

**EPN Comments on Accidental Release Prevention Requirements:
Risk Management Programs Under the Clean Air Act; Common Sense Approach to Chemical
Accident Prevention**

Docket No.:EPA-HQ-OLEM-2025-0313

May 11, 2026

The [Environmental Protection Network](https://www.epa.gov/environmental-protection-network) (EPN) harnesses the expertise of more than 750 former Environmental Protection Agency (EPA) career staff and confirmation-level appointees from Democratic and Republican administrations to provide the unique perspective of former regulators and scientists with decades of historical knowledge and subject matter expertise.

On February 24, 2026, EPA released a proposal to change its Risk Management Program (RMP) regulations by making several proposed changes to the 2024 Safer Communities by Chemical Accident Prevention (SCCAP) rule. EPN believes that the proposed revisions represent a harmful shift away from several prevention-focused elements that were added to the RMP to address recurring causes of serious chemical accidents.

Introduction

EPA's assertion that a decline in reported accidents from 147 in 2014 to 81 in 2023¹ demonstrates that existing prevention programs are sufficient—and that the 2024 SCCAP rule is unnecessary—is not supported by the record. Most critically, the time period cited (2014–2023) predates implementation of the 2024 rule's core provisions. EPA established compliance timelines of up to three years (and in some cases four years) after the rule's effective date of May 10, 2024 for key prevention, emergency preparedness, and disclosure requirements. As a result, the accident data cited by the Agency cannot logically be used to evaluate the effectiveness—or necessity—of the SCCAP rule. It is methodologically unsound to claim that measures are unnecessary based on a dataset that reflects conditions prior to those measures taking effect.

Moreover, even within the cited dataset, the conclusion that existing programs are broadly “successful” is contradicted by both the scale and severity of ongoing incidents. The 2026 proposal acknowledges 335 RMP-reportable accidents with offsite impacts between 2014 and 2023²—an average of roughly 33 accidents per year affecting surrounding communities through deaths, injuries, evacuations, shelter-in-place orders, property damage, and environmental harm. EPA has also documented that approximately 27% of reportable accidents involve such offsite consequences. These are not minor incidents; they represent precisely the types of high-consequence, low-frequency events that the RMP is designed to prevent. Even at 81 accidents in 2023, this equates to dozens of serious chemical incidents annually, each with the potential for catastrophic impact—particularly in fenceline communities that are already overburdened by cumulative environmental and public health risks.

¹ <https://www.federalregister.gov/d/2026-03633/p-158>

² <https://www.federalregister.gov/d/2026-03633/p-198>

Finally, EPA's own findings in the 2024 final rule directly undermine the claim that existing prevention programs are sufficient. The Agency concluded that RMP accidents continue to impose substantial and unpredictable harm, with estimated monetized damages of approximately \$540 million annually. Importantly, EPA identified a persistent pattern of repeat accidents: between 2016 and 2020, at least 70 facilities experienced multiple reportable accidents, and a majority of those facilities had accident histories extending even further back. This pattern of recurrence is a hallmark of systemic gaps in process safety management, hazard analysis, emergency preparedness, and accountability—precisely the areas targeted by the SCCAP rule's provisions, including third-party audits, safer technology and alternatives analysis, and enhanced emergency coordination. Taken together, the record demonstrates not that prevention has been sufficiently achieved, but that meaningful, enforceable improvements remain necessary to address ongoing risks to workers, first responders, and surrounding communities.

#1 Safer Technology and Alternatives Analysis (STAA)

EPA's proposal states, “the EPA is proposing to remove these regulatory requirements for existing facilities to reduce burden on sources that are already implementing effective prevention programs.”³ This justification, however, relies on the flawed assumption that current oversight is adequate, disregarding the persistent cycle of major accidents that result in \$540 million in annual damages and that inflict severe, unpredictable harm on surrounding communities.

Limiting STAA requirements primarily to new processes removes a critical prevention tool from older, complex refinery and chemical plants where safer designs or operational alternatives may be feasible but historically remain unevaluated absent a regulatory driver. Enforcement experience repeatedly demonstrates that catastrophic incidents rarely arise from unknown hazards; rather, they occur where known risks were tolerated, normalized, or insufficiently challenged through structured analysis.

The underlying purpose of an STAA is to evaluate new alternatives for older processes in light of technological advances which may have arisen since the construction of the original process. Quite simply, STAAs are meaningless for new processes where there cannot have been such advances. Regulated sources continue to experience catastrophic accidents, meaning that those sources are not, in fact, implementing effective prevention programs. It is precisely such sources that would benefit from performing an STAA.

In practice, many higher-risk facilities—particularly petroleum refineries and large chemical manufacturing operations—already perform analyses substantially similar to STAA through existing programs such as Process Hazard Analyses (PHAs), Layers of Protection Analysis, inherently safer design reviews, and corporate risk management evaluations. These facilities generally possess the engineering expertise, operational experience, and technical staffing necessary to conduct such evaluations as part of routine process safety management. However, these analyses are often applied inconsistently, lack sufficient documentation transparency, or are not systematically revisited as equipment conditions, operating parameters, or hazard profiles evolve. Incorporating these expectations within the RMP framework establishes a consistent national baseline while recognizing that facilities presenting the greatest catastrophic risk already have the resources and professional capability to perform these evaluations in a structured and repeatable manner.

³ <https://www.federalregister.gov/d/2026-03633/p-186>

Accidents continue to occur at existing facilities. STAA is part of a robust prevention program for existing facilities. The US has not built a new refinery since 1977 so this requirement would have little effect for existing petroleum refineries, which continue to have frequent accidents.

EPA proposes to assess all sources that have had accidents through a compliance- and performance-driven approach. This may result in enforcement actions that require STAA-like actions to be taken as injunctive relief for sources with less effective prevention programs, where the Agency determines that such relief is appropriate. Because the Agency can pursue imposing these requirements through enforcement actions, the proposed regulation argues that imposing a blanket requirement on these facilities is unnecessary and potentially overbroad. EPA's RMP has historically operated as a relatively small regulatory program with limited inspection resources compared to the number and complexity of regulated facilities nationwide. The U.S. Government Accountability Office (GAO) report⁴ documented declining federal oversight capacity, noting that in 2020 the number of credentialed EPA RMP inspectors fell to approximately 35 inspectors nationwide responsible for overseeing more than 11,000 facilities, contributing to a substantial reduction in annual inspections. Historically, the national inspection planning goal has been to inspect approximately three percent of RMP facilities per year, meaning that even under fully staffed conditions, it would take decades to inspect all regulated facilities. In practice, EPA regions frequently fell short of this goal due to staffing shortages, retirements, and the continuous need to recruit and train new inspectors. Developing an effective RMP inspector requires significant time and technical investment; new hires often possess engineering or specialized scientific backgrounds, yet it typically takes two years or more of field experience and mentorship before an inspector can independently evaluate complex chemical processes and identify latent process safety deficiencies. Given these practical limitations, reliance on enforcement actions to implement STAA-like actions is neither realistic nor consistent with the prevention-based intent of the Clean Air Act (CAA).

