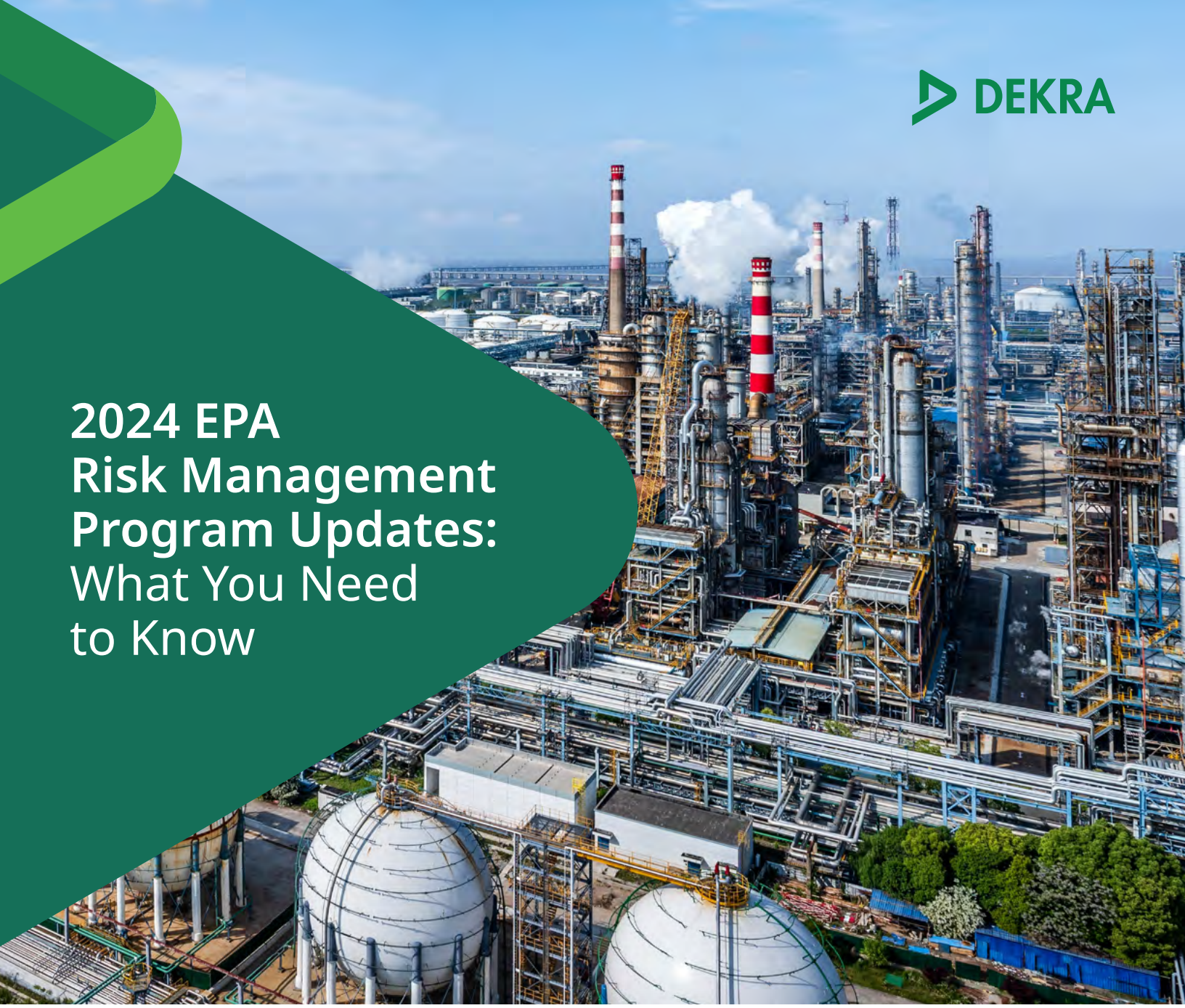

# 2024 EPA Risk Management Program Updates: What You Need to Know

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## Introduction:

On March 11, 2024, the US Environmental Protection Agency (EPA) published changes to its Risk Management Program (RMP) requirements. The revisions originated with the 2022 Safer Communities by Chemical Accident Prevention (SCCAP) rule. For those with processes already covered by OSHA's Process Safety Management (PSM) regulation, many of the new requirements will be familiar and your existing PSM programs may already meet some of the new requirements. In other cases, the requirements are completely new.

With an effective date of May 10, 2024, the rule implements significant new requirements for facilities covered by the RMP rule (40 CFR Part 68). The compliance date for most of the changes is May 10, 2027. Submission of a revised Risk Management Plan to the EPA must be completed by May 10, 2028; any revised or new plan submitted after December 19, 2024, must meet the new requirements. Compliance with the requirements for emergency response field exercises must completed by March 15, 2027. This article will describe the changes being required by the EPA.

