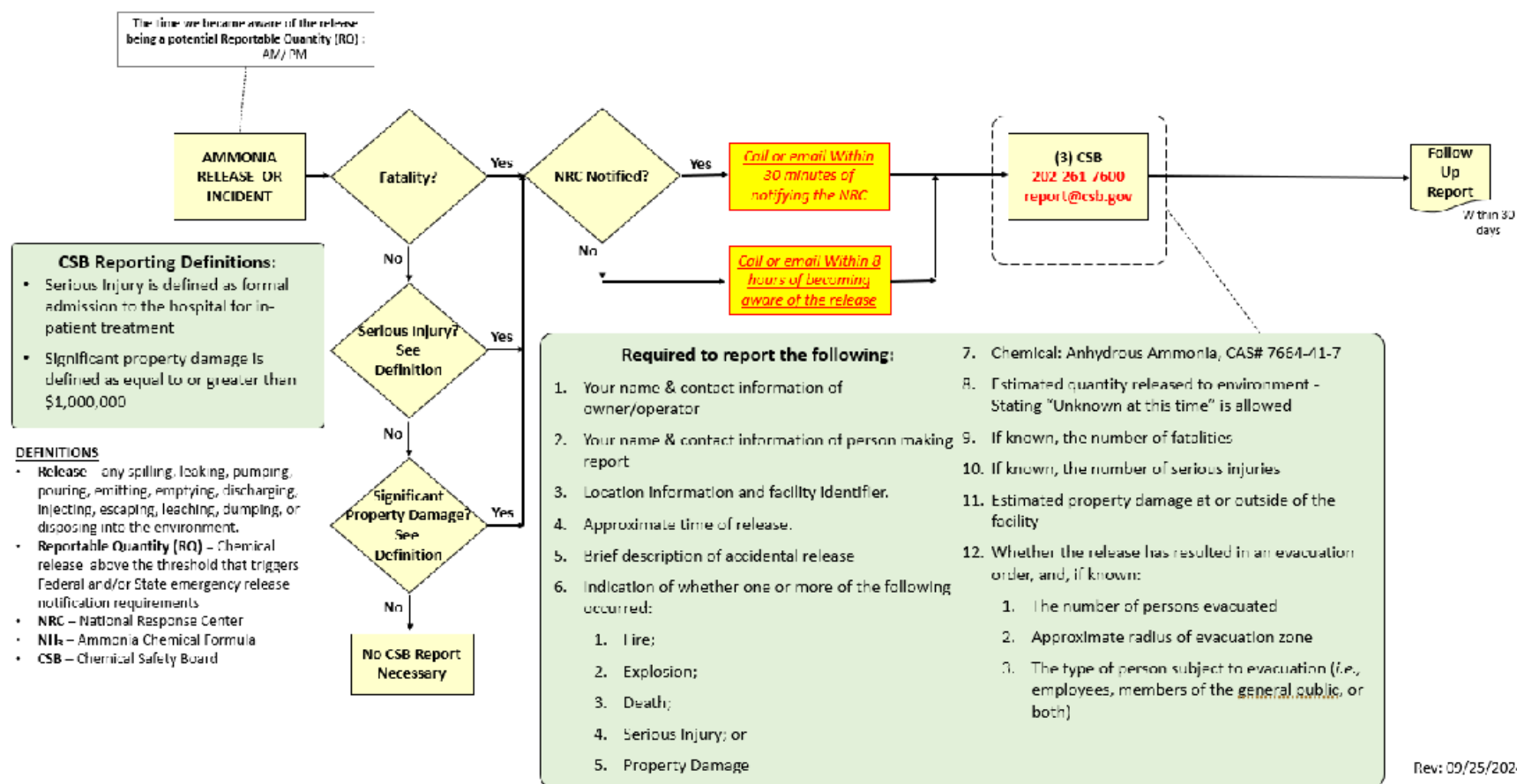
Other criteria that could be added to the above list based upon the difficulty of determining a release amount:

- Any safety relief valve lift to atmosphere
- Condenser tube leak

Finally, be sure to include in the EAP a list of personnel who are authorized and trained to make the notifications and include a statement in the EAP indicating that the local first responders will notify the public, if they deem it warranted, in the event of an accidental release.

