Comments of the American Chemistry Council on EPA's Proposal to Amend the Risk Management Program Regulations, 40 C.F.R. Part 68

Docket No. EPA-HQ-OLEM-2022-0174

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Table of Contents

Page

EXECUTIVE SUMMARY

The American Chemistry Council (ACC)[1] welcomes the opportunity to present these comments on EPA's proposal to amend the Risk Management Program (RMP) regulations, 40 C.F.R. Part 68, 87 Fed. Reg. 53556 (Aug. 31, 2022) (the Proposal). ACC and its members have a long history of engagement with EPA on this rule, providing technical and policy support charting back to its inception under Section 112(r) of the 1990 Clean Air Act amendments. ACC members represent much of the chemical manufacturing capacity in the United States; as such, any changes made to RMP can have significant implications to our members and ripple effects across the supply chain. It is therefore imperative that EPA rely on sound science as the foundation upon which modifications are proposed, carefully consider the potential costs of any potential changes, and understand and minimize unintended consequences.
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ACC supports EPA's approach to certain of these issues and applauds its efforts to use its statutory authority to prevent and mitigate accidental releases of regulated substances. ACC supports some of the revisions in the Proposal. For example, the field exercises implementation timeframe is reasonable, as it would allow industry sufficient time to gather experts, allocate funds, and dedicate resources to conduct comprehensive exercises. The Proposal would also require that these activities be completed frequently enough to keep participants familiar with necessary procedures. ACC also supports some elements of the proposed requirement to conduct a root cause analysis for a reportable accident.

However, EPA's proposal to reintroduce many previously rejected revisions from the 2016 amendments to the Risk Management Program regulations will burden affected industries by requiring them to undertake extensive new trainings, retrofits, and analyses, none of which will result in a reduction of accidental releases. In fact, the proposal in many requirements entirely ignores Congress's statutory intent for the RMP to reduce the risk of accidental releases. Certain proposed revisions will even impose significant new regulatory requirements that will not result in a reduction of the risk of accidental releases and in some cases, increase the risk.

ACC emphasizes, as it did in its May 13, 2016 comments on the 2016 proposal to amend the RMP regulations,[2] that the existing RMP is highly effective when correctly implemented and enforced. Based on data provided by EPA, the number of accidents at RMP facilities has dramatically decreased from a high of 208 in 2007 to a low of 92 in 2018. Of the estimated 1,650 NAICS Code 325 chemical manufacturing facilities regulated under the RMP rule, nearly

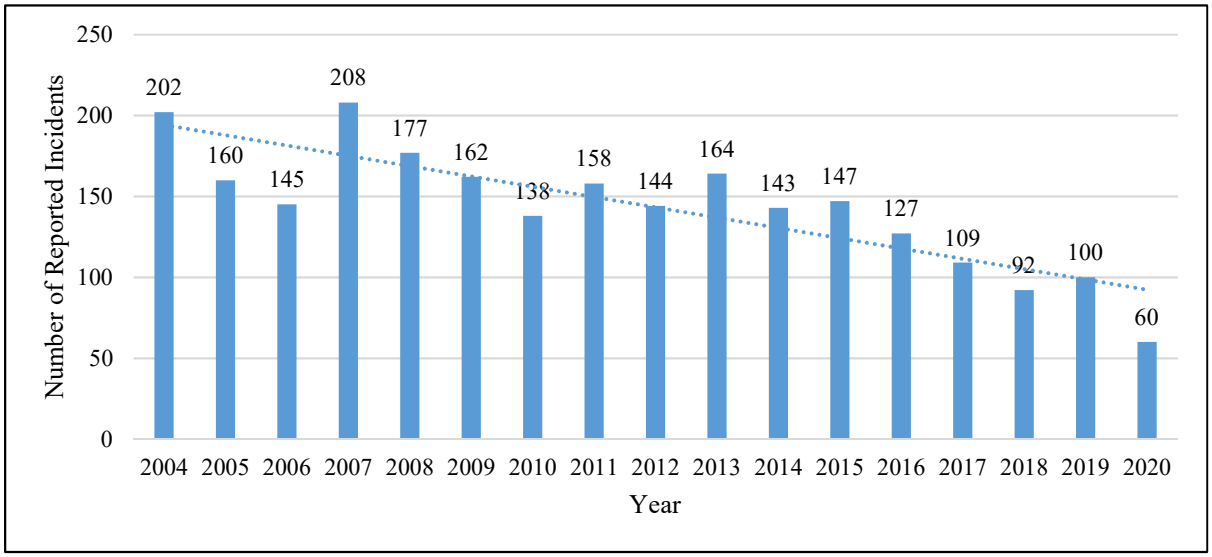
[1] ACC represents the leading companies engaged in the multibillion-dollar business of chemistry. ACC members apply the science of chemistry to make innovative products, technologies and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health, safety and security performance through Responsible Care®; common sense advocacy addressing major public policy issues; and health and environmental research and product testing. ACC members and chemistry companies are among the largest investors in research and development, and are advancing products, processes and technologies to address climate change, enhance air and water quality, and progress toward a more sustainable, circular economy.

[2] EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Docket EPA-HQ-OEM-2015-0725-0001 (2016 comments). ACC incorporates those comments here by reference.

76% (1,259 out of 1,650) of regulated chemical facilities have no accident history.[3] Furthermore, relatively few chemical facilities are responsible for a disproportionate number of reported incidents. Within the chemical manufacturing sector, only 5% (90 out of 1,650) of chemical sites account for over half 56% (458 of 815) of the chemical sector's incidents.[4] These figures suggest that if enforcement efforts of existing RMP requirements by EPA focused on just 5% of the facilities in NAICS Code 325, the Agency could substantially reduce the number of incidents reported without any changes to the RMP regulations.

Assessment of EPA's data demonstrates that the current RMP requirements have been highly effective in reducing accidental chemical releases. ACC is very concerned the Proposal will depart from a collaborative and data-driven process to impose complex, unnecessary regulatory mandates. If an overlooked factor in promulgating such measures would further reduce the number of incidents, then EPA should demonstrate that the additional regulatory requirements imposed would substantially reduce accidental release risk.

Figure 1. Across sectors, facilities consistently report fewer chemical releases each year

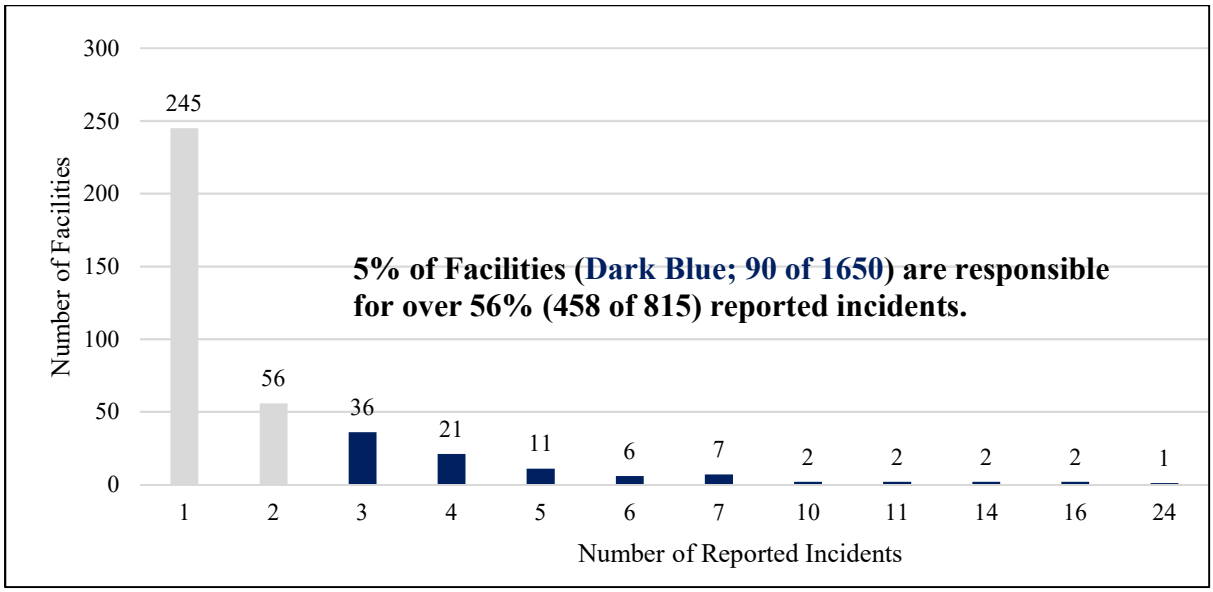


since RMP's inception. (Source: EPA Appendix A)

Figure 2. Reportable incidents are rare and concentrated. Between 2004 and 2020, over 76% of chemical manufacturing sites reported zero chemical releases. (Source: EPA Appendix A to Technical Background Document)

[3] EPA, RMP Accidents 2004-2020 (Appendix A); Technical Background Document for Notice of Proposed Rulemaking: Risk Management Programs Under the Clean Air Act, Section 112(r)(7) Safer Communities by Chemical Accident Prevention, Docket EPA-HQ-OLEM-2022-0174, https://www.regulations.gov/document/EPA-HQ-OLEM-2022-0174-0065.

[4] *Id.*



The RMP program works precisely because the current requirements encourage facilities to prioritize the specific risks and hazards that they have identified in their own careful analyses. The effectiveness of risk management requires that compliance be based less on adherence to specific measures and more on overall safety performance. Diverting the critical attention of facility engineers, workers, and management towards new and unnecessary requirements may unintentionally increase levels of risk. Where possible, ACC presents EPA with some recommended alternatives that attempt to achieve the shared goal of reducing the risk of accidental releases and the impacts of such releases but would do so without placing an unacceptable burden on the regulated community or compromising the critical need to safeguard sensitive RMP information.

As a final note, the EPA RMP and the Occupational Safety and Health Administration (OSHA) Process Safety Management (PSM) standard are designed to work hand-in-hand. OSHA is considering changes to provisions and the scope of its PSM rule,[5] with comments on its notice due by November 14, 2022.[6] ACC urges EPA to continue to harmonize its RMP requirements with OSHA's PSM standard. Otherwise, inconsistent requirements could result, making compliance more challenging. This would also impose additional time and cost burdens for both agencies and industry alike that could have been entirely avoided without sacrificing meaningful regulatory improvement.

ACC appreciates EPA's consideration of our comments, and we look forward to working with EPA and other federal agencies to find ways to continue to improve chemical process safety and assist local emergency authorities and the communities surrounding RMP facilities in planning and responding to accidental releases. ACC member companies are committed to safe

[5] OSHA, Process Safety Management (PSM); Stakeholder Meeting, 87 Fed. Reg. 53020 (Aug. 30, 2022) (the OSHA Notice).
[6] OSHA, Process Safety Management (PSM); Stakeholder Meeting, 87 Fed. Reg. 57250 (Sept. 20, 2022).

operations. ACC's Responsible Care® program's Process Safety Code[7] sets forth this collective commitment to a culture of process safety throughout chemical facility processing operations, management systems, and leadership organizations.

EPA requested commenters to identify their comments on specific issues by using the relevant number and comment headings listed in the preamble. These comments follow that practice for the 15 comment headings.

DISCUSSION

1. Natural Hazards

A. EPA Has Not Demonstrated a Link Between Natural Hazards and Accidental Releases

EPA is proposing to add a new 40 C.F.R. § 68.50(e)(5) (relating to hazard reviews for Program 2 processes) and a new § 68.67(c)(8) (relating to process hazard analyses (PHAs) for Program 3 processes). They would require the respective reviews to consider "external events such as natural hazards, including those caused by climate change or other triggering events that could lead to an accidental release." "Natural hazards" would be defined in § 68.3.[8]

EPA's RMP accident database for NAICS Code 325 demonstrates no link between climate-factored natural hazards and substantial accidental release risk of chemicals. EPA's natural hazard approach factored into only 2% (7 out of 360) of RMP incidents reported at chemical manufacturing plants between 2015 and 2022 that were attributed to "unusual weather conditions" within the scope of the proposed rule. By comparison, ACC found that chemical manufacturers attributed 35% (127 out of 360) of RMP-reportable incidents to "human error" and 33% (117 out of 360) to "Equipment Failure" over the same period.

Figure 3. Initiating Event linked to RMP Chemical Incidents (Source: EPA Appendix A)

Initiating Event	#	%
Human Error	127	35%
Equipment Failure	117	33%
Improper Procedure	88	24%
Maintenance activity/inactivity	65	18%
Process Design failure	57	16%

[7] American Chemistry Council, Responsible Care: Process Safety Code of Management Practices (Oct. 30, 2021), https://www.americanchemistry.com/chemistry-in-america/responsible-care-driving-safety-industry-performance/resources/responsible-care-process-safety-code.
[8] Proposal at 53609-12.

Overpressurization	55	15%
Upset condition	37	10%
Unusual weather condition	**21**	6%
Blizzard (Feb. 21 winter storm)	**14**	4%
Hurricane	**2**	1%
Other	**5**	1%
Other	42	12%
Total	**360**	

EPA should provide sufficient evidence of deficient industry performance in assessing natural hazard and explain whether such deficiency warrants emphasis during the RMP hazard assessment. ACC believes EPA might be misdirecting scarce public and private sector resources to unnecessary compliance requirements that do not improve safety. Generally, ACC members in areas prone to hurricanes, tornadoes, floods, or other natural hazards already consider the potential for such hazards in their programs to prevent accidental releases, including in their hazard reviews or PHAs. For example, on the Gulf Coast, petrochemical facilities have existing plans in place that contemplate whether and how to shut down units in advance of predicted hurricanes.