The Center for Chemical Process Safety (CCPS) provides widely recognized guidance on Inherently Safer Design (ISD) that applies broadly to chemical and petrochemical processes involving the handling, storage, or transformation of hazardous materials.⁵ Importantly, these principles apply not only to the design of new facilities but also to existing operations where hazards can be reduced through substitution, minimization, moderation, or simplification. CCPS is internationally recognized as a leading authority in process safety, and ISD principles are increasingly embedded in regulatory frameworks around the world. For example, the European Union's Seveso II Directive and the United Kingdom's Control of Major Accident Hazards Regulations (COMAH) both encourage or require facilities to evaluate inherently safer approaches as part of major accident prevention strategies. Given that ISD is widely regarded as the gold standard in accident prevention—because it seeks to eliminate hazards at their source rather than relying solely on add-on safeguards—it is reasonable that similar expectations be incorporated into U.S. regulatory programs such as the RMP to promote consistent, prevention-based safety practices.

#2 Information Availability

EPA has proposed codifying the RMP Public Data Tool and shifting responsibility for information access from individual facilities to a centralized EPA-managed platform. It is a practical and beneficial

⁴ U.S. Government Accountability Office, Chemical Risk: EPA Should Take Additional Actions to Manage Risks from Climate Change (GAO-22-104494, 2022).

⁵ Center for Chemical Process Safety (CCPS). (2019). *Guidelines for inherently safer chemical processes: A life cycle approach* (3rd ed.). Wiley-AIChE. <https://onlinelibrary.wiley.com/doi/book/10.1002/9781119529248>

improvement that will enhance transparency, consistency, and public access to critical safety information. The online system ensures that communities, emergency responders, and other stakeholders can obtain timely and uniform information without delays or variability in facility responses. From an implementation perspective, a centralized tool improves data reliability and accessibility, particularly during emergency planning or response situations. It also supports broader public awareness by making information more readily available to all interested parties, not just those who submit formal requests. Overall, this change strengthens the effectiveness of the RMP by improving communication and access to hazard information, which are essential components of community preparedness and chemical accident prevention.

#3 Third-Party Compliance Audits

The proposed revisions to the third-party audit provisions fundamentally weaken one of the most critical independent verification tools in the RMP. Under the 2024 SCCAP rule, third-party audits are triggered following a single RMP-reportable accident or where EPA determines site-specific risks warrant additional scrutiny. These audits are structured to be independent, technically rigorous, and integrated into the facility's compliance cycle, with clear requirements for auditor qualifications, conflict-of-interest safeguards, and reporting to senior corporate leadership. This framework reflects a preventive approach: intervening after the first serious failure to identify root causes, correct systemic deficiencies, and prevent recurrence—particularly at facilities handling highly hazardous substances in close proximity to surrounding communities.

The proposed rule would either eliminate third-party audits entirely or significantly narrow their application by requiring two accidents within five years before an audit is triggered, while also removing EPA's authority to require audits based on site-specific risk conditions. At the same time, the proposal weakens or removes key independence and governance provisions, including auditor qualification standards, conflict-of-interest protections, and requirements to elevate findings to board-level oversight or document why recommendations are not implemented. Taken together, these changes transform third-party audits from a proactive, independent safety mechanism into a reactive—or potentially nonexistent—tool, reducing both accountability and the likelihood that systemic risks will be identified and addressed before additional incidents occur.

This shift is particularly concerning in light of EPA's own findings that a subset of facilities experience repeat accidents over time (i.e., 57 facilities had multiple accidents from 2019 to 2023)⁶—demonstrating that existing internal prevention systems are not consistently sufficient to prevent recurrence. By delaying or eliminating independent audits, the proposal removes a critical safeguard precisely where it is most needed: at facilities with demonstrated histories of failure. In high-risk industrial systems, the absence of early, independent intervention increases the probability that initial incidents escalate into more severe events, including those with offsite consequences. Maintaining strong third-party audit requirements is therefore essential, not only for regulatory compliance, but for protecting workers, first responders, and fenceline communities from preventable chemical disasters.

The Agency's rationale for removing the third-party audit requirement following a reportable accident is not fully supported by the accident data presented. While EPA notes that not all facilities experiencing a single RMP-reportable accident will experience a second, the purpose of a third-party audit is not solely to predict repeat accidents, but to ensure that the underlying causes of a significant incident are thoroughly and

⁶ <https://www.federalregister.gov/d/2026-03633/p-8987>

objectively evaluated. A reportable accident under the RMP already reflects a serious failure in prevention systems, often involving injuries, fatalities, substantial property damage, or offsite consequences affecting surrounding communities. In such circumstances, independent technical review is a reasonable and proportionate response to ensure that systemic deficiencies are properly identified and corrected before operations continue under similar conditions.

Based on enforcement experience, internal investigations conducted after significant releases may often lack independence and frequently focus on immediate technical failures rather than broader organizational or management system deficiencies.

The accident statistics cited by EPA also support maintaining independent review rather than eliminating it. Between 2014 and 2023, 177 facilities experienced more than one RMP-reportable accident,⁷ demonstrating that repeat incidents do occur at a meaningful number of facilities. Even among facilities that do not experience a second reportable accident, a single serious incident can reveal deficiencies in hazard evaluation, mechanical integrity, management systems, or emergency preparedness that warrant independent scrutiny.

Concerns about the potential variability in audit quality do not justify removal of the requirement. Instead, they support ensuring appropriate auditor qualifications and scope. In practice, facilities routinely obtain high-quality technical audits in other regulatory and industry contexts, including process safety reviews, insurance risk assessments, and consent decree requirements.