## RMP Program Levels

The RMP regulation maintains three levels of requirements known as Programs 1, 2 and 3. There have been no changes to the qualifications for each Program Level, which are described below. The regulatory changes apply only to facilities participating in Programs 2 and 3.

**Program 1 is applicable if it meets all three of the requirements below:**

1. No release of a regulated substance has occurred in the past five years that led to offsite death, injury or response or restoration activities for an exposure of an environmental receptor.
2. The Offsite Consequence Analysis (OCA) shows the distance to a toxic or flammable endpoint is less than the distance to any public receptor.
3. Emergency response procedures have been coordinated between the facility and local emergency planning and response organizations.

**Program 2 requirements apply if the facility does not meet the requirements for Program 1 or Program 3.**

If the facility does not meet the requirements for Program 1, and either of the following conditions is met, the facility must comply with the Program 3 requirements.

1. The process is in NAICS code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, or 32532;

**or**

2. The process is subject to the OSHA Process Safety Management Standard, 29 CFR 1910.119.

## New Terms and Definitions

The changes include definitions of several new terms. It will be important to refer to these definitions as you select methods of compliance with requirements that include these terms.

**Active measures** mean risk management measures or engineering controls that rely on mechanical or other energy input to detect and respond to process deviations. Examples of active measures include alarms, safety instrumented systems, and detection hardware (such as hydrocarbon sensors).

**Inherently safer technology** or design means risk management measures that minimize the use of regulated substances, substitute less hazardous substances, moderate the use of regulated substances, or simplify covered processes in order to make accidental releases less likely, or the impacts of such releases less severe.

**Natural hazard** means meteorological, climatological, environmental, or geological phenomena that have the potential for negative impact, accounting for impacts due to climate change. Examples of such hazards include, but are not limited to, avalanche, coastal flooding, cold wave, drought, earthquake, hail, heat wave, hurricane, ice storm, landslide, lightning, riverine flooding, strong wind, tornado, tsunami, volcanic activity, wildfire, and winter weather.

**Passive measures** mean risk management measures that use design features that reduce either the frequency or consequence of the hazard without human, mechanical, or other energy input. Examples of passive measures include pressure vessel designs, dikes, berms, and blast walls.

**Practicability** means the capability of being successfully accomplished within a reasonable time, accounting for environmental, legal, social, technological, and economic factors. Environmental factors would include consideration of potential transferred risks for new risk reduction measures.

**Procedural measures** mean risk management measures such as policies, operating procedures, training, administrative controls, and emergency response actions to prevent or minimize incidents.

**Root cause** means a fundamental, underlying, system-related reason why an incident occurred that identifies a correctable failure(s) in management systems, and if applicable, in process design.

**Third-party audit** means a compliance audit conducted pursuant to the requirements of § 68.59 and/or § 68.80, performed or led by an entity (individual or firm) meeting the competency and in requirements described in § 68.59(c) or § 68.80(c).

## Process Safety Information

**For Program 2 facilities, the facility must now ensure and document that the process is designed in compliance with recognized and generally accepted good engineering practices.**

**For Program 3 facilities, the changes/revisions are clarifying in nature, and are shown below with new/revised text in italics:**