The proposed changes to the RMP rules regarding natural hazards are clarifications of scattered EPA and OSHA guidance on and precedent referencing the advisability of considering such. For example:

- EPA settlements in 2015 and 2016 asserted violations of the RMP PHA regulation for failure to consider the effects of flooding on a covered process.[9]
- EPA RMP Emergency Response Program guidance directs owners and operators to consider their susceptibility to "Floods … and hurricanes."[10]

[9] See *In the Matter of U.S. Army Corps of Engineers – Cold Regions Research and Engineering Laboratory Hanover, New Hampshire*, (CAFO Sept. 28, 2015), 2015 WL 6567551 ("the PHAs did not identify or address hazards that exist at the Facility due to possible earthquakes, floods, tornadoes, and hurricanes, which are all credible threats at CRREL"); *In the Matter of Shell Chemical LP.*, EPA Docket No. CAA-06-2016-3352 (CAFO May 24, 2016), 2016 WL 3406276 ("Respondent's facility is sited in an area prone to hurricane and flood events …. Through its failure to specifically reference hurricane and flood planning in its process hazard analysis, Respondent has violated 40 C.F.R. § 68.67(c)(5)."

[10] EPA, Guidance for Facilities on Risk Management Programs (RMP), Chap. 8: Emergency Response Program for Chemical Accident Prevention (Apr. 2004), § 8.3, https://www.epa.gov/sites/production/files/2013-11/documents/chap-08-final.pdf.

The current regulatory text simply provides that a hazard review or PHA team must consider "the hazards of the process." Thus, a requirement for a hazard review or PHA to consider external natural hazards has been up to this point, at best, unclear. The existing text could be read to require consideration only of factors internal to the stationary source. Accordingly, ACC supports this change.

The preamble asserts that EPA is coordinating with OSHA on this and other proposed changes to the RMP regulations, to keep them consistent with the PSM standard, 29 C.F.R. § 1910.119. However, in its recent notice on potential changes to PSM that it is considering, OSHA characterized the natural hazards to be assessed in a PHA differently than does the EPA proposal. Specifically, the OSHA Notice refers to "natural disasters and extreme temperatures."[11] EPA and OSHA should use parallel language to address the same topic unless they intend their requirements to differ. Presumably, they do not, as to do so would upend decades of coordination between the two statutes.

It is important that EPA not second-guess the existing PHA determinations of PHA teams with respect to natural hazards. Natural hazards are inherently difficult to predict, and complete protection may be infeasible. If the PHA considers the reasonably foreseeable hazards and evaluates the layers of protection in place, the PHA team's decision to recommend or not to recommend additional layers of protection should be deferred to and should not be subject to regulatory scrutiny. Otherwise, EPA would be inappropriately injecting itself into the management of stationary sources. For example, a PHA team may decide not to recommend additional safeguards to protect against the potential effects of a 1,000-year flood. EPA should not mandate that owners and operators add layers of protection to address extremely low risk natural events that PHA teams have already assessed and concluded are unnecessary. While what is considered extremely low risk now may change over time, this would be better addressed by owners and operators evaluating such changes in the five-year updates to their hazard reviews or PHAs than any additional requirement in the regulatory scheme.

B. EPA Should Not Develop Additional Guidance for Assessing Natural Hazards

EPA should leave the development of additional guidance and standards to standard-setting organizations such as the American Institute of Chemical Engineers (AIChE) and its Center for Chemical Process Safety (CCPS), and the American Petroleum Institute (API). The U.S. Chemical Safety and Hazard Investigation Board (CSB) has recommended that CCPS develop guidance on assessing natural hazards, but it has not made a similar recommendation that EPA do so.[12] This was appropriate, since CCPS and other professional organizations have technical expertise that EPA lacks.

EPA could become a useful central online repository for the guidance documents that these standard-setting organizations have already developed, however. For example, it would be

[11] OSHA, Process Safety Management (PSM); Stakeholder Meeting, 87 Fed. Reg. 53020, 53021 (Aug. 30, 2022).
[12] CSB, Organic Peroxide Decomposition, Release, and Fire at Arkema Crosby Following Hurricane Harvey Flooding (2018), p. 127, Recommendation 15.4, at https://www.csb.gov/file.aspx?DocumentId=6068.

beneficial for stakeholders to have a web link to the guidance that appeared in one 2019 AIChE publication discussing managing the risks of severe wind and flood events.[13]

Additionally, EPA does not need to specify geographic areas most at risk from climate or other natural events by adopting a list of areas exposed to heightened risk of wildfire, flooding, storm surge, or coastal flooding. Facilities in these areas are generally well aware of the potential for such hazards. Neither does EPA need to apply different regulatory requirements based on geography. EPA has not demonstrated sufficient need to apply such geographic distinctions as part of any regulatory approach. Instead, a general provision to require hazard reviews and PHAs to evaluate the potential for natural hazards, such as (but not necessarily limited to) specific examples, would be more practical.

EPA should, however, encourage local jurisdictions, the Federal Emergency Management Agency (FEMA), and other entities (such as FM Global) to review and, where appropriate, update flood maps in light of changing climate. Hazard review and PHA teams rely on flood maps in assessing natural hazards. If flood maps become outdated due to climate change, the entities that prepared those maps should update them. EPA should not require individual owners or operators to speculate about potential flood risks not reflected in flood maps.

2. Power Loss: EPA Should Not Require Standby or Backup Power for Air Pollution Control or Detection Equipment

The Proposal would add a new 40 C.F.R. § 68.50(e)(3) (relating to hazard reviews for Program 2 processes) and a new § 68.67(c)(3) (relating to PHAs for Program 3 processes). They would require the respective reviews to consider the need for "standby or emergency power systems."[14]

As with consideration of natural hazards, these proposed changes to the RMP rules are clarifications of scattered EPA and OSHA guidance on and precedents referencing the advisability of considering the potential for loss of utilities. For example:

- EPA RMP guidance directs owners and operators to consider their susceptibility to "[l]oss of utilities, including power failures."[15]
- Additional EPA RMP guidance describes major hazards owners and operators should consider in preparing Risk Management Plans, including "[l]oss of cooling" (noting that "loss of cooling could lead to an increase in pressure and failure of a vessel").[16]
- A 2008 OSHA interpretation states, "OSHA has always intended employers to address the impact of a failure of utilities in their PHA …. If the employer determines that the loss of utilities could result in a potential release of HHC from the process, then, the employer would determine which engineering controls, standard operating procedures,

[13] Liserio, F. and Mahan, P., Manage the Risks of Severe Wind and Flood Events, CEP Magazine (Apr. 2019), pp. 42-49, https://www.aiche.org/sites/default/files/cep/20190442.pdf.
[14] Proposal at 53610, 53612.
[15] Guidance on Risk Management Programs for Chemical Accident Prevention, EPA, Chap. 8: Emergency Response Program (Apr. 2004), § 8.3, https://www.epa.gov/sites/production/files/2013-11/documents/chap-08-final.pdf.
[16] EPA, Risk Management Plan RMP*eSubmit User's Manual (Aug. 2019), § 7.4.d, https://www.epa.gov/sites/production/files/2019-03/documents/rmpesubmit_user_guide_-_march_2019_final_0.pdf.

instrumentation, employee training, etc. would be necessary to prevent or minimize the potential loss of a utility from contributing to a catastrophic release."[17]

- In a 2016 decision, the Fifth Circuit favorably cited that OSHA interpretation to hold that a positive pressurization unit (a type of utility) used in a fluid catalytic cracking unit to keep harmful vapors out of a control room is part of a covered process subject to PSM requirements.[18]

Under the current regulatory text, it is unclear whether there exists a requirement for a hazard review or PHA to consider the risks of a potential loss of power. A clarification would be helpful. Accordingly, ACC supports this change as currently stated, i.e., as a requirement for consideration of the potential for loss of power.

However, ACC would flag a major issue that, depending on how it is resolved, may compromise its support for this requirement. The preamble offers an explanation of these proposed amendments (p. 53571):

> While EPA is not requiring implementation of standby or emergency power for the entirety of an RMP process, EPA is proposing to require air pollution control or monitoring equipment associated with prevention and detection of accidental releases from RMP-regulated processes to have standby or backup power to ensure compliance with the intent of the rule.

The substance of the proposed regulatory text, however, differs from what is stated there. The proposed text does not mention air pollution control equipment. It would instead specify an issue for the hazard review or PHA team to consider. The practical result would be, after considering the need for standby or backup power for air pollution control or monitoring equipment, the team may consider that neither is necessary at the particular stationary source.

In contrast, the explanation of the preamble purports to describe a proposed requirement to have standby or backup power for air pollution control and detection equipment in all instances. However, such a proposed requirement does not appear in the proposed rule. EPA should ensure that the proposed amendments accurately reflect its intention. If EPA intends to require standby or backup power for air pollution control or detection equipment in all circumstances, the regulatory text should make that clear. As with any new regulatory requirements, EPA must provide adequate justification and address the costs and benefits in its economic analysis of the proposed rule.

As a general concern explored throughout these comments, including with respect to "natural hazards" above, ACC reminds EPA that there is no evidence of a deficiency to warrant such a proposed rule. EPA's proposal references 3,077 reported accidents from 2004 to 2020 that were associated with power loss, but, tellingly, it acknowledges that most did not involve RMP

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[17] OSHA interpretive letter to American Petroleum Institute (Jan. 31, 2008), https://www.osha.gov/laws-regs/standardinterpretations/2008-01-31; *see also* OSHA interpretive letter to American Cyanamid Company (March 10, 1994), https://www.osha.gov/laws-regs/standardinterpretations/1994-03-10 ("A utility system connected to a PSM covered process would have to be addressed in the Process Hazard Analysis.").

[18] *Delek Ref., Ltd. v. Occupational Safety and Health Review Comm'n.,* 845 F.3d 170, 181 (5th Cir. 2016).

chemicals, processes, or accidental releases as defined in CAA 112(r)(2).[19] EPA's lack of data on RMP-specific performance and enabling conditions is a fundamental defect.

EPA should recognize that providing standby or backup power for air pollution control or detection equipment for all stationary sources is not always practical or necessary. For example:

- Certain engineering controls can adequately mitigate risk without power, such as processes with valves and other controls that open or close automatically to a safe position in the event of a power loss.

- Two alternatives to providing emergency power to cool chemicals during a hurricane are reacting the inventory of those chemicals upon warning of a hurricane and transferring them off-site.

While fenceline monitors could detect an accidental release in some circumstances, high wind events such as hurricanes can render them useless. In that case, a loss of power to fenceline monitors would have no adverse effect on the stationary source or the surrounding community.

3. Stationary Source Siting: EPA Should Remain Consistent with OSHA and Avoid Prescriptive Requirements for Stationary Source Siting

The proposed amendments would add a new 40 C.F.R. § 68.50(a)(6) (relating to hazard reviews for Program 2 processes) and amend existing § 68.67(c)(5) (relating to PHAs for Program 3 processes). They would require the respective reviews to consider the need for stationary source siting, "including the placement of processes, equipment, and buildings within the facility, hazards posed by proximate facilities, and potential accidental release consequences to nearby public and environmental receptors."[20]

EPA adapted its current requirement that PHAs consider "stationary source siting" from the 1992 OSHA PSM standard, with its requirement that PHAs consider "facility siting." Neither rulemaking explained what the factors the requirement was intended to address. Accordingly, EPA's proposal to identify relevant factors for stationary source siting is not a clarification but a new requirement.

Stationary source siting is a complex issue. Owners and operators will need to consider different factors in different situations. Accordingly, the proposed amendments should not be too prescriptive. In addition, in considering whether to finalize these and the other proposed changes to the RMP rules, EPA should avoid diverting RMP compliance personnel and resources away from the most critical incident prevention activities. Moreover, a reasonable, more impactful approach to stationary source siting would focus on the design and development phase of any new RMP process.

Generally, ACC members with Program 3 processes already consider at least some of the proposed factors in their PHAs. Many have utilized recognized and generally accepted good

[19] EPA, Technical Background Document for Notice of Proposed Rulemaking: Risk Management Programs Under the Clean Air Act, Section 112(r)(7); Safer Communities by Chemical Accident Prevention (April 19, 2022) at 6.
[20] Proposal at 53610, 53612.

engineering practices (RAGAGEP) API Recommended Practices 752 and 753, the CCPS publications cited in the preamble (p. 53572), and related resources. For the most part, however, the related RAGAGEP focuses on the "placement of processes, equipment, and buildings within the facility" Portion of EPA's proposed definition. OSHA does not require consideration of the other proposed factors. The proposed amendments would thus mark a departure from EPA's effort to keep its Program 3 requirements parallel to those of OSHA.[21]

EPA should also better explain better how it intends the offsite factors of the proposed requirements to work and why they are necessary. For example, it is unclear how EPA anticipates that a hazard review or PHA team will consider hazards posed by proximate facilities. A stationary source will rarely have sufficient information to evaluate hazards from proximate facilities, and, generally, it will not be able to prevent or mitigate the consequences of an accidental release from a proximate facility. EPA should provide a thorough explanation considering how it anticipates industry to be able to comply with these requirements, in other words, so that they are feasible.

EPA also proposes that a hazard review or PHA team consider "potential accidental release consequences to nearby public and environmental receptors." Those potential consequences are appropriate for consideration in the context of emergency response planning. However, it is unclear how hazard review or PHA team members, who are working to identify means to prevent or mitigate accidental releases, would change the hazard review or PHA by knowing that an accidental release could have offsite consequences.