Moreover, the number of facilities subject to this requirement is limited—roughly 100 facilities per year report RMP accidents⁸—making the requirement a targeted oversight tool rather than a broad regulatory burden. Given the severity of incidents that trigger the requirement, allocating resources to an independent safety evaluation represents a prudent investment in preventing recurrence and protecting workers, responders, and nearby communities.

#5 Community and Emergency Responder Notification

The proposed revisions to Community and Emergency Responder Notification significantly weaken a core life-safety function of the RMP at precisely the moment when it is most needed. Under the 2024 SCCAP rule, EPA established a systems-based framework requiring facilities to ensure that effective, operational community notification mechanisms are in place, supported by documented procedures, real-time information sharing, and integration with local emergency response planning. This approach reflects a fundamental reality: during a chemical release—particularly under extreme weather conditions—effective response depends on pre-established, tested communication systems, not improvised coordination. In the context of increasing frequency and severity of extreme weather events, including hurricanes, flooding, and heat-related infrastructure stress, these systems are essential to managing so-called “Natech” risks, where natural hazards trigger technological accidents and compound impacts on surrounding communities.

The proposed rule shifts this framework toward a more limited coordination model, emphasizing that facilities need only coordinate with local officials, while removing requirements to ensure notification

⁷ <https://www.federalregister.gov/d/2026-03633/p-8987>

⁸ U.S. Environmental Protection Agency (EPA). (2024). *Regulatory Impact Analysis: Safer Communities by Chemical Accident Prevention Final Rule*. Office of Land and Emergency Management (OLEM). Page 7. [Available at EPA NEIS](#).

systems are in place, scaling back documentation and accountability, and reducing public access to facility-specific hazard information. This shift is particularly concerning given the well-documented challenges that extreme weather events pose to communication infrastructure, emergency response capacity, and interagency coordination. During major storms or flood events, local systems are often strained or degraded, and multiple incidents may occur simultaneously. In such conditions, reliance on loosely defined coordination—without enforceable requirements for system readiness, redundancy, and real-time information flow—creates a significant risk that critical notifications will be delayed, incomplete, or not delivered at all.

These risks are not hypothetical. EPA and broader research on Natech events have consistently shown that natural hazards can trigger cascading failures at industrial facilities, often under conditions where emergency response systems are already compromised. In these scenarios, timely and accurate communication to first responders and affected communities is not simply a regulatory requirement—it is a determinant of whether exposures, injuries, and fatalities can be prevented. The 2024 SCCAP rule appropriately recognized this by requiring facilities to establish and document robust notification systems integrated with local response frameworks. By contrast, the proposed revisions remove key safeguards that ensure these systems are functional, verifiable, and accountable. Maintaining strong Community and Emergency Responder Notification requirements is therefore essential to addressing the growing intersection of industrial risk and extreme weather, and to protecting fenceline communities who are most vulnerable to both.

#6 Stationary Source Siting

The proposed revisions to the 2024 SCCAP rule stationary source siting provisions would materially weaken one of the clearest regulatory mechanisms linking process safety to protection of surrounding communities. The 2024 SCCAP rule appropriately clarified that Program 2 hazard reviews and Program 3 PHAs must explicitly evaluate the placement of processes, equipment, and buildings; hazards posed by proximate stationary sources; and the consequences of accidental releases in relation to the public and public receptors. This clarification was not redundant—it was necessary. It ensured that facilities systematically assess how internal design decisions and external proximity conditions can amplify risk, including the potential for cascading or “knock-on” incidents. In high-hazard industrial environments—particularly where facilities are co-located or clustered—these interactions are a primary driver not only of catastrophic safety outcomes, but also of large-scale operational and economic disruption. EPA has estimated that RMP facility accidents result in approximately **\$540 million per year in monetized damages**,⁹ with an **average cost of roughly \$5.5 million per accident**, underscoring the material financial consequences of inadequate hazard identification and prevention.

The proposed rule would rescind this clarifying language and revert to a more generalized siting requirement, asserting that existing hazard review frameworks are sufficient. However, what is no longer explicitly required is less likely to be rigorously analyzed, documented, or enforced. Removing specific references to proximate sources and public receptors risks narrowing the scope of siting analyses in practice, particularly in facilities with complex operations or legacy infrastructure. The 2018 Husky Energy Superior Refinery explosion—resulting in over \$550 million in damages, a four-year shutdown, and mandatory community evacuations—serves as a critical case study on the importance of specific siting and facility layout requirements. While the initial explosion was caused by failed valves during a maintenance shutdown,

⁹ U.S. Environmental Protection Agency (EPA). (2024). *Regulatory Impact Analysis: Safer Communities by Chemical Accident Prevention Final Rule*. Office of Land and Emergency Management (OLEM). Page 13. [Available at EPA NEIS](#).

the catastrophic escalation was direct evidence of poor siting choices. The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigation into the 2018 Husky Energy explosion identified critical "stationary source siting" failures, noting that the proximity of the hydrofluoric acid (HF) tank—situated just 150 feet from the blast—posed a severe risk of a catastrophic toxic release due to flying debris. If the HF tank had been punctured, it could have resulted in a catastrophic toxic cloud released into the surrounding populated city, creating a "serious near miss" for a massive casualty event.¹⁰ This event demonstrates how siting and proximity can combine to produce cascading failures with severe economic consequences for facilities and broader supply chains.

For frontline and environmental justice communities, the consequences of this rollback are both immediate and enduring. EPA's own analysis has found that historically underserved and overburdened populations are disproportionately located near RMP facilities and therefore bear disproportionate risk from accidental releases. In many such communities, hazardous facilities are situated in close proximity to homes, schools, hospitals, and other public receptors, often alongside other industrial operations that compound exposure risks. When cascading events occur, the impacts extend far beyond the initial release to include **mass evacuations affecting thousands of residents, property damage in the tens to hundreds of millions of dollars**, and long-term economic dislocation. Following the Arkema incident, for example, surrounding communities experienced evacuations, business interruptions, and prolonged environmental and legal impacts. Local governments face substantial emergency response and recovery costs, while residents often incur **uninsured or underinsured losses**, contributing to declines in property values and erosion of local tax bases. These economic burdens compound existing vulnerabilities, reinforcing inequities in communities already facing disproportionate environmental risk. The 2024 SCCAP siting provisions directly addressed these realities by requiring facilities to evaluate how proximity to the public and neighboring hazards influences both the severity and distribution of impacts. Eliminating that clarity undermines accountability at precisely the points where risk is highest and most unevenly distributed. Retaining—and strengthening—explicit siting requirements is therefore essential not only for preventing catastrophic incidents, but also for avoiding the cascading economic harms that follow them.