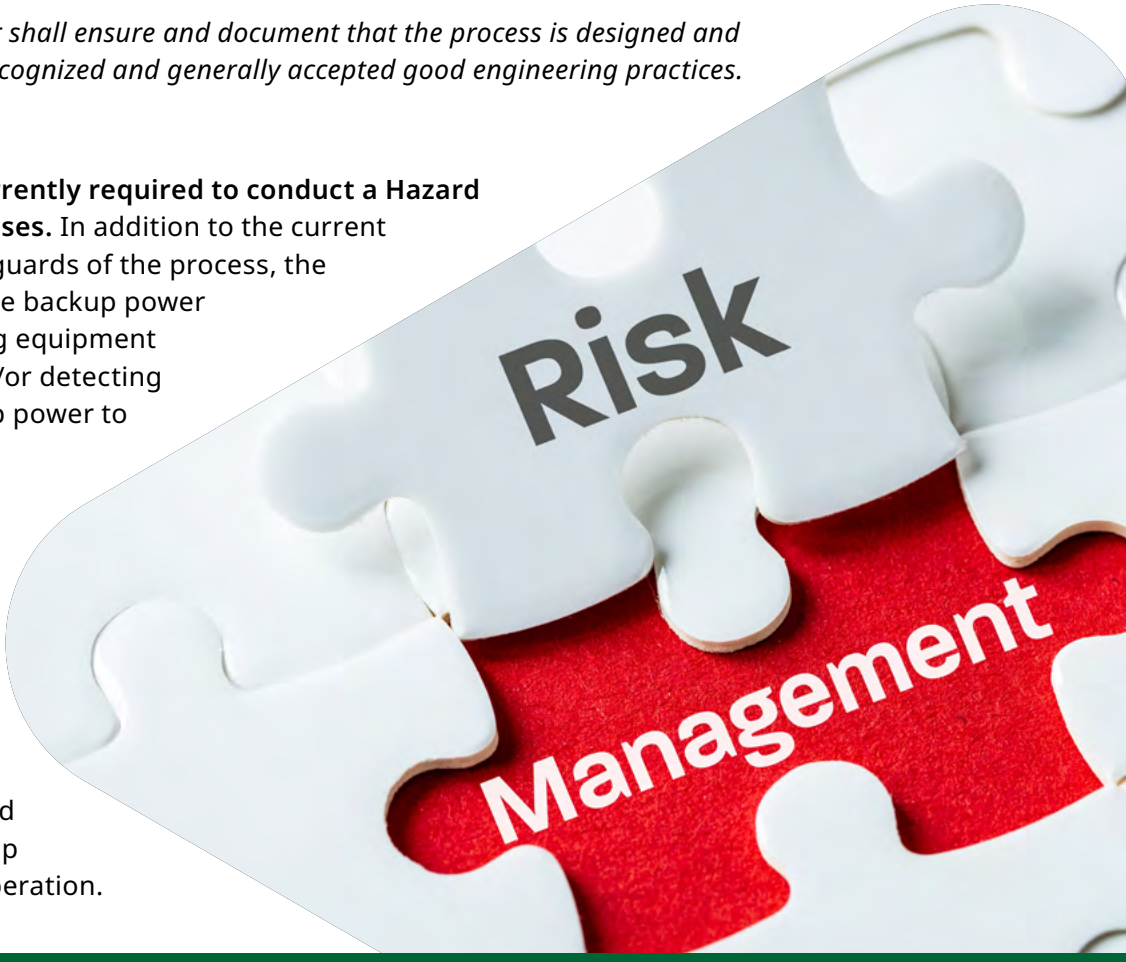
68.65(a) The owner or operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by the rule and shall keep process safety information up to date. *The compilation of written process safety information is to enable the owner or operator and the employees involved in operating the process to identify and understand the hazards posed by those processes involving regulated substances. This process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process.*

*68.65(d)(2) The owner or operator shall ensure and document that the process is designed and maintained in compliance with recognized and generally accepted good engineering practices.*

## Process Hazard Analyses

**Program 2 participants are currently required to conduct a Hazard Review of their covered processes.** In addition to the current requirement to review the safeguards of the process, the Hazard Review must now include backup power systems, and ensure monitoring equipment associated with preventing and/or detecting a release has standby or backup power to provide continuous operation.

**Program 3 participants are currently required to conduct a more detailed Process Hazard Analysis than the Hazard Review.** The facility must now ensure monitoring equipment associated with prevention and detection of accidental releases from covered processes has standby or backup power to provide continuous operation.



More specific language has been added to the requirement that facility siting be considered during the PHA. It now must include the placement of processes, equipment, and buildings within the facility, hazards posed by nearby facilities, and accidental release consequences posed to nearby public receptors. In addition to the previous requirements, the standard now specifically requires that natural hazards that could cause or exacerbate an accidental release be reviewed during the PHA. Program 3 PHAs must also include consideration of 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.

**For Program 3 participants in NAICS 324 or 325, the PHA must also include consideration of Safer Technologies and Alternatives (STAA).** The STAA must consider and document, in the following order of preference, inherently safer technology or design, passive measures, active measures, and procedural measures used for risk reduction.

The STAA must address additional requirements for Program 3 facilities that also meet any of the following criteria in Figure 1.

| | |
|---|---|
| **In NAICS codes 324 or 325** | located within 1 mile of another facility having a covered process in NAICS code 324 or 325 |
| **In NAICS code 324** | with hydrofluoric acid alkylation covered processes; and |
| **In NAICS codes 324 or 325** | that have had one accident that meets the accident history reporting requirements under § 68.42 since the most recent process hazard analysis under this section. |

If the Figure 1 criteria are met, the STAA must determine and document the practicability of the inherently safer technologies and designs considered during the PHA. The documentation must include any methods used to determine practicability. For any inherently safer technologies and designs implemented, the facility must document and submit to EPA a description of the technology implemented as a part of their next RMP submission.