4. Hazard Evaluation and PHA Recommendation Information Availability

A. EPA Should Not Require Making Rejected Recommendations from Risk Reviews and PHAs Public

The proposed amendments would require "enhance information sharing and collaboration" among industry stakeholders, local government, first responders, communities, and "the public."[22] Facilities would be required under the proposal to either implement recommendations drawn from hazard evaluations or justify the decision not to implement recommendations. The proposal would amend existing 40 C.F.R. § 68.170(e)(7) and 68.175(e)(8) to require facilities to include declined natural hazard, power loss, and siting hazard evaluation recommendations and associated justifications. EPA suggests that these amendments would require owners and operators to evaluate these hazards properly, which in turn, would "better ensure owner/operators do their due diligence in preventing or minimizing accidental releases of regulated substances to protect human health and the environment."[23]
Requiring Program 2 and Program 3 facilities to include this information would be, at the least, redundant and expensive. As ACC pointed out in its comments to the 2016 amendments, the information that EPA proposes to require is already reported under other statutes, including under the Emergency Planning and Community Right–To-Know Act of 1986 (EPCRA).[24]

[21] The OSHA Notice does not list any item under consideration related to facility siting.
[22] Proposal at 53574.
[23] *Id.* at 53575.
[24] 42 U.S.C. § 11001 et seq.

EPA has provided no rationale to support its proposition that requiring owners and operators to repackage this same information beyond its belief that publicizing hazards in an "adequate" fashion would motivate owners and operators to "further improve their safety in response to community pressure and oversight."[25] EPA has not explained how disclosure would be motivational, or how oversight from the public would be beneficial.[26]

The amendments would be redundant in that the public already has appropriate access to risk management plans. As the Proposal noted, EPA's 2019 reconsideration rule confirmed that:

> Members of the public can view risk management plans at Federal Government reading rooms, obtain risk management plan information from State or local government officials with risk management plan data access, or submit a request to EPA under the FOIA (for non-OCA [off-site consequence analysis] risk management plan information). EPA also mentioned that owners and operators of regulated facilities may disclose risk management plan information for their own facilities if they so choose.[27]

The RMP regulations already require the owner or operator to "establish a system to promptly address the team's findings and recommendations; [and] assure that the recommendations are resolved in a timely manner and that the resolution is documented."[28] There is no need for an amendment to require formal resolution of recommendations that are not accepted.

Under the proposed information availability approach, members of the public who are not intimately familiar with technical aspects of the worksite or factors involved in process safety analyses would only see the ultimate decision to accept or reject a safety program. ACC is concerned that a requirement for the disclosure of such decisions would ultimately affect the facility's discretion over how best to handle safety on its worksite. The public can and should

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[25] Proposal at 53574.

[26] The preamble cites as its sole support for this proposition (footnote 103) a document in EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)(7); Rule Modernization Under Executive Order 13650; Request for Information, Docket EPA-HQ-OEM-2014-0328-0543. The document is a Feb. 8, 2016 email to OMB attaching an unpublished draft of the 2016 proposed amendments. A statement in the draft, which also appears in the proposed rule preamble, EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, 81 Fed. Reg. 13637, 13677 (Mar. 14, 2016), reads, "When local citizens have adequate information and knowledge, facility owners and operators may be motivated to continuously improve their safety in response to community pressure and oversight." Virtually this same statement also appears in the 2022 Proposal, at 53556. In other words, EPA is citing its own previous statement as support for its assertion. A footnote in both the 2016 draft and the 2016 published preamble cites as support for the statement a 2014 comment from the Mary Kay O'Connor Process Safety Center in Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)(7); Rule Modernization Under Executive Order 13650; Request for Information, Docket EPA-HQ-OEM-2014-0328-0543. That comment stated at p. 165, "When local citizens have adequate information and knowledge, facilities may improve their safety further due to the community pressure and oversight." In other words, EPA simply copied the commenter's statement. The comment provided no support for this assertion. More importantly, it failed to address, as EPA has failed to address, whether local community pressure and oversight is appropriate for complex process safety decision-making, particularly where the local community lacks a detailed understanding of the layers of protection already in place, the cost of adding layers, and the concept of acceptable risk.

[27] Proposal at 53600.

[28] 40 C.F.R. § 68.67(e).

rely on the requirements to evaluate PHA recommendations and document their resolution in the RMP regulations—and on EPA's enforcement of those regulations. That is sufficient.

At worst, the proposed amendments could cause confusion and create fear among local communities and could pose a threat to national security. The Proposal would further introduce complex and technical data to the public to "enable the public to ensure facilities have conducted appropriate evaluations to address potential hazards that can affect communities near the fenceline of facilities."[29] It is difficult to understand how EPA would expect communities to oversee such evaluations, let alone be prepared with the expertise – and time necessary to conduct such evaluation. Encouraging nearby communities to police facilities through pressure and oversight would likely lead to misinformed confusion and fear. The "what-if" scenarios that owner or operators have identified, but deliberately chosen to de-prioritize based on extensive technical analyses, could lead communities to feel under-prepared for what they may not be equipped to identify as extremely rare scenarios. Public scrutiny from public availability of this information would further be inappropriate, particularly since the documentation typically is not an exhaustive explanation of the reasoning but rather a categorical summary of more detailed considerations. One such example would be determinations based on resource constraints. Expecting the public to understand this such that they could meaningfully evaluate the sites' decision-making is unreasonable, and EPA is potentially encouraging scenarios that generate undue resentment and mistrust towards a robust, thoughtful analysis.

Furthermore, posting this information online or in the RMP would conflict with Congressional intent to protect this information from revealing to the general public security-related information. Congress established the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (CSISSFRRA) to address concerns of national security for posting databases of Offsite Consequence Analysis data.[30] The statutory language of CSISSFRRA articulates the cautious approach that must be taken to provide information to the public while protecting sensitive information. It allows any member of the public access only to paper copies of OCA information and only for a "limited number" of facilities.[31]

Broadcasting strategic decisions online is dangerous, even if the information is intended to be shared with only a select population. The internet has long been used to facilitate terrorist activities and to disseminate information to others for purposes of committing criminal acts. The Department of Justice (DOJ) has acknowledged that "certain OCA data represents information that would provide a would-be perpetrator with refined targeting information, making it possible for him or her to select a facility from which a chemical release would cause the greatest damage, both to humans and to the surrounding environment and community."[32] EPA should not make such information publicly available, even for those facilities not specifically covered by CSISSFRRA by default.

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[29] Proposal at 53574.
[30] Chemical Safety Information, Site Security and Fuels Regulatory Relief Act, (CSISSFRA), 42 U.S.C. § 7401, note (Pub. L. 106-40, Aug. 5, 1999).
[31] 42 U.S.C. §7401(r)(7)(H).
[32] Department of Justice, Assessment of the Increased Risk of Terrorist or Other Criminal Activity Associated with Posting Off-Site Consequence Analysis Information on the Internet (2000) at 33-34 (DOJ report).

B. EPA Should Not Adopt Format Requirements for Information Availability

EPA has requested comments on whether information should be made available in narrative form or in specific categories that EPA selects.[33] Before determining how to make information available, ACC reemphasizes its concern with EPA's general trend towards EPA and public involvement in facility decision making.

Requiring covered facilities to provide declined hazard evaluation recommendations in narrative form is an unnecessary intrusion into internal practices at a facility that does not improve that facility's safety. Categorical listings would likely lead to public confusion and mistrust, as discussed above. Since EPA should not require disclosure of decisions not to implement PHA recommendations in the first place, there is no need to provide narratives or specific categories for reporting that information publicly.

C. EPA Should Not Adopt Methods to Justify Declining Recommendations

The justifications for declining PHA recommendations are typically complex. Owners and operators decline such recommendations following extensive analysis. Were EPA to try to present to the public a simplified version of these analyses – for example, by taking a categorical approach to grouping decisions – that could leave the public with an incomplete picture of an extensive system of investigation and reasoning leading to informed determinations. Yet EPA asserts that it is proposing to do just that:

> Regarding the requirement to provide justification for not implementing recommendations, EPA is proposing to allow facilities to choose from preselected categories. Under OSHA guidance, an employer may decline to adopt a PHA recommendation if, based upon adequate evidence, the employer can document that one or more of the following conditions is true:
>
> - The analysis upon which the recommendation is based contains material factual errors.
> - The recommendation is not necessary to protect the health and safety of the employer's own employees or the employees of contractors.
> - An alternative measure would provide a sufficient level of protection.
> - The recommendation is infeasible.[34]

Notably, this asserted proposed requirement for selection of "preselected categories" does not appear in the proposed regulatory text. If EPA intends to make use of these categories mandatory, it must put them into the regulatory text.

Moreover, the very lack of detail included in these categories illustrates ACC's concern with EPA's proposal to require justification for complex process safety decisions to appear in risk management plans. LEPCs and local communities are in no position to evaluate whether these justifications are actually appropriate. These categories are good conclusions for internal facility

[33] Proposal at 53574.
[34] Proposal at 53574. See also 53605.

evaluations that assess complex considerations, but they provide little or no useful information to LEPCs and local communities.

These categories derive from the OSHA PSM compliance directive[35] and EPA's RMP guidance.[36] Both documents relate to internal decision making about PHA recommendations, which is consistent with their being summary conclusions following a detailed assessment of PHA recommendations that are ultimately rejected. Neither document asserts that the summary of detailed reasoning should be made public. EPA should not now require these summary conclusions to be made public.

Instead, ACC suggests that EPA coordinate hazard evaluations information availability requirements with OSHA's. The OSHA Notice announced that OSHA is considering a change to "require formal resolution of the Process Hazard Analysis recommendations that are not utilized."[37] During OSHA's October 12, 2022 stakeholder meeting on the changes described in the OSHA Notice, OSHA noted that it is considering adding requirements to § 1910.119(e)(5) specifying that if management decides not to implement or make modifications based on PHA team findings and recommendations, management will ensure that the hazard identified by the PHA team has been adequately addressed. This could take the form of a formal document with management signature(s) approving the actions taken (or lack thereof) in order to resolve PHA team recommendations. The OSHA Notice includes no indication that OSHA is even considering a requirement to make those formal resolutions public, or even to submit them to OSHA for review. Like OSHA, EPA should plan to inspect sites as needed to confirm that recommendations are formally resolved. Any further requirement for publication of inaction does not serve the greater goal of public safety and may be antithetical to it.

5. Safer Technology and Alternatives Assessment

The Proposal would add a new STAA provision to the PHA requirements for Program 3 processes. Proposed 40 C.F.R. § 68.67(c)(9) would apply to owners and operators with processes in NAICS Codes 324 (Petroleum and Coal Products Manufacturing) and 325 (Chemical Manufacturing) located within one mile of another stationary source in either of those NAICS codes. It would also apply to stationary sources in NAICS code 324 with hydrofluoric acid alkylation processes. Covered stationary sources would have to consider and document "safer technology and alternative risk management measures applicable to eliminating or reducing risk from process hazards." Such STAA would have to consider inherently safer technology (IST) or design (ISD), along with other factors.[38]

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[35] OSHA Instruction CPL 2-2.45A CH-1 (Sept. 13, 1994), https://www.osha.gov/sites/default/files/enforcement/directives/CPL02-02-045_CH-1_20150901.pdf, replacement page B-22.
[36] EPA, General Guidance for Risk Management Programs for Chemical Accident Prevention (40 CFR Part 68), Chapter 7, https://www.epa.gov/sites/default/files/2013-11/documents/chap-07-final.pdf, p. 7-7.
[37] OSHA, Process Safety Management (PSM); Stakeholder Meeting, 87 Fed. Reg. 53021 (Aug. 30, 2022).
[38] Proposal at 53612.

A. EPA Has Provided Insufficient Evidence That IST Would Improve Safety

ACC members continuously strive to operate safely and reduce the hazards inherent in chemical manufacturing operations. ACC recognizes that certain IST and ISD are very useful risk reduction tools in several unique facility circumstances. Despite this, ACC believes EPA has not demonstrated commensurate feasibility nor benefit of STAA in reducing RMP-applicable incidents. By contrast, the results from approaches such as STAA may often redirect new risks and chemical hazard to offsite communities.

Generally, an STAA will seek to eliminate or reduce hazards associated with a particular set of facility conditions. STAA factors may aim to eliminate onsite hazard by generating new risks offsite or transferring hazards into the transportation mode. For example, a facility may choose to *minimize* the quantity of a chemicals stored onsite below the RMP threshold quantity. However, consider that this chemical substance is now either stored in separate shipments offsite or transferred to a larger number of rail car shipments. The circumstances of such risk transfers are well documented. The 2010 STAA study by CCPS and sponsored by the Department of Homeland Security (DHS) suggested that replacing such chemicals with "inherently safer alternatives" respect to a catastrophic release hazard might not address hazards at all, or it may create new hazards.[39] A 2013 National Academy of Sciences, Engineering, and Medicine (NAS) report pointed out that inherently safer process assessments will not always result in a clear path forward and may present countervailing risks, such as increasing the risk of fire or more severe environmental impacts.[40]

Inherently safer technology is not simple to identify or implement. Thus, EPA should not mandate STAA because IST may result in less public safety, not more.

B. EPA Should Continue the Long History of Rejecting IST Requirements

Over more than two decades of regulatory history, EPA has not demonstrated the benefits of adding an STAA requirement to RMP**.** The 1993 proposed RMP rule did not have an STAA requirement.[41] EPA did not propose to add one in a 1995 supplemental proposed rule, but there it explained why it did not do so:

> The manufacture, processing, and use of chemicals is inherently risky. EPA believes that fulfillment of the risk management program requirements entails ongoing attention to

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[39] CCPS, Final Report: Definition for IST in Production, Transportation, Storage, and Use. Prepared by The Center for Chemical Process Safety, (July 2010) at B-2, https://www.aiche.org/sites/default/files/docs/embedded-pdf/ist_final_definition_report.pdf ("An IST with respect to catastrophic release hazard from a fixed manufacturing plant may conflict with methods to minimize other hazards, such as theft or diversion of materials, contamination of product, or degradation of infrastructure. It may not address other hazards at all, or, it may create new hazards."