With these new requirements, be sure to comply with the coordination requirements in 40 CFR 68.93, or at least document the annual attempts to do so, and conduct the notification exercise required under 40 CFR 68.96(a) on an annual basis. While the recent changes are due May 10, 2027, the coordination requirement was first due in 2018 and the deadline to conduct the first notification exercise is December 19, 2024.

Ammonia Release/Incident CSB Reporting Process Chart



Rev: 09/25/2024

Figure 4. USCSB Notification Flowchart.

Rule Changes to 40 CFR 68.95 (EPA 40CFR68.95, 2024)

Several changes have been made to the requirements for “responding” sources.

First, 40 CFR 68.95(a)(1)(i) required the inclusion of “procedures for informing the public and the appropriate Federal, State, and local emergency response agencies about accidental releases,” but now includes the additional requirement of “partnering with these response agencies to ensure that a community notification system is in place to warn the public within the area potentially threatened by the accidental release. Documentation of the partnership shall be maintained in accordance with [§ 68.93\(c\)](#).”

One other informational change is the addition of the same text as was found in the section on the requirements for “non-responding” sources. The regulations note that “responding” facilities’ ERPs “shall include providing timely data and information detailing the current understanding and best estimates of the nature of the release when an accidental release occurs and be coordinated with the community emergency response plan developed under [42 U.S.C. 11003](#). The owner or operator may satisfy the requirement of this [paragraph \(c\)](#) through notification mechanisms designed to meet other Federal, State, or local notification requirements, provided the notification meets the requirements of this [paragraph \(c\)](#), as appropriate.”

Strategies for Compliance

With these new requirements, ensure that the plan includes the appropriate release notification mechanisms as discussed previously.

Also, as with the “non-responding” sources, be sure to comply with the coordination requirements in 40 CFR 68.93, or at least document the annual attempts to do so, and conduct the notification exercise required under 40 CFR 68.96(a) on an annual basis. If the local response agencies agree to coordinate with the facility, be sure to discuss methods of notifying the public and ensure that the ERP is updated to reflect the results of that conversation. As mentioned previously, while the recent changes are due May 10, 2027, the coordination requirement was first due in 2018 and the deadline to conduct the first notification exercise was December 19, 2024.

Rule Changes to 40 CFR 68.96 (EPA 40CFR68.96, 2024)

With the new regulatory changes “responding” sources are once again required to conduct field exercises with the local response agencies at least once every ten years, with the first one due by March 15, 2027.

40 CFR 68.96(b)(1) also states that if the local emergency response agencies feel that such frequency is impractical, they must document it in writing. In addition, if local emergency response agencies agree, “the owner or operator shall consult with local emergency response officials to establish an alternate appropriate frequency for field exercises.”

Strategies for Compliance

Be sure to comply with the coordination requirements in 40 CFR 68.93, or at least document the annual attempts to do so. If the local response agencies do not wish to conduct field exercises at least once every ten years, ensure that not only is that documented in writing, but also what is determined to be an appropriate frequency for such exercises.

It should be noted that local responders are unlikely to state that such exercises have no merit and do not need to be conducted. It is more likely that the response agencies will state their desired frequency. It is also likely that as deadlines approach, the frequency of such exercises may slip. It is important should this happen that documentation is provided by the response agencies to help the facility avoid possible citations.

The best method of ensuring that field exercises, and tabletop exercises, for that matter, are conducted on the required frequency is to build a relationship with the local response agencies. The best way to achieve this is to join the Local Emergency Planning Committee and participate in the meetings.