Maintaining the stationary source siting amplifying regulatory text in Section IV.F is important because enforcement experience has shown that this clarification improves both compliance and consistency in how facilities evaluate siting risks. In multiple inspections and enforcement actions, facilities failed to adequately address siting considerations—such as proximity to populations, occupied structures, and potential offsite impacts—when the regulatory language lacked specificity. The added amplifying language helps ensure that facilities more fully evaluate these factors within their hazard analyses, leading to more complete identification of risks and appropriate safeguards. Arguments for removing this language based on consistency with the OSHA Process Safety Management Standard are not persuasive, as the OSHA PSM standard has not been substantively updated since its promulgation in 1992 and does not reflect lessons learned from decades of chemical incidents and enforcement experience. Retaining the clarifying language in the Risk Management Program is therefore appropriate to ensure that siting hazards are consistently and adequately addressed in a manner aligned with current understanding of chemical accident risks and community impacts

Retaining these siting requirements will provide much-needed **regulatory clarity** for facilities. By establishing clear expectations for evaluating how equipment placement impacts receptors, the EPA

¹⁰ CSB, "Husky Energy Refinery Explosion and Fire," <https://www.csb.gov/husky-energy-refinery-explosion-and-fire/>.

removes the ambiguity that often leads to inconsistent safety cultures. This structured oversight ensures that all facilities operate under a uniform standard of **transparency and accountability**, focusing on community protection in a way that goes beyond the internal scope of OSHA and is consistent with the CAA.

#7 Natural Hazards

The proposed rule's elimination of the explicit natural hazards provisions from the 2024 RMP is arbitrary and capricious because it disregards the Agency's own prior findings, fails to account for substantial evidence in the record, and weakens protections against a well-documented and increasing category of catastrophic risk. The 2024 SCCAP rule appropriately required Program 2 and Program 3 facilities to evaluate "natural hazards that could cause or exacerbate an accidental release," defined such hazards broadly to include meteorological, climatological, environmental, and geological phenomena (including those influenced by climate change), and incorporated associated resilience measures such as backup power for monitoring equipment and documentation requirements when such equipment is taken offline due to imminent natural hazards.¹¹ EPA explained that these provisions were necessary to ensure consistent and adequate consideration of risks that some facilities were not previously evaluating, and to align regulatory expectations with evolving scientific understanding and state-level practices.¹²

The Agency now proposes to rescind these requirements on the grounds that they are redundant, potentially confusing, and may cause facilities to overemphasize natural hazards relative to other causes of accidental releases.¹³ This rationale is not supported by the administrative record and reflects a fundamental misunderstanding of the role natural hazards play in industrial accidents. Natural hazards do not operate in isolation or in competition with equipment failure or human error; rather, they frequently act as initiating or amplifying conditions that trigger or exacerbate those very failure modes. Flooding can disable electrical systems and instrumentation; extreme heat can degrade equipment integrity; storms can interrupt power and strain emergency systems; and all such conditions can increase operator error under stress. By eliminating explicit regulatory language requiring evaluation of these hazards, EPA risks narrowing the scope of hazard analyses in practice, thereby reducing the likelihood that facilities will identify and mitigate precisely the types of cascading and compound failures that have led to some of the most severe chemical incidents in recent history.

The proposed rollback is further undermined by a fundamental internal inconsistency in the Agency's position. On the one hand, the proposal acknowledges that facilities may consider "natural hazards" within general hazard review frameworks, implicitly recognizing that such risks exist and may be relevant to accidental releases. On the other hand, the broader policy context in which this rule is being advanced includes repeated statements minimizing or denying the increasing frequency and severity of extreme weather and climate-related impacts. This creates a logical and regulatory contradiction: the Agency cannot simultaneously justify removing explicit natural-hazard requirements on the premise that such risks are overstated or unnecessary, while retaining a regulatory framework that implicitly depends on facilities to identify and manage those same risks. If natural hazards are sufficiently material to be considered at all—as

¹¹ Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Safer Communities by Chemical Accident Prevention (SCCAP), Final Rule, 89 Fed. Reg. 17654 (Mar. 11, 2024).

¹² *Id.*

¹³ Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Proposed Rule, 91 Fed. Reg. EPA-HQ-OLEM-2025-0313 (Feb. 24, 2026).

the proposal concedes—then removing clear, enforceable requirements to evaluate them is irrational. Conversely, if the Agency believes such risks are not increasing or are not significant, it must reconcile that position with the substantial body of federal evidence to the contrary.

That evidence is extensive and was explicitly relied upon by EPA in the 2024 rulemaking. GAO found that approximately 31 percent of RMP facilities analyzed—more than 3,200 facilities—are located in areas exposed to flooding, storm surge, wildfire, or sea-level rise hazards that may be exacerbated by climate change, and recommended that EPA ensure facilities consider these risks.¹⁴ EPA agreed with those recommendations. In the 2024 final rule, EPA further recognized that natural hazards can exacerbate accidental releases and that explicit regulatory language was necessary to ensure consistent evaluation.¹⁵ The Agency cannot now reverse course without providing a reasoned explanation that addresses this evidence. A conclusory assertion that general hazard review provisions are sufficient does not satisfy the requirements of reasoned decision-making under the Administrative Procedure Act, particularly where the Agency is rescinding protections designed to address risks it has previously acknowledged as significant and increasing.

The proposal also eliminates associated resilience measures—most notably the requirement for backup power for monitoring equipment and the requirement to document when monitoring systems are taken offline due to imminent natural hazards—without adequately addressing their importance. These provisions are critical to ensuring visibility into facility conditions during extreme events, when monitoring systems are most likely to fail and when timely detection of releases is most essential to protecting workers, first responders, and surrounding communities. Removing these requirements reduces both operational resilience and accountability, increasing the likelihood that releases will go undetected or unreported during high-risk conditions.

The consequences of this rollback will fall disproportionately on frontline and environmental justice communities, which EPA has repeatedly found are more likely to be located near RMP facilities and to face cumulative environmental burdens.¹⁶ These communities are also more likely to be located in areas vulnerable to flooding and other climate-related hazards. In such settings, the intersection of industrial risk and extreme weather creates conditions for Natech events that can produce cascading failures, overwhelm emergency response systems, and result in severe public health and economic consequences. Eliminating explicit natural hazard requirements weakens safeguards precisely where risks are highest and most unevenly distributed, exacerbating existing inequities and undermining the Agency’s environmental justice commitments.