[40] National Academy of Sciences, The Use and Storage of Methyl Isocyanate (MIC) at Bayer CropScience (2013) at 5, https://nap.nationalacademies.org/login.php?record_id=13385 ("However, inherently safer process assessments will not always result in a clear, well-defined, and feasible path forward. Although one process alternative may be inherently safer with respect to one hazard – toxicity of by-products, for example – the process may present other hazards, such as an increased risk of fire or more severe environmental impacts.").

[41] EPA, Risk Management Programs for Chemical Accidental Release Prevention, 58 Fed. Reg. 54190 (Oct. 20, 1993).

> hazard identification, hazard analysis, risk management (assessment, reduction and control, or elimination), and public outreach. This process should lead to continuous improvement and the evolution of safer sources through a wide range of actions involving reduction of the inherent risk and control or mitigation of the hazards. During the proposed rule hearings, several presenters argued that, like pollution prevention, accident prevention could be more successful if the program were to focus on the elimination of hazards to make processes inherently safer rather than on an attempt to control or mitigate existing hazards. It was suggested that sources be required to examine different approaches or technologies through a process of technology options analysis (TOA), or a "state-of-the-art" search and analysis of safety alternatives as required by New Jersey in its Toxic Catastrophe Prevention Act regulations, to find, and adopt, inherently safer chemical pathways and processing techniques …. Commenters suggested that EPA formalize the search for alternative technologies by making TOA or similar reviews a required part of PHAs and by requiring sources to document and share the results in the RMP.
>
> **Such costly analyses are probably best conducted during the design of new processes, when, according to industry commenters, they often are already part of the design process to identify cost-effective approaches to improving safety.** In addition, if alternative technologies are discovered, whether for new or existing processes, further analysis is necessary to determine whether risks are inadvertently being transferred by the new technology from one location to another. Adoption of new technologies without such analyses may inadvertently impose greater individual or societal risk. EPA recognizes, however, that there are many opportunities to make processes inherently safer without large-scale adoption of new technologies. These opportunities may become apparent through the PHA. Some sources have already performed such analyses and have successfully taken action to make their processes inherently safer. **Consequently, EPA does not favor inclusion of a specific requirement in the initial program for an analysis of the inherent safety of processes or for adoption of new technologies.**[42]

In adopting the final RMP regulations in 1996, EPA reaffirmed its rejection of any IST requirement. There it stated:

> Finally, EPA does not believe that a requirement that owners or operators conduct searches or analyses of alternative process technologies for new or existing processes will produce significant additional benefits. Many commenters, including those who support these analyses, indicated that an assessment of inherently safer design alternatives has the most benefit in the development of new processes. Industry generally examines new process alternatives to avoid the addition of more costly administrative or engineering controls associated with a design that may be more hazardous in nature. Although some existing processes may be judged to be inherently less safe than others, EPA believes most of these processes can be safely operated through management and control of the hazards without spending resources searching for unavailable or unaffordable new

[42] EPA, Accidental Release Prevention Requirements; Risk Management Programs Under Clean Air Act Section 112(r)(7), 60 Fed. Reg. 13526, 13534-35 (Mar. 13, 1995) (emphasis added).

> process technologies. Application of good PHA techniques often reveals opportunities for continuous improvement of existing processes and operations without a separate analysis of alternatives. EPA encourages owners or operators to continue to examine and adopt viable alternative processing technologies, system safeguards, or process modifications to make new and existing processes and operations inherently safer. Through the process and prevention program information in the RMP, sources can demonstrate, and users of the RMP information can observe and promote, progress toward safer processes and operations.[43]

Later, Congress considered and similarly rejected an IST requirement for the Department of Homeland Security's Chemical Facility Anti-Terrorism Standards (CFATS) regulations, codified at 6 C.F.R. Part 27. Chemical facility security legislation was initially introduced shortly after the events of September 11, 2001. Competing bills from the 107th, 108th, and 109th Congresses were characterized by disputes over which agency should run the program (some bills would have allocated authority to EPA, others to DHS), the scope and details of the program, and particularly whether the program would mandate the retrofitting of existing chemical products production facilities to incorporate IST. The deadlock over IST persisted into the 109th Congress, and ultimately motivated Congress to opt for a provisional approach, inserting a short section into the annual DHS appropriations bill to convey regulatory authority to DHS on a temporary basis, expiring "three years after the date of enactment," October 4, 2006. The result, Section 550 of the DHS Appropriations Act of 2007,[44] was sparse on programmatic details, in effect giving DHS wide latitude to interpret its mandate and define the contours of the program.

In implementing Section 550, DHS considered that Congress had prohibited it from adopting an IST requirement, noting that "Section 550 prohibits the Department from disapproving a site security plan 'based on the presence or absence of a particular security measure,' including inherently safer technologies. See Section 550(a). Even so, covered chemical facilities are certainly free to consider IST options, and their use may reduce risk and regulatory burdens."[45]

In 2014, Congress provided a solid legislative basis for the CFATS program with the "Protecting and Securing Chemicals Facilities from Terrorist Attacks Act of 2014."[46] After years of wrangling about IST and other issues, Congress decided not to include an IST requirement in the legislation.

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[43] EPA, Accidental Release Prevention Requirements: Risk Management Programs Under Clean Air Act Section 112 (r)(7), 61 Fed. Reg. 31688, 31674 (June 20, 1996) (emphasis added).
[44] Department of Homeland Security Appropriations Act, 2007, § 550, Pub. L. No. 109-295, 6 U.S.C. § 121 note (Oct. 4, 2006).
[45] DHS, Chemical Facility Anti-Terrorism Standards, 72 Fed. Reg. 17688, 17719 (Apr. 9, 2007).
[46] Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014, Pub. L. 113-254, 6 U.S.C. § 101 note (Dec. 18, 2014).

Notwithstanding this history, in 2014 EPA requested information on a possible STAA requirement for the RMP regulations, including consideration of IST.[47] It proposed such a requirement in 2016[48] and adopted it in 2017.[49]

In 2018, EPA proposed to repeal the STAA requirement.[50] EPA adopted a final rule repealing the requirement in 2019, before it became operational. The preamble explained:

> EPA now believes the Amendments rule was likely to be less effective at preventing accidents than the Agency previously believed. Prior to its reconsideration of the Amendments, EPA had not attempted to quantify the effects of state level regulations that are comparable to the Amendments rule's STAA provision. EPA has now conducted a detailed analysis of RMP facility accident rates in New Jersey and Massachusetts – two states with long-established state-level regulations comparable to the Amendments rule STAA provision – and found that accident rates in these states have not improved more than accident rates at RMP facilities nationwide under the pre-Amendments rule. In fact, the average number of accidents per RMP facility in both states have exceeded the national average. Therefore, EPA believes that the STAA provision of the Amendments is an unreasonable regulation because its costs are disproportionate to its benefits.[51]

This history provides multiple explanations as to why EPA's proposed adoption of an STAA requirement, including an IST requirement, would be a bad policy decision, some of which comes from EPA itself.

To date, EPA has not sufficiently explained why an STAA requirement is newly appropriate after years of determining the exact opposite. The Proposal explains that EPA is "unable to determine if STAA provisions are ineffective."[52] That is not a reason for adopting an STAA provision, however. Given the very high costs of an STAA requirement, EPA should at least have to establish that an STAA requirement would be effective, and it has not done so.

C. EPA Lacks Statutory Authority to Adopt an STAA Requirement

Nowhere in Section 112(r) does Congress authorize EPA to require a company to evaluate and/or undertake changes in its technology choices or its process design decisions. Where Congress intended to grant EPA the authority to mandate changes in design or technology, it did so explicitly. As an example, in CAA Section 112(d)(2), Congress provided EPA with the authority

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[47] EPA, Accidental Release Prevention Requirements; Risk Management Programs Under the Clean Air Act, Section 112(r)(7), 79 Fed. Reg. 44605 (July 31, 2014).
[48] EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, 81 Fed. Reg. 13638 (Mar. 14, 2016).
[49] 40 C.F.R. § 68.67(c)(8); EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, 82 Fed. Reg. 4594, 4699 (Jan. 13, 2017).
[50] EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, 83 Fed. Reg. 13638 (May 30, 2018).
[51] EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, 84 Fed. Reg. 69834, 69852 (Dec. 19, 2019). EPA found that the cost savings from repeal of the STAA provisions would come to $70 million annually. *Id*. at 69839.
[52] Proposal at 53579.

to establish emission standards that require the maximum degree of reduction in emissions that EPA determines is achievable, "including, but not limited to, measures which:

> (A) reduce the volume of, or eliminate emissions of, such pollutants **through process changes, substitution of materials or other modifications,**
> (B) **enclose systems or processes to eliminate emissions**,
> (C) collect, capture or treat such pollutants …,
> (D) **are design, equipment**, work practice or operational **standards** ….

(Emphasis added.) By contrast, in Section 112(r)(7), Congress mandated that EPA adopt "reasonable regulations and appropriate guidance" that would only "cover the use, operation, repair, replacement and maintenance of equipment". CAA § 112(r)(7)(B)(i). Moreover, the legislative history of the Clean Air Act Amendments of 1990 indicates that there was no discussion or consideration of a requirement for consideration of alternative technologies or design under Section 112(r).[53]

For this reason as well, EPA should not adopt its proposed STAA requirement.

D. EPA Has Mischaracterized the Process Safety Performance of Facilities in NAICS Code 325

The preamble asserts that "EPA identified the sectors covered by this requirement by using sector-wide accident rates." (p. 53576). The preamble then asserts that the accident rate for facilities in NAICS Code 325 is twice that for industry as a whole. (p. 53578).

EPA's methodology for calculating that statistic is unclear. Nevertheless, ACC has reviewed the data in EPA's Technical Background Document.[54] This review shows the following data for facilities in NAICS Code 325 with respect to RMP-reportable incidents during the 17-year period of 2004-2020:

- There were 1,650 RMP-covered facilities, which collectively had 815 reported incidents.
  - Of those facilities, **1,259** (76% of the 1,650 facilities) **reported 0 incidents** during that period.
  - **391** facilities reported **at least 1** incident during that period (**24%** of the 1,650 facilities).
- Of those 391 reporting facilities:
  - 245 facilities (63% of the 391 reporting facilities) each reported 1 incident (i.e., 245 incidents, or 30% of the 815 incidents reported).
  - 56 facilities (14% of the 391 reporting facilities) each reported 2 incidents (i.e., 112 incidents, or 14% of the 815 incidents reported).
  - 300 facilities (77% of the 391 reporting facilities) each reported 1-2 incidents for a total of 357 incidents, or 44% of the 815 incidents reported).

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[53] See Senate Report of the Committee on Environment and Public Works, Clean Air Act Amendments of 1990, S. Rep. No. Report 101-228, pp. 221-226 (1990).

[54] EPA, RMP Accidents 2004-2020 (Appendix A); Technical Background Document for Notice of Proposed Rulemaking: Risk Management Programs Under the Clean Air Act, Section 112(r)(7) Safer Communities by Chemical Accident Prevention, https://www.regulations.gov/document/EPA-HQ-OLEM-2022-0174-0065.

- 1,504 of the 1,650 RMP-covered facilities in NAICS 325 (91% of the total) reported either 0 or 1 incident during that period.
- 1,560 of the 1,650 RMP-covered facilities in NAICS 325 (95% of the total) reported 0-2 incidents during that period.
- 90 facilities (5% of the 1,650 RMP-covered facilities in NAICS 325) reported 458 incidents (56% of the 815 incidents) during that period. Of these facilities, the average was 5 reported incidents per facility, with a range of 3-24 incidents reported per facility.

This is a remarkable safety record, particularly since, as EPA notes in the preamble, chemical facilities are generally much more complex, with much greater volumes of regulated substances, than most other industries. It suggests that enhanced enforcement of RMP requirements by EPA, focused on just 5% of the facilities in NAICS Code 325, could substantially reduce the number of incidents reported, without any changes to the RMP regulations.

E. The Proposed STAA Provision Would Not Be Cost-Effective

The preamble clarifies that the proposed STAA provision would be by far the largest component of the overall cost of the proposed RMP amendments:

> The largest annualized cost of the proposed rule is the safer technologies and alternatives analysis (STAA) provision ($51.8 million at both 3% and 7% discount rates) ….[55]

EPA projects the total annual cost of the entire rule to be $75.8 million (3% discount rate) or $76.7 million (7% discount rate). That means that the STAA requirement alone, costing $51.8 million, would account for over two-thirds of the total cost at either discount rate.

Notably, "EPA does not intend to require facilities implement identified IST,"[56] nor should it, for reasons explained in the preamble:

> EPA believes facility owners and operators will adopt IST and other safer technology alternatives when it is practicable technically and economically and when the risk reduction is significant even in the absence of a mandate.[57]

Thus, the $51.8 million annual cost of the proposed STAA requirement is solely for consideration of possible alternatives. If, as EPA would suggest here, owners and operators can be relied upon to adopt IST where it makes sense to do so, they can also be relied on to consider IST when it makes sense to do so. Accordingly, an STAA requirement would not produce benefits, much less any benefits justifying an annual cost of $51.8 million.