All STAAs must be performed by a team that includes members with expertise in the process being evaluated, including at least one member who works in the process. The team members must be documented.

Also, for facilities listed in Figure 1, the EPA requires that the facility, where practicable, implement at least one of the following:

- a passive measure, or
- an inherently safer technology or design, or
- a combination of active and procedural measures that achieve the same or greater risk reduction offered by a passive measure.

If none of the above measures are practicable then at least one procedural measure must be implemented. For passive and active measures not implemented, the determination that they are not practicable must be documented, not be based on solely reduced profits or increased costs.

## Operating Procedures

For both Programs 2 and 3, the operating procedures must include documentation of what monitoring equipment associated with prevention and detection of accidental releases from covered processes is removed due to safety concerns from imminent natural hazards. This could perhaps be documented in the procedures used to prepare for and manage such natural hazards.

## Incident Investigation

For incident investigations required by Programs 2 and 3, EPA now requires that:

1. The report must be completed within 12 months of the incident, unless the EPA approves, in writing, to an extension of time; and
2. The report must identify the initiating event, direct and indirect contributing factors, and root causes. Root causes must be determined by conducting an analysis for each incident using a recognized method.

## Employee Participation

Program 2 now requires a written Employee Participation plan describing how employees can participate in various elements of RMP. Employees and their representatives must be informed annually of their right to view the RMP and how to access it. Training is required as often as necessary to ensure employees are informed of the details of the RMP.

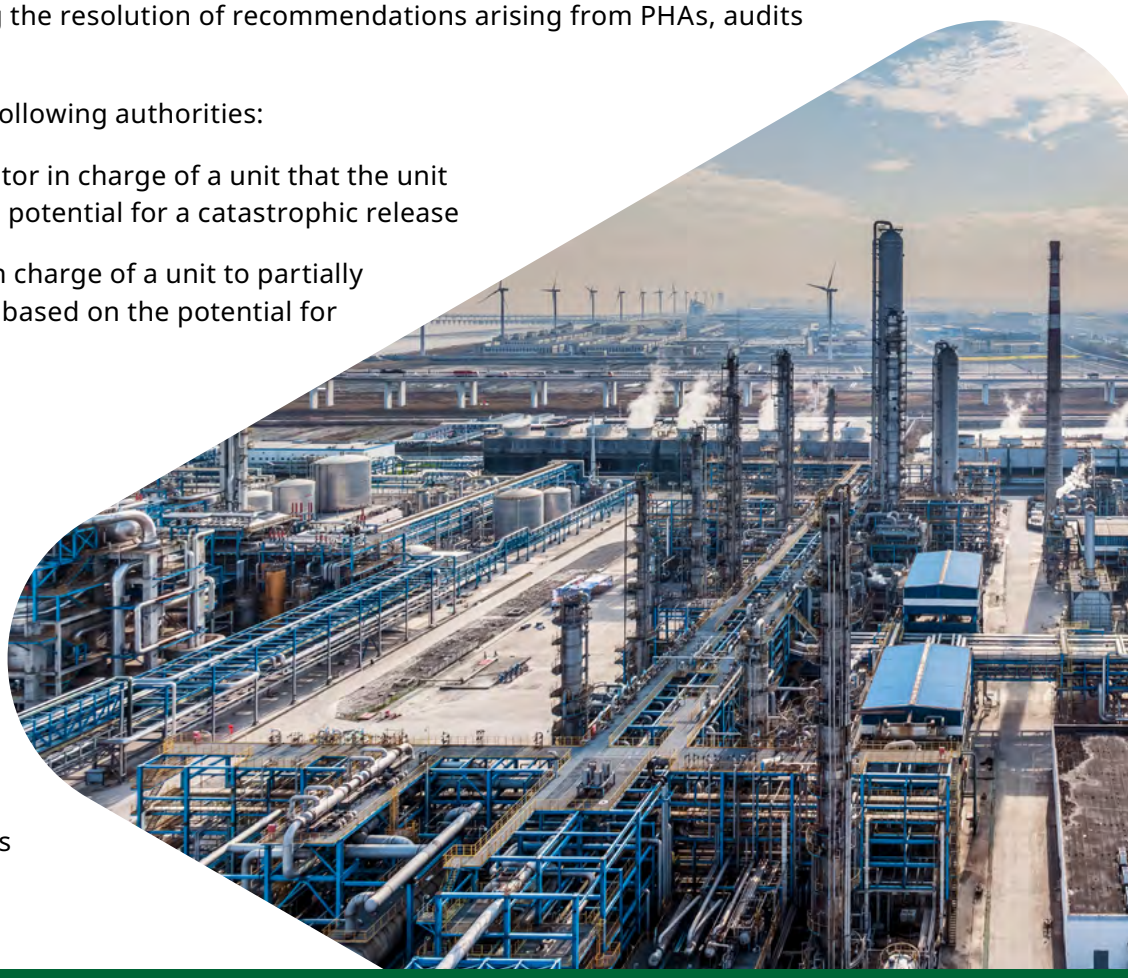
Employers are also required to implement a reporting process for employees and their representatives to report unaddressed hazards that could lead to catastrophic releases. The process must provide employees the ability to report this information to the company, the EPA, or both. Employees may report anonymously if desired.