Retaining the 2024 SCCAP requirements for documenting vulnerabilities to natural hazards provides much-needed regulatory clarity for facilities. By establishing clear expectations for evaluating risks from extreme weather, flooding, and seismic events, EPA removes the ambiguity that often leads to inconsistent safety standards across the industry. This structured oversight ensures that all facilities operate under a uniform standard of transparency and accountability, requiring them to address the specific risks that environmental stressors pose to process integrity and community safety.

¹⁴ U.S. Government Accountability Office, *Chemical Risk: EPA Should Take Additional Actions to Manage Risks from Climate Change* (GAO-22-104494, 2022).

¹⁵ 89 Fed. Reg. 17654 (Mar. 11, 2024).

¹⁶ *Id.*

The proposed removal of requirements to explicitly evaluate natural hazards within hazard reviews or PHAs should not be viewed as eliminating redundancy. Enforcement experience has consistently shown that, in the absence of clear regulatory expectations, facilities frequently overlook or inadequately evaluate external initiating events such as wildfires, flooding, or extreme weather conditions, despite their well-documented role in significant chemical incidents. Explicitly requiring evaluation of natural hazards ensures that regulated facilities analyze these foreseeable external threats systematically as part of core process safety reviews, including impacts on monitoring systems, safeguards, safe shutdown capability, and emergency response functions. EPA must not only require facilities to assess climate change risk, as proposed, but implement plans to protect against it. **Without such clarity, consideration of these hazards becomes inconsistent and dependent on individual facility practices rather than a uniform prevention-based performance standard.**

From an inspection and enforcement perspective, it is difficult to ensure that facilities adequately evaluate natural hazards without explicit regulatory language requiring such review. When natural hazards are not clearly identified within the regulatory requirements, inspectors often lack a direct compliance basis to cite deficiencies, and these issues are typically documented as recommendations rather than violations. Field inspection experience in EPA Region 9 demonstrates that natural hazards present observable and credible risks at regulated facilities. During an RMP inspection conducted at a municipal water treatment facility storing multiple one-ton chlorine containers (approximately 2,000 pounds of chlorine each), burn marks from a recent grass fire were observed along the facility perimeter immediately adjacent to the chlorine storage area, with residential homes located directly beyond the facility boundary. At the time of inspection, the facility had no procedures addressing protection or removal of chlorine containers during an advancing wildfire. This represented a credible release scenario because chlorine ton containers are equipped with fusible plugs designed to melt between approximately 158°F and 165°F (70°C to 74°C) when exposed to fire. Activation of these plugs, while intended to prevent catastrophic vessel rupture, would result in a significant toxic chlorine release capable of producing serious offsite consequences. Following the inspection findings, the facility voluntarily revised its emergency response plan to include procedures for relocating chlorine containers under wildfire threat conditions. Explicitly requiring facilities to evaluate natural hazards within the RMP framework would ensure that similar vulnerabilities are systematically identified and addressed before an incident occurs, rather than being discovered incidentally during inspections or after a near-miss event.

Elimination of natural events requirements are especially concerning for Natech events, where natural hazards such as flooding, hurricanes, and extreme heat trigger technological failures given the increasing risk of compound and cascading failures associated with extreme weather events. Flooding, storms, and heat-related infrastructure stress can simultaneously impact multiple units or neighboring facilities, increasing the likelihood of multi-point releases. Real-world incidents illustrate the magnitude of these risks. The explosions at the Arkema Crosby Chemical Plant during Hurricane Harvey became the clearest real-world demonstration that the RMP historically underweighted natural hazard risk in chemical accident prevention. Floodwaters disabled primary and backup refrigeration systems needed to stabilize organic peroxides, triggering decomposition, fires, and explosions—despite the facility's general compliance with existing regulatory frameworks. The event exposed a structural blind spot: RMP focused heavily on process safety and internal failures, but did not explicitly require facilities to systematically evaluate and mitigate extreme weather risks (flooding, storm surge, power loss cascades).

The 2024 SCCAP rule directly incorporated lessons from Arkema and similar “Natech” events by embedding natural hazard considerations into core prevention elements. Facilities were required to explicitly evaluate natural hazards (e.g., floods, hurricanes, extreme heat, wildfire) as potential initiating events in PHAs—moving beyond optional consideration to a more formalized expectation. For certain high-risk sectors, facilities had to evaluate inherently safer design options (e.g., less hazardous chemicals, passive safety systems) that reduce vulnerability to system failures caused by extreme weather. The rule strengthened expectations that facilities assess location-specific risks (e.g., floodplains) and consider backup power reliability and redundancy, directly addressing the failure mode seen at Arkema. Lastly, enhanced coordination requirements and exercise expectations were intended to ensure local responders understand compound risks, including those triggered by extreme weather events.

In sum, the proposed elimination of the natural hazards provisions represents a retreat from evidence-based regulation and introduces a policy contradiction that further undermines the rule’s rationality. The Agency cannot both implicitly rely on facilities to consider natural hazards and simultaneously remove the explicit requirements that ensure such consideration occurs. At a time when federal evidence demonstrates increasing exposure to climate-related risks, EPA should retain—and strengthen—the current provisions rather than rescind them. EPA should improve implementation by providing practical tools to help facilities evaluate natural hazards, such as a list of relevant codes and standards and references to established technical guidance. Existing resources from the Center for Chemical Process Safety (CCPS), including the monograph *Assessment of and Planning for Natural Hazards* updated in 2020 following recommendations from the U.S. Chemical Safety and Hazard Investigation Board (CSB), provide recognized methods for assessing and managing natural hazard risks at chemical facilities. Referencing these resources and developing additional resources would promote more consistent and technically sound hazard evaluations.