EPA "expects that some portion of future damages would be prevented through implementation of a final rule" that includes STAA.[58] However, its explanation of the expected benefits for the Proposal does not identify any benefits tied specifically to the STAA provision. EPA is unable

[55] Proposal at 53561.
[56] *Id*. at 53580.
[57] *Id.*
[58] *Id.* at 53561.

to document any connection between consideration of possible STAA changes and reduction in accidental releases.

ACC is concerned that EPA did not review and summarize literature on STAA in its proposal, since the concept has been known for decades and the academic literature is significant. We found a dearth of studies on its practical effectiveness, but consensus on its theoretical value: as a tool to inform future investment decisions. Once a facility has committed to a particular production technology, STAA is not particularly useful nor informative.

F. EPA Should Limit Any STAA Requirement to the Design and Development Phases of New RMP NAICS Code 324 or 325 Processes

ACC emphasizes that STAA is often both inappropriate and cost-prohibitive for existing processes.[59] Facilities will most often conduct STAA during the design phase of a new process, in contrast to the PHAs and other existing tools used for an existing process. The enormity of the requirement to perform STAA for every existing RMP process far exceeds its potential value in effectively reducing risk of an accidental release and may very well be counterproductive by taking away time and resources that could be better applied to more productive risk reduction activities. An acceptable alternative to the EPA STAA proposal would be to require all Program 2 and Program 3 processes to consider safer alternatives and strategies during the design and development phase of any new RMP process.

G. Ambiguities in the Proposed STAA Requirements Would Make Compliance Difficult

ACC remains concerned with several significant vagueness issues with the Proposal, the results of which are making facilities unsure of how best to achieve compliance. As mentioned in the preamble, numerous variables must be incorporated into the initial analysis of available technologies and then the subsequent feasibility analysis. Because of the complexity of IST analysis, with any characterization of "safer" being extremely subjective, it is unclear what would constitute sufficient STAA for purposes of the proposed rule.

For example, the Proposal would define "inherently safer technology or design" to mean "risk management measures …."[60] That definition would mischaracterize IST, which is a process rather than measures such as engineering changes identified through a process. CCPS has provided a more appropriate definition that highlights the subjective nature of IST:

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[59] See, e.g., NAS, The Use and Storage of Methyl Isocyanate (MIC) at Bayer CropScience (2013), at 6, https://nap.nationalacademies.org/login.php?record_id=13385 ("For this reason, it is easiest to implement inherently safer process design before process technologies have been chosen, facilities built, or customers have made commitments based on products with particular characteristics. As a product moves through its life cycle, these and other factors may limit options, make changes more difficult, or involve more people and organizations in the change."); CCPS, Final Report: Definitions for Inherently Safer Technology in Production, Transportation, Storage and Use (2010) at 6, https://www.aiche.org/sites/default/files/docs/embedded-pdf/ist_final_definition_report.pdf ("While IST applies throughout the life cycle, the greatest opportunities to implement IST significantly arise early in the cycle.").

[60] *Id.* at 53609.

> Inherently Safer Technology (IST), also known as Inherently Safer Design (ISD), permanently eliminates or reduces hazards to avoid or reduce the consequences of incidents. IST is a philosophy, applied to the design and operation life cycle, including manufacture, transport, storage, use, and disposal. IST is an iterative process that considers such options, including eliminating a hazard, reducing a hazard, substituting a less hazardous material, using less hazardous process conditions, and designing a process to reduce the potential for, or consequences of, human error, equipment failure, or intentional harm. Overall safe design and operation options cover a spectrum from inherent through passive, active and procedural risk management strategies. There is no clear boundary between IST and other strategies.[61]

Technical experts have already concluded that "safer" is a relative term[62] and that there is no consensus on how best to conduct IST.[63] If EPA would pursue its own unique approach to STAA, especially one that has no scientific underpinnings, this would only exacerbate the problem. If EPA is proposing such a requirement, it should provide clear regulatory language to inform the regulated community sufficiently on what specific steps can be taken to comply with proposed requirements, and how EPA will evaluate compliance and enforce the provisions. EPA has not done so and likely does not have the expertise to do so. In either case, EPA would still need to provide clear guidance on what is required, so that affected facilities can understand what their obligations are, and how compliance will be determined

H. EPA Should Not Adopt the Proposed Practicability Assessment Requirement

The Proposal would add a new § 68.67(c)(9)(ii), which would require a covered owner or operator to determine and document the practicability of IST considered; document the methods used to determine practicability; and document and send to EPA a description of the IST implemented. It would also add a new § 68.175(e)(7) to require the risk management plan to identify any IST implemented since the last risk management plan.[64]

ACC opposes these proposed requirements for several reasons:

- ACC opposes any requirement to consider IST in existing processes at covered stationary sources for the reasons addressed above.
- Additionally, even with an STAA requirement, the proposal for the owner or operator to notify EPA of any IST adopted is unnecessary. The current Risk Management Plan provision already requires the owner or operator to notify EPA and other RMP recipients every five years of process controls in place, mitigation systems in use, monitoring and detection systems in use and changes since the last PHA. See 40 C.F.R. § 68.175(e)(3)-

[61] CCPS, Final Report: Definitions for Inherently Safer Technology in Production, Transportation, Storage and Use. Prepared by the Department of Homeland Security (2010) at 5, https://www.aiche.org/sites/default/files/docs/embedded-pdf/ist_final_definition_report.pdf.
[62] *Id*. at 6 ("A material, process, or technology can only be described as 'inherently safer' when compared to a different material, process, or technology; and, the hazard or set of hazards which were considered must be specified.").
[63] *Id*. at 6 ("There is currently no consensus on either a quantification method for IST or a scientific assessment method for evaluation of IST options.").
[64] Proposal at 53612, 53615.

(6). This is sufficient, because this information from the risk management plan will reflect any additional changes made as a result of STAA and be available to LEPCs and the public as provided in 40 C.F.R. § 68.210. EPA does not explain why this longstanding provision is no longer sufficient. Absent any justification or demonstration that the existing provision is insufficient, this requirement adds no benefit and instead exists solely as a new burden for covered facilities.

- The EPA notification requirement and the Risk Management Plan IST requirement would tend to involve EPA and the public in the key decision-making of the owner or operator about how best to operate its stationary source. That would be inappropriate. EPA should not regard itself, LEPCs, or the public as partners with the hundreds of affected stationary sources that consider—and sometimes reject—ideas about possible IST at the stationary source. EPA's duty under Section 112(r) is to set standards for owners and operators to meet. That duty does not encompass EPA carving out space for itself or the public to influence decision-making on potential improvements to affected facilities that already meet RMP requirements.

I. EPA Should Not Develop an STAA Clearinghouse

ACC does not support development of a publicly accessible clearinghouse of safer alternatives. First, "safer" is a comparative term–safer than what?[65] Next, STAA involves the comparison of existing controls against other kinds of controls, which will always necessarily include evaluating safety. It will also always include assessing the value in risk reduction a given control offers against resource requirements. Inherently safer alternatives may not be safer if the resources needed to implement them preclude the use of other, more practical controls. As such, corralling what are deemed "safer" controls *in context* into a clearinghouse that necessarily strips them of said contexts results in meaninglessness. ACC opposes the creation of such on these grounds alone.

EPA establishment of such a clearinghouse could additionally lead to public perception that the STAA in the clearinghouse is always preferable to existing controls, which is not the case. This may engender under-informed scrutiny, which can lead to unearned lowered public trust—none of which supports the goal of increased public safety.

It is ACC's position that EPA should leave development of STAA to standard-setting organizations such as AIChE and API.

J. The Proposed STAA Applicability Criteria Are Not Appropriate

The proposed 1-mile co-location threshold for STAA is arbitrary, capricious, and unduly burdensome. The Agency provided no sufficient justification regarding why it has linked its

[65] See CCPS, Final Report: Definitions for Inherently Safer Technology in Production, Transportation, Storage and Use. Prepared by the Department of Homeland Security (2010) at 5, https://www.aiche.org/sites/default/files/docs/embedded-pdf/ist_final_definition_report.pdf ("ISTs are relative**:** A technology can only be described as inherently safer when compared to a different technology, including a description of the hazard or set of hazards being considered, their location, and the potentially affected population. A technology may be inherently safer than another with respect to some hazards but inherently less safe with respect to others, and may not be safe enough to meet societal expectations.").

most burdensome requirement with proximity-based factors. EPA's RMP accident database for NAICS Code 325 demonstrates no link between facility proximity and risk of accidental chemical releases. Limiting STAA to facilities within a 1-mile radius does not change the fundamental lack of demonstrated benefit of mandating STAA commensurate with the exceptional costs imposed.

EPA makes several unclear claims regarding the factors that indicated a need to propose focusing the STAA requirement on densely co-located chemical manufacturing facilities. Namely, EPA claims, "[t]he distance of 1 mile represents the median distance of facilities with 324 and 325 NAICS processes that have had accidents in the period from 2016 to 2020 to the nearest facility with a process in these NAICS in 324 or 325." (p. 53577) This claim is predicated on EPA's separate logic that "the proximity of densely co-located refining and chemical manufacturing facilities creates a greater risk of an accident at one facility impacting safety at the nearby facility, thereby increasing the potential for a release at the second facility (a "knock-on" release)."

However, EPA's RMP accident database for NAICS Code 325 demonstrates no link between co-location of facilities and reported incidents. Based on EPA's dataset, 72% of facilities within the 1-mile proximity have had no accident history over two decades, which is comparable with 76% of the total chemical facilities.[66] It would be dubious at best to claim site proximity poses any substantially higher degree of risk. Furthermore, according to the RMP dataset, there were zero (0) reported simultaneous or synchronous incidents at separate companies within a mile of each other (i.e., the proposed 1-mile co-location) between 2015 and 2022. EPA provides no example of actual "knock-on" release example in the STAA discussion in the preamble. Only one near-miss example is cited, "an 8,600-pound vessel fragment traveled 435 feet and impacted a neighboring business, injuring one offsite worker and causing significant property damage." (p. 53571).

It is therefore unclear what EPA's basis is for including this criterion in any risk assessment scheme, as there is no nexus to real -world harms. It does not stand up to scrutiny and appears to be arbitrary and capricious, so any inclusion of it in the Proposal is not appropriate.

6. Root Cause Analysis

A. ACC Supports a Root Cause Analysis Requirement

EPA proposes to require Program 2 and 3 facilities to conduct a root cause analysis as part of an incident investigation for an RMP-reportable accident.[67] EPA intends that this proposal will be coordinated with OSHA's PSM requirements. The Proposal would define "root cause" as "a fundamental, underlying, system-related reason why an incident occurred."[68] It does not define "near-miss," but seeks comments on a potential definition. The Proposal would also amend 40 C.F.R. § 68.81 and § 68.60 to require that facilities prepare a report when an accident

[66] EPA, RMP Accidents 2004-2020 (Appendix A); Technical Background Document for Notice of Proposed Rulemaking: Risk Management Programs Under the Clean Air Act, Section 112(r)(7) Safer Communities by Chemical Accident Prevention, https://www.regulations.gov/document/EPA-HQ-OLEM-2022-0174-0065.
[67] Proposal at 53581.
[68] *Id.* at 53583.

investigation concludes, and complete the report within 12 months of the incident (though extensions may be requested).[69] For incidents that meet the accident history reporting requirements under 40 C.F.R. § 68.42, the Proposal would require the owner or operator to investigate the factors that contributed to an incident. EPA has suggested that "these factors will now include root causes, and these root causes shall be determined by conducting an analysis for each incident using a recognized method (such as CCPS)."[70]

As documented in section 13 of these comments, concerning the Regulatory Impact Analysis (RIA), EPA failed to construct appropriate regulatory alternatives. It estimated the annualized cost of the proposed root cause and third-party audit provisions to be $11 million.[71] If the trigger for these requirements to be a Program 2 or 3 facility with a reportable incident were changed to apply only where there is at least one fatality or any off-site property damage, the annualized cost would drop to $250,000.

Nonetheless, as indicated in its comments on the 2016 proposed rule, ACC supports the inclusion of root cause analysis for both catastrophic releases and those that could have reasonably resulted in a catastrophic release.

The Proposal would require the root cause analysis to include specific elements and require the use of a recognized investigation method. EPA should ensure that owners and operators have flexibility to modify recognized investigation methods to reflect the context, which may involve very complex or relatively simple processes or incidents. In some cases, certain specific elements would not be relevant, so a requirement to include them could lead to confusion as covered facilities attempt to comply with this provision.

B. A Definition of "Near Miss" is Not Required and Could Cause Confusion

ACC recognizes that the concept of a near miss is familiar to industry and has long been part of industry vernacular. ACC does not see the need for a formal definition of the term. The "near" aspect necessitates consideration of a variety of factors specific to the particular context, making adoption of a satisfactory definition difficult. The incident investigation provision in current 40 C.F.R. § 68.81(a), which describes incidents that "could reasonably have resulted in a catastrophic release," is itself already sufficient to identify a near miss.

ACC also objects to the examples in the NJDEP definition of "near miss" that relate to the successful operation of controls to prevent a release, "activation of layers of protection such as relief valves, interlocks, rupture discs, blowdown systems, halon systems, vapor release alarms, and fixed vapor spray systems; and activation of emergency shutdowns."[72] The proper operation of a safeguard designed and intended to prevent a hazardous scenario is not a near miss. A process upset is also not a good example of a "near miss." While some process upsets can lead to near misses, the "near" criteria are not met if existing controls work properly to control the process upset.

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[69] *Id.* at 53583.
[70] *Id.*
[71] EPA, Regulatory Impact Analysis, Safer Communities by Chemical Accident Prevention, Proposed Rule (April 19, 2022) at 8.
[72] Proposal at 53584.