**For Program 3, the regulation requires compliance with the Program 2 requirements listed above plus those listed below.**

- Consult employees regarding conduct and development of PHAs and other elements of the RMP.
- Consult employees regarding the resolution of recommendations arising from PHAs, audits and incident investigations.
- Provide employees with the following authorities:
  - To recommend to the operator in charge of a unit that the unit be shut down, based on the potential for a catastrophic release
  - Allow a qualified operator in charge of a unit to partially or completely shut it down, based on the potential for a catastrophic release

## Hot Work Permits

For Program 3 participants, Hot Work Permits must now include the requirements of 1910.252(a) in OSHA's Welding, Cutting and Brazing standard. This includes the date of the authorized work and the identity of the object on which hot work is to be performed. Hot work permits must be retained for three years after completion of the work.



## Emergency Response

The changes to Emergency Response requirements apply to both Program 2 and 3 facilities. Facilities must have appropriate mechanisms for notifying emergency responders of an emergency. This includes providing timely data and information about the incident to arriving responders. Emergency plans must also include procedures for informing the public and the appropriate Federal, State, and local emergency response agencies about accidental releases. Facilities must partner with emergency response agencies to develop methods of warning members of the public who may be threatened by a release. (e.g. community emergency warning system)

Employers must work with emergency responders to conduct and establish the frequency of field exercises. A field exercise must be completed before March 15, 2027, and at least once every ten years thereafter. If the responding agencies state in writing that this frequency is impractical, an alternative frequency must be established.

Within 90 days of each field and tabletop exercise a report must be written to include a description of the exercise scenario, names and organizations of each participant, an evaluation of the exercise results including lessons learned, recommendations for improvement or revisions to the emergency response exercise program and emergency response program, and a schedule to promptly address and resolve recommendations.

## Compliance Audits

The standard now requires a written certification that compliance with the regulation has been evaluated at least every three years. Under the circumstances below, this audit must be conducted by a qualified third party.

- An accidental release from a covered process at a facility has occurred that resulted in deaths, injuries, or significant property damage onsite, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage, or
- When ordered by the EPA due to conditions at the site that could lead to an accidental release of a regulated substance.

The standard contains specific requirements for third-party audit teams, qualifications, responsibilities, the contents of the audit report, and managing recommendations in sections 68.59 (Program 2) and 68.80 (Program 3) of the RMP standard. The requirements for Programs 2 and 3 are identical. The third-party audit report must include a summary of any significant revisions between draft and final versions of the report.

## Risk Management Plan Submission

The EPA has added additional information requirements for the Risk Management Plan submitted to them. Any new or revised RMP submission occurring after 12/19/24 must meet these requirements.

**For Program 2, these additional requirements include:**

- The method of communication that hazard information is available to the public
- Any declined recommendations related to natural hazard, power loss and siting hazard evaluations. Justification for declining the recommendation must be included.
- The date of the most recent compliance audit
- The expected completion date for resolution of audit findings
- Any declined recommendations, along with the justification, from a third-party audit.

**Program 3 facilities must include the additional Program 2 requirements, plus the following additional information:**

- The identity of any inherently safer technology or design measures implemented since the last PHA.
- 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.

## Conclusion

While some of the new RMP requirements are minor, facilities must begin now to prepare for the changes that will require significant time and effort to implement. Efforts to gather and generate additional information for the RMP submission must begin now. Determining gaps between versions of codes and standards used to construct facilities, and the current versions of these documents, may require a significant amount of work. The implications of the requirement to report justification for declining certain types of recommendations must be addressed through careful consideration of how recommendations are made, evaluated, and resolved.

Facilities must begin preparation for compliance now. A gap analysis between your current RMP program and the new requirements should be completed. Take advantage of opportunities to leverage existing activities under the PSM standard. A roadmap showing activities to be undertaken, and the timing of such activities relative to the compliance dates, will ensure all of the new requirements are addressed before the deadlines.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