Incident Investigation

Rule Changes to 40 CFR 68.81 (EPA 40CFR68 Subpart D, 2024)

The new regulations have established several incident investigation requirements when the incident meets the accident history reporting requirements under §68.42, which include on-site injuries, deaths, and significant property damage, and known off-site deaths, injuries, property damage, environmental damage, evacuations, or shelters-in-place.

First, such reports on such incidents must be completed within 12 months of the incident, unless the implementing agency (e.g., EPA) approves, in writing, of an extension. Second, the report on such incidents must include root causes.

Strategies for Compliance

Compliance with this change requires that the incident investigation program be updated to define the due dates for the report and the criteria that trigger those due dates. In addition, a root cause analysis technique, such as the 5-why technique, should be selected and identified in the program.

The final step to complying with this change in requirements is to train facility or corporate personnel who are responsible for conducting incident investigations on the use of the selected root cause technique. The deadline for compliance with this part is May 10, 2027.

Compliance Audits

Rule Changes to 40 CFR 68.79 (EPA 40CFR68 Subpart D, 2024)

With the new regulations a return to the third party audit requirement from the 2017 changes has occurred with some minor modifications. The new regulation requires that the next required compliance audit must be a third party audit when the facility experiences an RMP

reportable accident as defined in §68.42(a) or “when an implementing agency requires a third-party audit due to conditions at the stationary source that 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 of §68.80(c).” Appeals to the third-party audit requirement are possible. The appeals process is detailed in 40 CFR 68.79(g). It is important to note that while the regulation allows for the third-party audit to be completed in the timeframe corresponding to the next regular compliance audit, the implementing agency may require that it be conducted sooner.

Rule Changes to 40 CFR 68.80 (EPA 40CFR68 Subpart D, 2024)

The third-party audit team must be led by a third-party auditor meeting the competency and independence requirements outlined in paragraph (c). Any team members working for the third-party auditor’s firm must also meet the independence requirements of paragraph (c)(2).

The third-party auditor must be knowledgeable in the 40 CFR Part 68 regulations, experienced with ammonia refrigeration system audits and in applicable recognized and generally accepted good engineering practices (RAGAGEP), and trained or certified in proper auditing techniques. The owner or operator of the facility being audited must determine and document that the third-party auditor meets these requirements.

The third-party auditors must act impartially when auditing the facility and developing the audit report. They must receive no financial benefit from the outcome of the audit, apart from payment for the auditing services. All third-party personnel involved in the audit must sign and date a conflict-of-interest statement documenting that they meet the independence criteria. The regulations do allow for retired employees of the company being audited may qualify as independent if their sole continuing financial attachments to the owner or operator are employer financed retirement and/or health plans.

The third-party audit firm must have written policies and procedures to ensure that all personnel comply with the competency and independence requirements. Also, the firm must ensure that all third-party personnel involved in the audit do not accept future employment with the owner or operator of the stationary source for a period of at least two years following submission of the final audit report. However, they are allowed to conduct additional third-party audits in the two-year time frame, should the owner or operator need them.

The audit report must include the policies and procedures that the third part audit firm has put in place to ensure competency and independence is maintained. It also must include the summaries of qualifications for all team members, along with information demonstrating that all third-party auditors meet the competency requirements. Finally, any significant revisions between the draft and final versions of the report must be summarized within the final report.

The regulation, in 40 CFR 68.80(e) defines specific certification language that must be included in the report:

“I certify that this RMP compliance audit report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and

evaluate the information upon which the audit is based. I further certify that the audit was conducted and this report was prepared pursuant to the requirements of subpart D of [40 CFR part 68](#) and all other applicable auditing, competency, independence, impartiality, and conflict of interest standards and protocols. Based on my personal knowledge and experience, and inquiry of personnel involved in the audit, the information submitted herein is true, accurate, and complete.”