#8 Power Loss

According to EPA records, over 3,000 facilities have reported chemical releases associated with power loss between 2004-2020. Moreover, an overwhelming majority of facilities that identify power loss as a threat to their operations have failed to install backup power systems voluntarily. Eliminating the explicit amplifying regulatory language planning requirements addressing power loss hazards could result in critical safeguards simply being overlooked—including protections developed in response to prior incidents and enforcement actions—thereby increasing the likelihood that foreseeable external events again lead to preventable releases with offsite consequences. Retaining the 2024 SCCAP requirements for documenting power loss vulnerabilities provides much-needed regulatory clarity for facilities. By establishing clear expectations for evaluating electrical reliability and backup power systems, the EPA removes the ambiguity that often leads to inconsistent safety standards across the industry. This structured oversight ensures that all facilities operate under a uniform standard of transparency and accountability, requiring them to address the specific risks that utility failures pose to process stability and community safety.

A hazard analysis which does not consider a power loss is manifestly inadequate. EPA has historically intended that facilities consider the impacts of power grid failures within their hazard analyses; however, in practice this evaluation has not always occurred. Including explicit regulatory language addressing power loss hazards would provide greater clarity to the regulated community and promote more consistent implementation. From an enforcement perspective, removing requirements for facilities to evaluate and plan for power loss and natural hazard scenarios would be inconsistent with well-documented accident history and enforcement findings demonstrating real and repeated offsite consequences to surrounding

communities. Loss or disruption of electrical power is a foreseeable initiating event that has repeatedly contributed to significant chemical incidents when facilities lacked adequate contingency planning and system resilience.

A clear example of the importance of explicitly requiring facilities to address power loss is a 2023 enforcement action by the EPA involving the Valero Benicia Refinery. In that case, the EPA required the facility to perform a comprehensive evaluation of electrical power reliability and utility failure vulnerabilities as part of its PHA following a major power loss event. On May 5, 2017, the refinery experienced an unexpected loss of electrical power across the facility, resulting in extensive flaring, visible dark emission plumes, and releases that prompted shelter-in-place warnings affecting more than 1,000 individuals, including students and staff at nearby elementary schools. Emissions coated nearby vehicles in oily residue, and workers at a neighboring manufacturing facility required emergency medical treatment. EPA records indicate that more than 10,000 pounds of flammable materials and approximately 74,420 pounds of sulfur dioxide were released during the event, producing significant offsite impacts and economic damage. Prior to this incident, the refinery had not adequately evaluated the potential impacts of a complete loss of electrical power, in part because it relied on the presence of two redundant utility electrical supply lines serving the facility. The incident demonstrated that reliance on external utility redundancy alone does not eliminate the risk of total power loss and highlighted the need for facilities to systematically evaluate loss-of-power scenarios and associated safeguards within their hazard analyses.

This incident, as well as a subsequent power-disruption event at the refinery in 2019, demonstrates that electrical power loss is not a theoretical concern but a predictable hazard capable of rapidly escalating into community exposure events. Modern refinery and chemical operations rely heavily on electrically powered instrumentation, automated controls, monitoring systems, and mitigation equipment necessary to maintain safe operating limits. When power disruptions occur without prior evaluation and contingency planning, facilities may simultaneously lose process visibility, automated safeguards, and operator response capability. Enforcement experience has shown that explicit regulatory expectations are often necessary to ensure facilities adequately evaluate safe shutdown capability, backup power reliability, and operation under degraded conditions.

#9 Declined Recommendations

Retaining the 2024 SCCAP rule requirements for documenting declined recommendations provides the EPA with a high-value diagnostic tool to identify systemic safety gaps before they lead to catastrophic releases. By analyzing these submissions, EPA can target its oversight toward facilities that consistently reject critical improvements in high-risk areas like power reliability, natural hazard mitigation, and pressure relief systems. This data allows for more efficient, risk-based inspections, enabling the agency to prioritize facilities where a pattern of declined recommendations suggests a deteriorating safety culture or a failure to adhere to updated industry standards (RAGAGEP).

Furthermore, submission of this documentation is essential for ensuring corporate accountability and long-term safety. EPA inspections have revealed critical safety recommendations that have remained ignored for a decade or more. Without a formal requirement to document and report the rejection of these safety measures, facilities can bypass safety critical upgrades with little oversight. Keeping these reporting mandates forces a level of transparency that prevents known hazards from being sidelined, ensuring that "declined" doesn't simply become a shortcut for avoiding vital safety investments.

#10 Emergency Response Exercises

The proposed amendments to the RMP under 40 C.F.R. Part 68 would materially weaken the regulatory framework governing emergency preparedness and public notification, particularly when evaluated against the strengthened provisions adopted in the 2024 SCCAP rule. While the Agency proposes to retain the baseline requirement that Program 2 and Program 3 facilities conduct emergency response exercises pursuant to 40 C.F.R. § 68.96, the proposal simultaneously removes the core accountability mechanisms that ensure such exercises serve their intended function—namely, protecting surrounding communities through demonstrable preparedness and effective notification systems.

Under the current rule, § 68.96(b)–(c) requires regulated facilities to conduct notification exercises annually and field and tabletop exercises on a periodic basis, coupled with documented evaluation of exercise performance, coordination with local emergency response authorities, and identification of corrective actions. These provisions are not merely procedural; they operationalize the statutory mandate under CAA § 112(r) to prevent and mitigate catastrophic releases by ensuring that emergency response systems—including public alert and notification mechanisms—are tested, validated, and improved over time. Critically, the 2024 amendments reinforced these obligations by requiring facilities to document coordination with Local Emergency Planning Committees (LEPCs) and other responders, and to evaluate the effectiveness of community notification systems as part of exercise execution.

The proposed rule would dismantle these core elements. Specifically, EPA proposes to eliminate or substantially reduce explicit documentation requirements tied to emergency response exercises, replacing them with a generalized expectation that facilities demonstrate “good-faith efforts” to coordinate with local responders. This shift effectively removes the enforceable requirement that facilities maintain records demonstrating (1) how exercises were conducted, (2) whether public notification systems were tested, and (3) what deficiencies were identified and corrected. In doing so, the proposal undermines the integrity of § 68.96 by transforming exercises from verifiable preparedness tools into largely unreviewable procedural events.

This weakening is compounded by parallel revisions to the public information and notification provisions under § 68.210, which would eliminate the requirement that facilities directly provide hazard and emergency response information to members of the public within a defined radius upon request. Under the 2024 rule, § 68.210 established a framework for proactive and accessible disclosure, including requirements for timely response, notification of information availability, and documentation of outreach efforts. The proposed rule would rescind these provisions and instead rely primarily on the RMP Public Data Tool, while also narrowing that tool’s functionality. As a result, the regulatory framework would no longer require facilities to directly engage with or notify the communities most at risk from accidental releases.