7. Third-Party Compliance Audits

Proposed 40 C.F.R. §§ 68.59 and 68.80 would reinstate much of the 2017 RMP amendments with respect to third-party audits, with only very limited modifications.[73] To the extent that the requirements are similar and present the same concerns, ACC reiterates its previous comments.

EPA has proposed to modify the prior rule to require third-party audits when a facility experiences (a) two RMP-reportable accidents within five years; or (b) for chemical or petroleum and coal manufacturing facilities, one RMP-reportable accident within five years if the facility is located within one mile of another chemical or petroleum/coal facility. EPA has also proposed to add a requirement to justify in the risk management plan when third-party compliance audit recommendations are not adopted.

A. EPA Lacks Statutory Authority to Require Third-Party Audits and Cannot Delegate Any Authority It May Have to a Private Party

ACC has previously commented on EPA's lack of authority to compel third-party compliance audits and continues to believe that this is beyond the scope of EPA's Clean Air Act authority. No provision in Section 112(r) or Section 114 of the CAA grants EPA authority to mandate third-party audits. Neither does either section allow EPA to delegate this type of authority to a private third party. Congress clearly articulated those limited instances when EPA is allowed to delegate its enforcement and oversight authority, and when it does so, limited permission is granted. Section 114 of the CAA, 42 U.S.C. § 114, which sets forth EPA's inspection and enforcement authority, allows EPA to delegate that authority in only two circumstances, both of which are focused on agency regulatory authority: (1) an EPA "authorized representative" and (2) a state after a formal delegation process has been completed. The inspection and enforcement authority is limited to EPA, with an allowance for those persons acting on behalf of EPA or having been delegated the authority from EPA. The third-party auditor is neither of these and thus is not authorized under the CAA.

Moreover, the third-party audit program violates the U.S. Constitution's private non-delegation doctrine.[74] Under this doctrine, an agency cannot delegate the regulatory authority that Congress provided to it, as the private entity is not authorized to exercise that executive power.

Rather than a regulatory oversight program, the third-party audit requirement would be a private party enforcement program in which EPA would have abdicated a significant portion of its enforcement authority. Because this scheme would allow a private party effectively to regulate another private party, it would violate the non-delegation doctrine, which prohibits that very action.[75] As Justice Alito concurred in *Department of Transportation v. Association of American*

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[73] *Id.* at 53610-13.

[74] The private non-delegation doctrine is rooted in Article 1, Section 1 of the U.S. Constitution, which vests legislative powers in Congress and limits the delegation of those powers. The private non-delegation doctrine "flows logically" from the Constitutional vesting clauses. (See *Dep't. of Transportation v. Ass'n of Am. R.Rs.,* 135 S. Ct. 1225, 1252 (2015). (Thomas, J., concurring).

[75] *Carter v. Carter Coal Co.,* 298 U.S. 238 (1936) (private parties cannot set binding regulations on other parties and therefore cannot act as a regulator).

Railroads, "when it comes to private entities, however, there is not even a fig leaf of constitutional justification" for this exercise of executive power because the Constitution does not vest that power in private entities.[76]

A third-party auditor would be hired by the owner or operator and would not be an authorized representative of EPA or have any oversight by a government agency. Yet, the audit could result in enforcement by the agency. EPA could conduct these inspections itself. Instead, it proposes to require the third-party audit. For example, EPA reiterates its comments from the 2019 rule, that "the Agency prioritizes inspections at facilities that have had accidental releases" and that "EPA's enforcement resources and posture are capable of addressing accident-prone facilities without additional broad regulatory mandates."[77] EPA can conduct the needed inspections, but instead seeks to outsource its inspection duties to a third party. Thus would force owners and operators to be subject to inspection results of third-party auditors without clear processes to protect the due process rights of those subject to the audits.

B. EPA Has Not Shown That Third-Party Auditing Is Necessary

ACC agrees that audits can be a useful tool for facilities to analyze their compliance programs, but EPA does not adequately explain why third-party auditing is needed, particularly at facilities that have not had multiple accidents. In the Proposal, EPA recognizes that "a relatively small number of RMP-regulated facilities have RMP-reportable accidents."[78] EPA seeks to address the very small percentage of remaining facilities by setting bright-line requirements without any risk-based support. As such, EPA's proposed requirement for third-party audits of facilities that have two accidents within a five-year period is arbitrary.

EPA goes even further when it proposes to similarly require third-party audits for facilities in NAICS codes 324 and 325 with only one reportable accident if they are also located within a one-mile radius of another chemical facility or a petroleum and coal manufacturing facility. EPA determines that such facilities – those in NAICS codes 324 and 325 and located within one mile of another qualifying facility – incur increased accident severity, frequency, and consequences. EPA further states that, because of this, such stationary sources pose a greater risk to surrounding communities. While EPA purports to have fleshed out its initial conclusion in the STAA portion of the preamble, it does not; this is therefore unsupported. Further, stating that such facilities pose a greater risk is a second unsupported conclusion. Basing a requirement on both is deeply flawed.

C. Third-Party Audits May Not Be as Insightful as Self-Audits and, Therefore, Not as Valuable

ACC has pointed out in prior comments to both EPA and OSHA that second-party and self-audit programs provide significant benefits to sources by allowing the use of individuals who have the highest knowledge of each process and of process safety risks. (Second-party audits are conducted by or with the assistance of company personnel not located at the facility being

[76] *Dep't of Transportation v. Ass'n of Am. R.Rs.* at 1237.
[77] Proposal at 53585.
[78] *Id.* at 53584.

audited, such as corporate experts in process safety.) A third-party auditor is not necessary in all instances to lead the team. In many cases, internal company auditors offer advantages over non-affiliated third-party contractors. As described in Chapter 21 of the CCPS Guidelines for Risk Based Process Safety,[79] selection of an audit team is highly complex and requires careful consideration based on site-specific factors. Third-party auditors may not have the first-hand knowledge of company programs and practices and may not have the specific technical knowledge of the process or the desired level of technical competence. Further, in some cases much of the knowledge gained by a third-party audit will literally walk out the door at the end of the audit, losing the benefit of potential cross-learning and lesson-sharing.

As recognized and accepted by CCPS, the use of second-party auditors is a common practice employed within industry to provide a high level of expertise, objectivity and competence, while minimizing cost burdens. Second-party auditors do not work for the individual facility being audited but work at another facility of the same company or in a corporate capacity, such as a corporate risk management function. They provide a valuable oversight role for the corporation and are highly trained and qualified experts in the management systems and processes being employed throughout their company's facilities. Their job is to assess risk at the individual facility and across the organization and to minimize or eliminate risk where feasible. Second-party auditors provide distinct advantages over third-party auditors:

(1) They have the requisite in-house expertise and knowledge of complex, and sometimes unique chemical manufacturing processes.
(2) Any audit findings and corrective action taken support cross-learning across the company.
(3) As employees of the company, they have a significant incentive to identify problems and solutions to minimize corporate risk.
(4) Their use as auditors is cost-effective.

Bypassing the use of these valuable company individuals by mandating the hiring of third parties to analyze complex chemical processes and their potential safety risks is unreasonable. ACC appreciates that the Proposal would provide a little more flexibility in auditor selection than did the 2017 rule, but it still does not allow the use of second-party auditors. EPA has not justified the need to have a third-party audit when better options are available.

Moreover, two National Enforcement Programs (NEPs) carried out by OSHA support the fact that the majority of compliance audits being undertaken are sufficient and protective even where they are not conducted by a third party. OSHA found that inadequate compliance audits were one of the least cited PSM elements in the Petroleum Refinery Process Safety Management NEP, comprising only 4% of the total PSM citations. Similarly, the PSM-Covered Chemical Facilities NEP, which was launched in 2009 and expanded nationwide in 2011, found that inadequate compliance audits received only 4.5% of the total PSM citations.[80]

[79] CCPS, Guidelines for Risk Based Process Safety (2007) at 607.
[80] OSHA's Refinery & Chemical National Emphasis Programs, July 20, 2012 presentation by Jordan Barab, Deputy Assistant Secretary for OSHA, July 20, 2012, http://www.csb.gov/UserFiles/file/Barab%20(OSHA)%20PowerPoint.pdf.

Many chemical plants are comprised of a series of complex engineered processes; they are not simply off-the-shelf units that a third-party auditor can reference and come to understand through trade manuals or manufacturers' instructions. In many cases, they are processes that have been uniquely developed to meet an individual customer's product specifications and often are not replicated in other locations. While ACC appreciates the flexibility EPA has provided by removing a couple of the independence requirements for auditors, this does not address the central concern that third-party auditors often do not have the breadth and depth of knowledge and expertise required.

D. Requiring Justification of Declined Audit Findings May Result in Acceptance of Ill-Advised Recommendations

EPA is considering adoption of specific pre-selected categories for owners and operators as justifications for declining third-party audit findings based on OSHA guidance for declining a PHA recommendation. The categories are as follows: (1) the analysis upon which the recommendation is based contains material factual errors; (2) the recommendation is not necessary to protect the health and safety of the employer's own employees, or the employees of contractors; (3) an alternative measure would provide a sufficient level of protection; and (4) the recommendation is infeasible. These categories unfortunately fall woefully short of capturing all the real-world reasons to decline an audit recommendation, including but not limited to that a particular recommendation is impractical and ineffective.

ACC is additionally concerned that a third-party auditor may not be sufficiently knowledgeable or fully informed to be able to make appropriate compliance judgments needed to ensure adherence to RMP provisions at a particular facility, which could lead to a significant uptick in poorly aligned recommendations. When faced with the burden of having to address numerous poorly aligned recommendations, compounded by the inadequacy of the predetermined options for justifying declining those recommendations, ACC fears facilities may give in to pressure to consider and possibly adopt ill-advised recommendations simply to avoid potential legal liability or public criticism for failure to take corrective action to address auditor conclusions. This potential outcome must be measured against the benefit of developing such categories. The proposed third-party audit requirement does not survive this balancing test.

E. Mandatory Public Release of Declined Third-Party Audit Recommendations Could Impermissibly Infringe on a Legal Privilege

Many RMP audits are conducted under the attorney-client privilege, since the results of the audits may be necessary for an attorney to provide the owner or operator with legal advice. The U.S. Supreme Court has spoken to the importance of the attorney-client privilege to the administration of justice:

> The attorney-client privilege is the oldest of the privileges for confidential communications know to the common law …. Its purpose is to encourage full and franc communication between attorneys and their clients and thereby promote broader public interests in the observance of law and administration of justice. The privilege recognizes

> that sound legal advice or advocacy serves public ends and that such advice or advocacy depends upon the lawyer being fully informed by the client.[81]

This assertion of privilege is fundamental to the ability of individuals and entities to understand and comply with the law. The D.C. Circuit Court of Appeals recently clarified that the privilege applies to protect communications when made in the course of conducting activities that are required by statute or regulation:

> In the context of an organization's internal investigation, if one of the significant purposes of the internal investigation was to obtain or provide legal advice, the privilege will apply. That is true regardless of whether an internal investigation was conducted pursuant to a company compliance program required by statute or regulation, or was otherwise conducted pursuant to company policy.[82]

Consequently, the requirement in proposed 40 C.F.R. § 68.170(e)(7)(i) to identify declined third-party auditor recommendations would prevent the assertion of attorney-client privilege. This proposed requirement would be in excess of EPA's statutory authority, and would certainly be unreasonable. The proposed language is contrary to established judicial precedent and it would thwart a principle that is fundamental to the administration of justice.

Similarly, EPA cannot prevent the application of the attorney work product doctrine through rulemaking. The Federal Rules of Civil Procedure establish that a party to litigation may obtain discovery of document and tangible things otherwise discoverable and prepared in anticipation of litigation upon a showing of substantial need.[83]

The federal courts have consistently upheld the use of the attorney work product doctrine to withhold information that was otherwise arguably required to be produced. In *Martin v. Bally's Park Place Hotel & Casino*, the Third Circuit Court of Appeals held that a company responding to an OSHA directive to investigate emissions could assert the attorney work product doctrine to prevent the discovery of an investigative report that the company had prepared, including sampling data.[84] The court also found that there was no substantial need for the report information because OSHA had the right and the ability to conduct its own investigation and to collect its own sampling data.

In this proposed third-party audit requirement, EPA seeks to adopt a rule that prevents assertion of the attorney work product doctrine over not only an audit report and all of its drafts, but also all "related records." EPA simply has no authority to suspend these rights, as established by the Federal Rules of Civil Procedure and the pertinent case law. Congress has never ceded to EPA the authority to re-write the Federal Rules of Civil Procedure, nor has it granted to EPA the authority to substitute its administrative judgment on a matter that is reserved to a reviewing court. Moreover, EPA's proposed requirement that drafts and other communications and documents about the audit must also be disclosed and are not allowed protection under a legal

[81] *Upjohn v. U.S.,* 449 U.S. 383, 389 (1981).
[82] *In re Kellogg Brown & Root, Inc.,* 756 F.3d 754, 760 (D.C. Cir. 2014).
[83] Fed. R. Civ. Pro. 26(b)(3).
[84] 983 F.2d 1252 (3rd Cir. 1993).

privilege is effectively a deprivation of counsel because it chills the ability of the lawyer and client to have full and frank communications.[85]

8. Employee Participation

A. EPA Should Only Adopt One Aspect of the Proposed Revision

The Proposal would revise the employee participation requirements in 40 C.F.R. § 68.63 (for Program 2 processes) and § 68.83 (for Program 3 processes).[86] The proposed changes would require employers to engage in extensive consultations with employees, including in decision-making regarding recommendations from PHAs, compliance audits, and incident investigations. It would require employers to allow opportunity for employees to stop work under certain circumstances, and to report late or unreported accidents and other areas of RMP non-compliance to EPA and other relevant authorities. The Proposal would amend 40 C.F.R. § 68.83(d) to require that the written plan of action for Program 3 processes regarding the implementation of the employee participation requirement include authority for employees and their representatives to:

1) Refuse to perform a task when doing so could reasonably result in a catastrophic release;
2) Recommend to the operator in charge of a unit than an operation or process be partially or completely shut down, in accordance with procedures established in 40 C.F.R. § 68(69(a), based on the potential for a catastrophic release; and
3) Allow a qualified operator in charge of a unit to partially or completely shut down an operation or process, in accordance with procedures established in 40 C.F.R. § 68.68(a), based on the potential for a catastrophic release.