Once the final audit report is received, the owner or operator must develop a findings response report as soon as possible, but no later than 90 days after receiving the final audit report. This report must contain:

- A copy of the final audit report
- An appropriate response to each of the audit report findings
- A schedule for promptly addressing deficiencies
- A certification, signed and dated by a senior corporate officer, or an official in an equivalent position, of the owner or operator of the facility.

This certification must also use language spelled out in the regulations:

“I certify under penalty of law that I have engaged a third party to perform or lead an audit team to conduct a third-party audit in accordance with the requirements of [40 CFR 68.80](#) and that the attached RMP compliance audit report was received, reviewed, and responded to under my direction or supervision by qualified personnel. I further certify that appropriate responses to the findings have been identified and deficiencies were corrected, or are being corrected, consistent with the requirements of subpart D of [40 CFR part 68](#), as documented herein. Based on my personal knowledge and experience, or inquiry of personnel involved in evaluating the report findings and determining appropriate responses to the findings, the information submitted herein is true, accurate, and complete. I am aware that there are significant penalties for making false material statements, representations, or certifications, including the possibility of fines and imprisonment for knowing violations.”

The owner or operator must implement the schedule to address deficiencies identified in the audit findings response report and must document the action taken to address each deficiency and the date that the action was completed.

The finding response report and the documentation of the documentation detailing the addressing of the findings must be submitted to the owner or operator's audit committee of the Board of Directors, or another comparable committee or individual, if applicable.

The two most recent final third-party audit reports, their associated finding response reports, and the documentation of actions taken to address deficiencies must be kept on hand.

Strategies for Compliance

Update your Compliance Audit Program detailing the triggers for conducting a third-party audit, as well as the requirements for conducting such audits. This should include how to evaluate a third-party auditor's competency and independence, a list of the documentation required in

the audit report, and how to develop a finding-response report. It should also include details on required communication related to the third-party audit, including submitting the documentation to the senior corporate officer for certification, submitting the certified documentation to the implementing agency, and communicating the information to the audit committee of the Board of Directors, or another comparable committee or individual.

Note that it is vitally important that the senior corporate officers and the audit committee of the Board of Directors, as well as Facility Management, understand their responsibilities when third-party audits are to be conducted. This training should also include the criteria for RMP reportable accidents and the importance of avoiding them. The deadline to comply with this part is May 10, 2027.

Availability of Information to the Public

Rule Changes to 40 CFR 68.210 (EPA 40CFR68.210, 2024)

A requirement to make information available to the public was first introduced in the 2017 regulatory changes. With the 2024 changes, there are some new requirements.

First, the RMP is required to be made available to the public. This has been implemented by the EPA using a website presented earlier. Second, the public meeting requirement, as implemented in the 2019 changes, is still triggered by an RMP reportable accident with known offsite consequences. Third, the owner or operator must now make the following information available to any member of the public residing, working, or spending a significant time within 6 miles of the fenceline of the stationary source:

1. **Regulated substances information.** Names of regulated substances held in a process
2. **Safety Data Sheets.** SDSs for all regulated substances located at the facility
3. **Accident history information.** Provide the five-year accident history information required to be reported under [§ 68.42](#)
4. **Emergency response program.** The following summary information concerning the stationary source's compliance with [§ 68.10\(f\)\(3\)](#) and the emergency response provisions of [subpart E of this part](#) as applicable:
 - a. Whether the stationary source is a responding stationary source or a non-responding stationary source
 - b. Name and phone number of local emergency response organizations with which the owner or operator last coordinated emergency response efforts, pursuant to [§ 68.180](#)
 - c. For stationary sources subject to [§ 68.95](#), procedures for informing the public and local emergency response agencies about accidental releases;
5. **Exercises.** A list of scheduled exercises, excluding dates, required under [§ 68.96](#) occurring within one year from the date of request
6. **LEPC contact information.** Include LEPC name, phone number, and web address as available
7. **Declined recommendations and justifications.** Include declined recommendations and justifications required under [§§ 68.170\(e\)\(7\)](#) and [68.175\(e\)\(7\)](#) through [\(9\)](#)

The information must be made available in English or in at least any two other commonly spoken languages by the population potentially affected.