The interaction between these two sets of changes—(1) weakened exercise documentation under § 68.96 and (2) elimination of direct public information and notification obligations under § 68.210—creates a compounding regulatory deficiency. Emergency response exercises are the principal mechanism through which facilities test real-world notification pathways, including the speed, clarity, and effectiveness of alerts to surrounding populations. By removing both the requirement to rigorously document and evaluate these exercises and the obligation to directly provide information to the public, the proposal effectively decouples emergency preparedness from community protection. Facilities may conduct exercises without

demonstrating that notification systems function, while simultaneously bearing no affirmative obligation to ensure that affected communities are informed of risks or response protocols.

This approach is inconsistent with both the text and purpose of CAA § 112(r), which requires not only prevention of accidental releases but also mitigation of their consequences to the surrounding community. Courts and the Agency have long recognized that timely and effective public notification is a central component of consequence mitigation, particularly for acute chemical releases where minutes can determine the difference between exposure and protection. The proposed revisions would significantly impair that capability by removing enforceable requirements for both testing notification systems and maintaining direct lines of communication with the public.

In practical terms, the proposed rule would allow a facility to (1) conduct an emergency response exercise without documenting whether community notification systems were activated or effective, and (2) decline to directly provide nearby residents with information about chemical hazards or emergency procedures. This represents a clear regression from the 2024 rule and reintroduces the very gaps in preparedness and communication that have been identified in prior incidents and Agency analyses.

For these reasons, the Agency should retain the 2024 requirements for exercise documentation under § 68.96 and public information access under § 68.210, including explicit obligations to evaluate and document community notification systems and to provide direct, accessible information to affected populations. At a minimum, EPA should clarify that emergency response exercises must include documented testing of public notification mechanisms and demonstrable coordination with local authorities responsible for issuing alerts, and that facilities maintain an affirmative obligation to ensure that communities have timely access to critical risk and response information.

Requiring facilities to document and retain evidence of good faith coordination efforts with LEPCs would improve clarity for regulated facilities and consistency of the emergency response provisions under the EPA RMP. From an implementation and enforcement perspective, facilities often face uncertainty when LEPCs are inactive, understaffed, or unable to participate in coordination or exercises. In the absence of clear documentation requirements, it can be difficult for both facilities and regulators to demonstrate whether meaningful outreach and coordination were attempted, leading to inconsistent interpretations of compliance. Establishing a requirement to document good faith efforts—such as records of outreach, meeting requests, correspondence, and attempted exercise coordination—provides a transparent and verifiable basis for demonstrating compliance, even when coordination is not ultimately achieved. It also promotes accountability by encouraging facilities to take proactive, documented steps to engage with local responders. Requiring retention of this documentation ensures continuity over time and allows inspectors to evaluate compliance in a consistent manner. Overall, this approach supports both regulated entities and enforcement agencies by reducing ambiguity while maintaining the underlying goal of strengthening emergency preparedness and community protection.

#11 Safety Information and RAGAGEP

The proposed amendments to the RMP would weaken foundational elements of process safety by diminishing the rigor, transparency, and enforceability of Safety Information and Recognized and Generally Accepted Good Engineering Practices (RAGAGEP) requirements under 40 C.F.R. §§ 68.65 (Program 2) and 68.73 (Program 3), while simultaneously retreating from the integration of natural hazard risk and stationary source siting considerations into these core safety frameworks. Although the proposal nominally retains the

obligation for facilities to maintain safety information and adhere to RAGAGEP, it removes or softens critical provisions that ensure these requirements function as meaningful safeguards against accidental releases—particularly those influenced by facility location, surrounding land use, and exposure to extreme weather.

Under the current rule, §§ 68.65 and 68.73 require facilities to compile and maintain complete and accurate safety information sufficient to support hazard analysis, operating procedures, and mechanical integrity programs, including detailed data on chemical hazards, process technology, and equipment design. The 2024 SCCAP amendments reinforced that such information must be usable, current, and reflective of actual operating conditions, including the evaluation of external stressors such as flooding, extreme heat, and infrastructure disruption. The 2026 proposed rule reduces this clarity and emphasis, effectively decoupling safety information from explicit consideration of natural hazards and site-specific vulnerabilities, including those arising from facility siting. This shift risks transforming safety information from a decision-critical foundation for risk management into a more limited compliance artifact, undermining its role in identifying and mitigating foreseeable, location-driven risks.

The proposal similarly weakens the enforceability of RAGAGEP requirements. Under the existing framework, facilities must not only design, operate, and maintain equipment in accordance with RAGAGEP, but also identify the specific standards applied and document and justify any deviations, demonstrating that alternative measures provide equivalent or greater safety under real-world operating conditions. These requirements are particularly important where facility siting introduces additional risk factors, such as proximity to flood-prone areas, population centers, or critical infrastructure. The proposed revisions would dilute these documentation and justification requirements, thereby reducing the ability of regulators—and the public—to assess whether engineering practices adequately account for both inherent process risks and risks amplified by facility location.

Critically, these changes must be read in conjunction with the proposal's weakening of stationary source siting considerations within hazard analysis requirements (e.g., under § 68.67 for Program 3 processes). The 2024 SCCAP rule reinforced the importance of evaluating offsite consequences, surrounding land use, and proximity to vulnerable populations as part of process hazard analysis and prevention planning. The proposed rule reduces the emphasis and specificity of these considerations, thereby weakening the requirement that facilities systematically evaluate how location-based factors—including encroaching development, environmental justice communities, and exposure to natural hazards—affect risk profiles and consequence severity. This rollback severs a critical link between where a facility is located and how it must design and operate based on RAGAGEP to manage risk, increasing the likelihood that hazards will be underestimated or inadequately mitigated.

Taken together, the weakening of Safety Information and RAGAGEP requirements, including the gap analysis as part of the PHA, combined with the reduced emphasis on natural hazards and stationary source siting, creates a compounding regulatory deficiency. Facilities may maintain incomplete safety information, apply engineering standards inconsistently, and fail to adequately account for site-specific and climate-driven risks, all while facing reduced obligations to document or justify their decisions. This undermines the integrated safety framework envisioned under CAA § 112(r), which depends on the alignment of hazard identification, engineering design, and location-specific risk evaluation to prevent catastrophic releases and protect surrounding communities.