ACC supports EPA's proposed amendment to § 68.83(d)(2) allowing an employee to recommend to an operator in charge of a unit that the operation be partially or completely shut down based on the potential for a catastrophic release and in accordance with § 68.69(a). Section 68.69(a) requires owners or operators to develop and implement written operating procedures with "clear instructions" for safely conducting emergency shutdown, including what conditions require such shutdown and which qualified operator is assigned shutdown responsibility. ACC recognizes the importance of these operating procedures and the benefit of encouraging communication between employees and operators.

On the other hand, ACC opposes the other two options, either "stop work" or unilateral commencement of a shutdown. Both of these could have catastrophic consequences. A work stoppage could come at a critical point in the process, when action rather than cessation from action is necessary. A unilateral shutdown, without any consultation requirement, could sometimes be avoided by consultation with supervisors or others.

In the chemical industry, process safety incidents may occur during infrequent events – like an unplanned shutdown. The CSB has found that "[p]rocess unit startups and shutdowns are

[85] While not exactly on point, *U.S. v. Stein,* 541 F.3d 130 (2d Cir. 2008), is instructive and brings a cautionary note to what EPA is proposing to do in this rulemaking.
[86] Proposal at 53612, 53614.

significantly more hazardous than normal oil refinery or chemical facility operations. This is because the startup and shutdown periods involve many non-routine procedures, and these periods can result in unexpected and unusual situations."[87] Shutdowns may also take weeks for ACC members' facilities to come back online.

These concerns are likely to be quite different from those for much less complex processes. Consider the shutdown procedures for an ice cream facility that uses anhydrous ammonia. Such procedures are simpler with fewer people and chemicals, and less space. It logically follows that employee participation during a shutdown at these two sites should look very different. Uniform requirements from EPA across industries and processes, which would result in equal levels of opportunity for employee involvement during a shutdown at these respective facilities, ignores the practical realities for the diverse array of regulated facilities. One size does not in fact fit all.

Instead, EPA should recognize that prevention programs differ by both industry and process. It should take these differences into consideration – i.e., be more specifically tailored to the needs on the ground rather than less.

EPA should allow for continued flexibility and recognition of existing workflows and processes, not eliminate them entirely. Thus, ACC urges EPA to reconsider a blanket approach to broadening employee-involvement in facility decision-making. It should refrain from issuing generic and overreaching requirements that will only impair a facility's ability to be responsive to diverse conditions.

ACC reiterates that serious risks are inherent in abruptly shutting down complex processes. Certain rare situations may require a partial or complete shutdown of an operation or process, and such shutdowns might be best handled by a qualified operator in charge of the at-risk unit. However, the proposed amendment does not require that operators notify anyone of an impending shut down. ACC urges EPA to consider adding a requirement that operators communicate to management the decision to shut down an operation or process.

ACC companies already implement varying degrees of employee consultation to much success. ACC is concerned that the imposition of EPA's unclear employee participation program may detract from existing progress and create an atmosphere of uncertainty and confusion for employers, employees and regulators alike.

The added requirement that a site document and respond to each employee recommendations within 30 days[88] is overly broad and could be construed to include everything from significant acute hazards requiring immediate unit shutdown, to leading indicators such as near misses, safety observations, and other behavioral-based safety identifications. Requiring a written response to every reported near miss or safety observation would create significant burden that would detract from management's response to the more significant acute hazards, as well as

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[87] U.S. Chemical Safety and Hazard Investigation Board, Safety Digest: CSD Investigations of Incidents during Startups and Shutdowns, https://www.csb.gov/assets/1/6/csb_digest_-_startup_shutdown.pdf (citing Scott W. Ostrowski, Kelly K. Keim, Tame Your Transient Operations: Use a special method to identify and address potential hazards, Chemical Processing (June 22, 2010), http://www.chemicalprocessing.com/articles/2010/123/.

[88] Proposed 40 C.F.R. § 68.93(d); Proposal at 53592.

delay action on the forward-looking hazards. Most ACC member companies have well-defined systems for employees to report hazards and to generate action plans to address identified hazards. EPA should clarify why requiring a written response to every hazard report accomplishes the goal of improving facility and community safety as compared to the systems that are already in place to identify hazards and track their resolution.

EPA's proposal includes numerous terms that would create confusion for implementers and unnecessary barriers for compliance. The very definition of "consultation" generates significant uncertainty regarding how and when communication with employees should take place. The Proposal is written so broadly here that one could assume that each employee must be involved in every aspect of PHA.

For example, the following are specific concerns with the proposed employee consultation requirement that an "owner or operator shall consult with employees and their representatives on addressing, correcting, resolving, documenting, and implementing recommendations and findings of process hazard analyses under § 68.67(e), compliance audits under § 68.79(d), and incident investigations under § 68.81(e)." [89]

- EPA must clarify which employees and representatives would need to be consulted. The Agency seemingly intends to propose a quota representing "affected" employees without further explanation.

- EPA has not defined what it means by "addressing" and/or "correcting" a recommendation. ACC raises several questions regarding these requirements. Must employees be consulted regarding all technical details of a recommendation? Are such requirements continual, obtained through multiple meetings during the decision-making process? If a team performing a compliance audit or a PHA decides to change a recommendation prior to publishing a final report, does such a correction require a second consultation with the employees?

- EPA must clarify what it means by "resolving" a recommendation. EPA should confirm whether this concerns the close out of the documentation associated with a recommendation, the process technology aspects of conceptually developing a solution that meets the recommendation, or a combination of both. In any case, EPA should offer clarifying guidance regarding when in the development process such consultation would take place, and how employees or their representatives will most meaningfully be involved in the resolution of recommendations.

- EPA must clarify what it means by "documenting" a recommendation. Is this referring to the way the recommendation is written in the final referenced report? Are employees to be consulted in the way reports are written? Is this instead referring to the way documentation is developed in the process technology, process design and engineering design stages? Is it intended that employees must be consulted in all of the design package documentation? Alternatively, is this referring to the text used to explain the way the recommendation was addressed?

[89] Proposed 40 C.F.R. § 68.83(c).

- EPA must clarify what it means by "implementing" a recommendation. As written, it would seem EPA intends to stimulate employee participation during the physical construction phase including, e.g., wiring, pipe-fitting, etc., that is associated with implementing a recommendation in the process. Is it intended that employees be consulted during the entire construction phase of implementing a recommendation or only prior to construction beginning? Does a work-permitting system meet the expectation of consultation during the implementation stage, or is there something else that is intended?

Considering the broad impacts and scope of these concerns, ACC encourages EPA to offer clarification on the many questions provided above and those surely to come or ultimately propose a rule that offers appropriate flexibility to owners, operators, and employees.

B. EPA Should Not Set Specific Employee Representation Criteria

ACC opposes any quota system for employee participation that would require a specific percentage of employees and their representatives to be involved in recommendation decision teams or other aspects of the process. The employee participation provision has been in place for many years and has generally worked well. There is no need to impose arbitrary employee representation requirements.

The preamble to the Proposal cites the Chemical Safety Board Safety Digest's publication on, The Importance of Worker Participation, which provides general recommendations that employees participate in trainings covering operating procedures and safety information.[90] To best comply with its own recommendation, EPA should align any training and notification requirements with OSHA's standards for worker safety in keeping with decades of established coordination between the two agencies. Additionally, the OSHA Notice mentions consideration of a stop work requirement, and ACC requests that EPA coordinate with OSHA accordingly. While the CSB report refers to its prior recommendation that a facility's safety committee have equal representation of employees and management, OSHA has proposed no such a requirement. EPA should again follow the proven successful model of aligning with OSHA and decline to do so, as well. Instead, EPA should look to other employee participation models to identify what will best answer their and their stakeholders' needs.

9. Proposed Modifications and Amplifications to Emergency Response Requirements: These Are Outside the Control of a Facility and Are More Appropriately Placed with Response Agencies

The Proposal would amend 40 C.F.R. Part 68, Subpart E by adding new requirements for notifying the community of RMP-reportable accidents. It would require non-responding RMP facilities to develop procedures for informing the public about accidental releases; require release notification data to be provided to local responders; and ensure that a community notification system is in place for notification of RMP-reportable accidents.[91]

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[90] CSB, Safety Digest: The Importance of Worker Participation, https://www.csb.gov/assets/1/6/worker_safety_digest.pdf.

[91] Proposal at 53614-15.

The Proposed Rule would improperly place responsibility on facilities for response requirements that are outside of their control. EPA recognizes that the many elements of the community emergency response plan cannot be mandatory requirements. The Proposed Rule adds these to § 68.90 as "should" provisions, meaning that they are goals rather than strictly enforceable provisions. The proposed provisions would include the type of information that is more readily available to emergency responders, who are also better suited to provide such information to the community. EPA requests that facility owners and operators put together a comprehensive evaluation of facilities within the emergency planning district, proximity to hospitals, and schedules for training of local emergency response and medical personnel. Such provisions do not belong in RMP regulations, which apply to owners and operators.

While EPA is proposing that owners and operators ensure that community emergency response plans include all the listed elements, many of these elements are outside the facility's control and are better placed with the responding agencies. As an example of the appropriate division of responsibility, 40 C.F.R. § 300.205(e) requires emergency planning districts to prepare and implement emergency response plans. While an owner or operator can work with the LEPC, it is the LEPC that adopts the community emergency response plan.

10. Emergency Response Exercises: ACC Supports a 10-Year Frequency

The Proposed Rule would require a 10-year frequency for field exercises unless local responders indicate that frequency is not feasible. The current RMP rule requires field exercises at "an appropriate frequency." 40 C.F.R. § 65.96(b)(1)(i). ACC agrees with EPA that a 10-year timeline for conducting field exercises is reasonable. This timeline would allow local responders to maintain capabilities and familiarity with processes for responding to accidental releases. It would also allow industry to obtain appropriate staff, experts, and funds.

11. Information Availability

The Proposed Rule would amend 40 C.F.R. § 68.210 by adding new paragraphs (d), (e), and (f). These provisions would allow members of the public to request specific chemical hazard information if they reside within 6 miles of a facility.[92] While EPA has established this 6-mile zone in an effort to address both information availability and security concerns, the Proposed Rule does not strike the proper balance.

A. The Proposed Changes Fail to Address Security Concerns and Would Be Contrary to Law

ACC submitted extensive comments on the 2016 amendments rule to express its concern that EPA's proposed public disclosure requirements would be contrary to other federal statutes, such as the Critical Infrastructure Information Act of 2002, that seek to protect this type of sensitive information from public disclosure.

[92] *Id.* at 53616.

ACC has recognized neighboring communities' need to know what to do in case of a chemical-related emergency. ACC members already provide a variety of information to government regulatory agencies, law enforcement, and local emergency planners. However, ACC is very concerned that EPA's proposed availability of this information to the public within a 6-mile radius from any RMP site would fail to build upon these programs in any safe and meaningful way. Instead, EPA is creating opportunities for someone or a foreign entity landowner to either learn about and misuse information about chemicals and their hazards or disrupt responses to emergencies. EPA should consider a careful balance between security and public safety needs to protect communities from accidental – as well as intentional – incidents.

Security issues posed by the broad public disclosure contemplated by EPA are complex and may result in exploitation of site vulnerability and amplification of the likelihood of a terrorist attack as a function of threat and consequence. There are multiple agencies with jurisdiction over chemical security issues with long-noted interest in how they are addressed, including DHS, DOJ, FBI, the U.S. Coast Guard, and state governments. ACC believes it is imperative for EPA to engage in a broad dialogue with each of these agencies before finalizing any regulations that would further disseminate critical infrastructure information potentially about facilities storing regulated substances.

For example, in proposed § 68.175(e)(7)-(9), EPA would require public disclosure in risk management plans of declined natural hazard, power loss, and siting evaluation recommendations, and declined recommendations to close gaps in RAGAGEP. Such information is closely analogous to the topics addressed in the Security Vulnerability Assessments (SVAs) required by the Department of Homeland Security under its Chemical Facility Anti-Terrorism Standards (CFATS). In 6 C.F.R. § 27.215(a), DHS may require a chemical facility to prepare and SVA that includes information such as:

> (3) Security Vulnerability Analysis, which includes the identification of potential security vulnerabilities and the identification of existing countermeasures and their level of effectiveness in both reducing identified vulnerabilities and in meeting the applicable risk-based performance standards;
> (4) Risk Assessment, including a determination of the relative degree of risk to the facility in terms of the expected effect on each critical asset and the likelihood of a success of an attack; and
> (5) Countermeasures Analysis, including strategies that reduce the probability of a successful attack or reduce the probable degree of success, strategies that enhance the degree of risk reduction, the reliability and maintainability of the options, the capabilities and effectiveness of mitigation options, and the feasibility of the options.