The owner or operator must provide ongoing notification on a company website, social media platforms, or through other publicly accessible means that:

1. Information specified in [paragraph \(d\)](#) of this section is available to the public residing, working, or spending significant time within 6 miles of the stationary source upon request. The notification shall:
 - a. Specify the information elements, identified in [paragraph \(d\)](#) of this section, that can be requested
 - b. Provide instructions for how to request the information including verification of presence within 6-miles (*e.g.*, email, mailing address, and/or telephone or website request)
2. Identify where to access information on community preparedness, if available, including shelter-in-place and evacuation procedures.

This information must be provided within 45 days of receiving a request. Records of requests must be kept for five years. The deadline for implementing this system for information requests is May 10, 2027.

Strategies for Compliance

Implementation of a system to comply with this part can take any one of probably 100 different directions and it is outside the scope of this paper to fully evaluate each of the possible means of implementing each part of this requirement. However, there are some serious questions that must be asked as soon as possible, so that answers can be developed with enough time to implement a compliant system.

Here are some of the questions that need to be asked, along with some, but certainly not, of the possibilities.

1. How will requests be submitted?
2. Who will manage the requests?
 - a. Facility personnel
 - i. New job responsibility for existing position?
 - ii. Do the personnel with the knowledge to field the requests have the margin for the additional responsibility, especially if there is a flood of requests?
 - iii. New position?
 - b. Corporate role
 - i. New job responsibility for existing position?
 - ii. New position?
3. Where will the information be kept?
4. How will the information be kept up to date?

5. How will requests be vetted to determine if they come from a requestor that meets the criteria?
6. What is “significant time” and how is that determined?
7. How will the information be provided?
8. How are available languages determined?
9. How are language translations going to be accomplished?

As should be evident from the list of questions, there are multiple stakeholders who will be needed to implement a program to comply with this requirement. This includes personnel from operations, risk, environmental, health & safety, IT, legal, and, of course, senior c-suite executives.

RMP eSubmit

Rule Changes to 40 CFR 68.160-175 (EPA 40CFR68 Subpart G, 2024)

To wrap up the changes, there are several new items that will be required to be reported on the RMP submittal. The following list of items must be submitted prior to May 10, 2028:

1. Method of communication and location of the notification that chemical hazard information is available to the public residing, working, or spending significant time within 6 miles of the stationary source, pursuant to [§ 68.210\(d\)](#).
2. Inherently safer technology or design measures implemented since the last PHA, if any, and the technology category (substitution, minimization, simplification and/or moderation). – not applicable to most facilities with ammonia refrigeration
3. Recommendations declined from natural hazard, power loss, and siting hazard evaluations and justifications.
4. Recommendations declined from safety gaps between codes, standards, or practices to which the process was designed and constructed and the most current version of applicable codes, standards, or practices.
5. The date of the most recent compliance audit; the expected date of completion of any changes resulting from the compliance audit and identification of whether the most recent compliance audit was a third-party audit, pursuant to §§ 68.79 and 68.80; and findings declined from third-party compliance audits and justifications.

It is important to note that if a facility’s RMP resubmission is due prior to the deadline of May 10, 2028, two resubmissions may be required. It is to the facility’s advantage to implement as many of the new requirements prior to their next scheduled resubmission.

Conclusion

With the myriad of changes to the RMP provisions and the relatively short timeframe for implementing some complicated requirements prior to their deadlines, it is important for each owner or operator to start the process as soon as possible. Review each new requirement. Identify the party responsible for each section’s update. Create teams to address a

requirement, if necessary. Identify the tasks required to complete the requirements to comply with each section. Develop a schedule to complete the tasks. Hold people accountable and reach out for help if progress is stalled.

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