For these reasons, EPA should retain the current RAGAGEP requirements under §§ 68.65, 68.67 and 68.73, as well as the strengthened stationary source siting considerations under § 68.67, including explicit obligations to evaluate and document the interaction between facility location, natural hazards, and potential offsite consequences. At a minimum, the Agency should clarify that any flexibility provided does not diminish the requirement for demonstrable adherence to RAGAGEP, comprehensive safety information, and rigorous evaluation of siting-related risks, including those affecting vulnerable and overburdened communities.

A significant number of enforcement actions under both the CAA and process safety programs have involved failures by facilities to properly implement RAGAGEP. In many cases, facilities relied on outdated codes and standards or failed to evaluate whether their existing equipment and practices remained consistent with current industry guidance. The clarifying language added to the rule under § 68.67(c)(10) is intended to address this recurring safety gap. In particular, many facilities do not perform systematic RAGAGEP gap analyses to determine whether existing processes and equipment remain aligned with updated industry codes and standards. While conducting such analyses may require additional effort, they serve an important safety function by identifying deficiencies that emerge as engineering standards evolve in response to incidents, new research, or lessons learned within an industry. Regularly evaluating facility practices against updated RAGAGEP helps ensure that safety improvements developed across an industry are incorporated into operating facilities rather than remaining limited to new designs or future projects.

An example of an enforcement action requiring systematic evaluation of RAGAGEP is the 2019 refinery consent decree involving Chevron U.S.A. Inc., which arose from accidents at the Richmond, El Segundo, and Pascagoula refineries. The decree required the company to implement corporate-level process safety management improvements, emphasizing evaluation and application of evolving engineering standards rather than relying solely on equipment upgrades. The decree remediated systemic weaknesses, including deficiencies in how the company evaluated and implemented evolving industry safety standards. As part of the settlement, Chevron was required to strengthen corporate oversight of refinery safety by centralizing decision-making authority, including the evaluation and implementation of RAGAGEP, and establishing clearer corporate accountability for process safety performance across all U.S. refineries. This requirement reflects a broader enforcement finding that failure to systematically evaluate and implement updated codes, standards, and engineering practices can contribute to catastrophic incidents. Maintaining clear regulatory language in the 2024 SCCAP rule requiring facilities to evaluate and address gaps between existing practices and updated RAGAGEP therefore remains an important prevention measure to ensure that lessons reflected in evolving industry standards are consistently implemented before accidents occur.

Industry groups such as the International Institute of All-Natural Refrigeration (IIAR) have incorporated a requirement for a RAGAGEP gap analysis, similar to § 68.67(c)(10), into its standard ANSI/IIAR 9-2020, demonstrating that this sector has recognized the importance of systematically evaluating current practices against updated codes and standards. However, this approach is not applied consistently across all industries subject to the RMP. In the absence of explicit regulatory language under § 68.67(c)(10), facilities may overlook the need to perform RAGAGEP gap analyses, leading to uneven implementation and leaving some facilities operating under outdated standards. This inconsistency creates variability in safety performance and undermines a core objective of the program—to ensure that lessons learned and improvements reflected in evolving engineering practices are broadly adopted. Clearly stating this expectation in the regulation

promotes uniformity, ensuring that all facilities regularly assess and address gaps as industry standards evolve, rather than relying on selective or industry-specific adoption.

Regarding the proposed *Alternative Options* under Section IV.K.6, relying on submitted lists of standards in RMP*submit effectively shifts the burden to EPA to analyze large volumes of data to identify potential safety gaps or inconsistencies. In practice, the Agency does not have the resources to perform this level of facility-specific technical analysis across thousands of regulated sources. Without an explicit requirement for facilities to conduct and document their own RAGAGEP gap analyses, the submission of codes and standards risks becoming a check-the-box exercise rather than a meaningful safety evaluation. Clear regulatory language provided in the 2024 SCCAP rule under § 68.67(c)(10) therefore emphasizes that responsibility rests with the facility to actively assess, document, and address gaps in RAGAGEP, rather than relying on EPA to infer compliance from submitted data.

Adoption of the Section IV.K.5 proposed regulatory changes is step backward in providing clarity to regulated facilities on expectations to regularly update safety with RAGAGEP.

#13 Retention of Hot Work Permits

Despite ongoing alignment with OSHA standards, severe industrial accidents continue to occur that demonstrate that hot work remains a persistent and lethal hazard - such as the Sunco Oil accident.¹⁷ Hot work related incidents often stem from systemic failures in hazard recognition or atmospheric testing that an audit of a single “completed” permit cannot fully capture. Retaining hot work permits for a three-year period, as currently required by the 2024 SCCAP rule, provides a critical longitudinal data set for the auditors conducting the facility’s 3-year compliance audit to identify dangerous patterns in a facility's safety culture without imposing a significant administrative burden. Given the high stakes and the history of fatal oversight, this extended retention ensures that compliance is not just a snapshot of a single day’s work, but a proven, consistent practice that can prevent the next catastrophic failure.

Conclusion

EPN has RMP collective enforcement and inspection experience and provides independent, technically informed perspectives to ensure environmental regulations are grounded in practical implementation and lessons learned from past incidents. Based on this experience, the proposed revisions represent a meaningful shift away from several prevention-focused elements that were added to the RMP to address recurring causes of serious chemical accidents. Field inspections and incident investigations consistently show that major releases are rarely the result of a single unexpected failure; rather, they involve identifiable hazards that were not fully evaluated, external events such as power loss or natural hazards that were not systematically considered, or safety management weaknesses that were not independently reviewed following an accident. Provisions such as explicit evaluation of power-loss and natural hazard scenarios, independent third-party compliance audits after significant incidents, stronger inherently safer technology considerations, and robust emergency preparedness requirements were developed to address these recurring gaps observed through enforcement actions and accident investigations. Reducing the scope or clarity of these provisions risks allowing facilities to overlook foreseeable hazards that have historically contributed to releases with offsite consequences. Given that federal inspection resources are limited and most facilities are inspected

¹⁷ See <https://www.csb.gov/CSB-releases-final-investigation-report-on-2016-sunoco-oil-terminal-fire-and-explosion-in-texas/>.

infrequently, the effectiveness of the RMP depends heavily on clear regulatory expectations that require facilities to proactively identify and mitigate hazards. Maintaining strong, prevention-oriented requirements is therefore essential to ensuring that lessons learned from past accidents translate into sustained improvements in chemical safety and protection of workers, emergency responders, and surrounding communities.