While a covered facility must prepare and submit an SVA to DHS, DHS regards such SVAs as protected critical infrastructure information that is protected by regulations in 6 C.F.R. Part 29 from public disclosure. EPA may similarly ask facilities to submit such information for its review as part of an risk management plan, but EPA should certainly not include such information in the publicly available portions of risk management plans.

ACC is concerned that EPA does not adequately weigh the security concerns of facilities and communities in its decision making, focusing instead on empowering local communities.

Security is a critical element of release prevention programs and a leading priority of ACC members. ACC created a security program called the Responsible Care® Security Code of Management Practices[93] that is mandatory for all ACC regular members and Responsible Care Partner companies. The ACC Security Code is recognized by local, state, and federal governments as a model security program, for chemical facilities and other U.S. industries, and recent enhancements to the Code serve to increase emphasis on addressing potential threats. ACC members have invested heavily under the Security Code to enhance further site, transportation, and cyber security at their facilities.

Ultimately, EPA's proposed approach threatens to remove safeguards on highly sensitive chemical and facility security information. EPA should rely on the many existing programs including CFATS and EPCRA to address these issues, as they are designed to curate emergency information for safe public consumption. Rather than build upon two decades of successful programs, ACC is concerned that EPA has instead threatened to undermine the safeguards these programs have put in place.

EPA should not choose to impose the arbitrary 6-mile threshold for information availability and instead should meaningfully build upon existing programs and safeguards to protect sensitive chemical information.

B. EPA Should Minimize Duplicative Efforts with EPCRA

ACC supports reasonable efforts that would help RMP facilities, the public, and emergency responders streamline communications regarding emergency preparation and response. However, the information shared must be limited to that which is relevant to the public's ability to protect themselves in such emergencies. ACC recognizes that certain information in EPA's Proposal could benefit public safety in the event of rare chemical emergencies:

1) A written acknowledgement that the RMP site handles a substance that may present a hazard to the public in the event in the event of an accident.
2) Emergency response information, limited to:
    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; and
    c. procedures for informing the public and local emergency response agencies about accidental releases;
3) A list of scheduled exercises; and
4) LEPC contact information.

EPA should keep requirements clear, concise, and curated for public consumption. Facilities already report and share a significant amount of information with LEPCs under EPCRA such

[93] The ACC Responsible Care® Security Code of Management Practices, available at https://www.americanchemistry.com/chemistry-in-america/responsible-care-driving-safety-industry-performance/resources/responsible-care-security-code.

that those bodies should understand and be ready if there were an accidental release resulting in offsite impacts. EPA should seek to build upon, not disregard, requirements and considerations under EPCRA.

C. EPA Should Not Require Public Disclosure of Hazard-Related Information

ACC strongly urges EPA to avoid dissemination of chemical hazard information, regardless of any 6-mile threshold. ACC believes that broad availability of this information increases security risk with little value offered to the public. To balance security concerns with public safety, ACC does not recommend public availability of:

1. Names of regulated substances held in a process;
2. Safety data sheets (SDSs); and
3. Accident history information under any circumstances.

The names and specific hazard characteristics of RMP-regulated chemical processes may be too security-sensitive to be shared broadly with the public. Over 300 RMP-regulated chemical substances are included in CFATS Appendix A (List of Chemicals of Concern) for posing a terrorism-related risk of theft/diversion, release, or sabotage. In the wrong hands, these same chemicals can be used for terrorism or great harm. ACC is particularly concerned that many of the most common RMP-regulated substances, e.g., chlorine, anhydrous ammonia, propane, and butane, can be found on both lists in bulk quantities. To avoid "creating a roadmap for terrorists," EPA should omit any site-specific information.
Furthermore, hazard information contained on a chemical SDS is too workplace-specific to benefit public safety, but it would affect security risk. SDSs contain data that is mostly pertinent to trained workers and emergency responder preparedness. While there may be some findings that might be of interest to an LEPC, ACC believes it is inadvisable to release this information into the public arena as it could highlight chemical properties that could be exploited in the wrong hands. While this information is already reported to LEPCs under EPCRA, it is provided in a different format, and it not packaged in a manner that would allow indiscriminate easy access to sensitive information.

D. EPA Should Instead Encourage Local Citizens to Engage with the LEPC

ACC supports providing relevant chemical hazard information to the LEPC, which can then share it with the local community, if this information is relevant to emergency preparedness. The LEPCs are in the best position to obtain, assimilate, and communicate the information in a user-friendly format. Additionally, by centralizing this communication through the LEPC, citizens can establish an ongoing relationship with the responding agency and regularly attend LEPC meetings. They can hear from emergency officials about the nature of chemical risks and how to protect themselves.

Some of this information may be security sensitive. When it is relevant to emergency preparedness but security-sensitive, ACC supports information sharing with the LEPC – but such information should not be disseminated to the public. Accident histories can contain security sensitive information that is inadvisable to release widely into the public arena as it can highlight facility vulnerabilities that can be exploited by terrorists and other adverse individuals and

groups. Providing emergency response related information to the LEPC and relying on the LEPC to maintain security sensitive information strikes the proper balance between informing the response agency while protecting such information from widespread public disclosure.

E. The Proposed 6-Mile Radius for Information Sharing Is Arbitrary and Inappropriate

EPA's Proposed Rule attempts to address recognized concerns about the widespread release of chemical hazard information by restricting release of such information to people who reside within a 6-mile radius. This in no way addresses or minimizes the concern that sensitive site security information should not be readily shared with the public. In the 2019 reconsideration rule, EPA clearly understood that whether or not information could already be publicly obtained, consolidating chemical hazard information in one place "may present a more comprehensive picture of the vulnerabilities of a facility than would be apparent otherwise, thus potentially increasing terrorist risk."[94] EPA reiterates but dismisses this concern in the Proposed Rule. Instead, EPA inaccurately believes that it would require substantial effort to coordinate the information, when, in fact, it would not.

EPA fails to consider the ease with which information can be readily shared. For example, EPA does not define the term "reside" such that only by actual members of the community can request information. Anyone may be able to obtain a post office box near multiple facilities in order to qualify as a resident or foreign entity landowner under the proposed provision. In addition, once shared with "residents," this information is in no way guaranteed to be limited to those within the 6-mile radius. Anyone with the information can make chemical hazard data publicly available online and share it broadly. This would create the widespread distribution that EPA agrees it is trying to avoid.

EPA should recognize that the 6-mile threshold does not actually provide any limit on widespread access to security-sensitive information. EPA offers literally no means to retain or prevent further publishing of facility information that is originally shared only as intended, i.e., within that proximity, nor can it. For this reason, ACC believes that no security sensitive information specifically related to chemical hazards or facility vulnerabilities is appropriate for publication in this matter, as it only increases security risk with little benefit to the public.

EPA presents no reasoned explanation as to how making security-sensitive information available within 6 miles builds upon existing regulatory programs, which are already designed by DHS and EPA to safeguard this information. If EPA wants to expand the public's ability to access chemical information, they should start by strengthening programs such as LEPCs, which currently have reporting mechanisms between sites and community that present an already established foundation to build on.

EPA justifies its proposed proximity threshold with no serious consideration of RMP site circumstances. As an initial matter, EPA has chosen the most significantly overbroad and unduly burdensome option, which encapsulates the most marginal communities not at any

[94] EPA, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, 84 Fed. Reg. 69834, 69887 (Dec. 19, 2019).

substantial risk of the accidental release. It would force facilities to expend time, labor, and resources to develop and maintain an information availability program that could have been used to support emergency planning and preparedness efforts.

F. Security Threats Are Likely From Dissemination of This Information

Broad availability of chemical hazard information creates considerable security threat opportunities. An actor who becomes knowledgeable of nearby chemicals and their hazardous properties might seek to disrupt, steal, damage, or manipulate assets in the facility. These threats are not limited to terrorism; adversaries range from opportunistic lone actors to competitor companies, to sophisticated nation states. While the facility owner/operator has little power to change or influence the threat environment, the facility can actively minimize threat opportunities by safeguarding information related to their critical assets. Thus, ACC is rightfully concerned that this information would override security programs and federal statutes that seek to protect this type of sensitive information from public.

Furthermore, broad availability of chemical hazard information and facility accident history increases the attractiveness of attack on those chemical processes. As a crime of opportunity, adversaries will often target an extremely hazardous substance with any demonstrated weakness, performance deficit, or perceived absence of security measures. In response to this information becoming public, would a facility owner or operator would need to implement significant new security measures to minimize the likelihood and impact of security events and address new vulnerabilities, both in a way that is commensurate with the risk of the process? However, because this security risk can never be reduced to zero, an adversary seeking to exploit a specific chemical or chemical process could ultimately find a way to do so.

12. Other Areas of Technical Clarification

A. RAGAGEP

In proposed 40 C.F.R. § 68.65(d)(2), EPA would amend the Process 3 process safety information provision to state that the owner or operator must determine and document that the process "is designed and maintained in compliance with" (rather than the current "complies with") recognized and generally accepted good engineering practices (RAGAGEP). Also, proposed § 68.67(c)(10) would be added to "clarify" that PHAs must include an analysis of the most recently promulgated RAGAGEP in order to identify "any gaps between practices related to the facility's design, maintenance, and operation and the most current version of RAGAGEP." Lastly, EPA proposes in a new § 68.175(e)(7) that owners or operators specify in their risk management plans why PHA recommendations associated with adopting practices from the most recent version of RAGAGEP are not implemented. EPA would also require justification for a decision not to adopt these practices and would limit that justification to three specific categories of rationale.

There is no necessity for these proposed changes. Certainly, the RAGAGEP used for the design of an RMP facility will change over time. The RMP rule already requires evaluation of whether current equipment built using outdated codes is still safe. See 40 C.F.R. § 68.65(d)(3):

> For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

Nevertheless, ACC does not oppose a clarification to require consideration of the gap between as-built RAGAGEP and current RAGAGEP.

EPA should be aware, however, that it is generally both unnecessary and infeasible for owners and operators to keep their processes compliant with recent changes in updated RAGAGEP. The RAGAGEP itself often recognize this. Many consensus standards identify changes to updated standards with indications of whether or not the changes are "retroactive," but few changes are so marked. That is because updates to RAGAGEP are in the nature of continuous incremental improvements, rather than newly recognized step changes essential to process safety.

Moreover, EPA should recognize that some RAGAGEP contain "should" provisions. OSHA has recognized that non-compliance with "should" provisions does not create a presumption of non-compliance, and that non-compliance with "shall" provisions is not necessarily a violation of a regulatory RAGAGEP requirement.[95]

OSHA has also acknowledged that published RAGAGEP is often appropriately restated in internal procedures of the owner or operator,[96] meaning that details of the published RAGAGEP may not appear in the internal procedures. Such restatements are necessary to adapt published RAGAGEP to the specific circumstances and technology of a particular stationary source, and to eliminate inapplicable or overly-technical provisions in published RAGAEP to make the internal procedures useful to site personnel. Such departures from published RAGAGEP are essential to ensure safety.

With respect to the requirements to use the PHA to identify which RAGAGEP practices are not implemented and why, this is not necessary and should not be included in the final rule. As discussed more fully in Section 4 above, EPA should not require facilities to provide declined hazard evaluation recommendations. This includes decisions to decline to rely on certain RAGAGEP practices. Overall, it is an unnecessary intrusion into internal practices at a facility and does not improve good decision-making or that facility's safety. Since EPA should not require disclosure of decisions not to implement PHA recommendations, including RAGAGEP decisions, there is no need to provide specific categories for reporting that information publicly.

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[95] OSHA, Memorandum for Regional Administrators, RAGAGEP in Process Safety Management Enforcement (May 11, 2016), https://www.osha.gov/laws-regs/standardinterpretations/2016-05-11.

[96] *Id*. See also the preamble to the final PSM rule, OSHA, Process Safety Management of Highly Hazardous Chemicals; Explosives and Blasting Agents, 57 Fed. Reg. 6356, 6390 (Feb. 24, 1991) ("The phrase suggested by rulemaking participants: 'recognized and generally accepted good engineering practices' is consistent with OSHA's intent. The Agency also believes that this recommended phrase would include appropriate internal standards of a facility, as well as codes and standards published by NFPA, ASTM, ANSI, NFPA, etc.") (emphasis added).

B. Storage Incident to Transportation

The Proposal would modify the definition of "stationary source" in 40 C.F.R. § 68.3 to define what does not constitute "storage incident to transportation." ACC is concerned that EPA's proposed definition would conflict with Department of Transportation (DOT) requirements and could create an inconsistent national understanding of the meaning of the statutory term "transportation."

As noted in the preamble (p. 53564), CAA § 112(r)(7) directs EPA to adopt its RMP regulations in reliance on DOT expertise and in consultation with DOT:

> The Administrator shall utilize the expertise of the Secretaries of Transportation and Labor in promulgating such regulations.[97]
>
> In carrying out the authority of this paragraph, the Administrator shall consult with the Secretary of Labor and the Secretary of Transportation and shall coordinate any requirements under this paragraph with any requirements established for comparable purposes by the Occupational Safety and Health Administration or the Department of Transportation.[98]

These statutory provisions appear to be targeted at distinguishing storage incident to transportation, which is subject to DOT jurisdiction, and activities once transportation has ceased, which EPA may regulate. The definition of "stationary source" in the RMP regulations,[99] appropriately excludes from that definition "storage incident to transportation," as that (or a similar term) that DOT defines under its statutes and regulations:

> The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this part. A stationary source includes transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source for loading or unloading. Transportation includes, but is not limited to, transportation subject to oversight or regulation under 49 CFR parts 192, 193, or 195, or a state natural gas or hazardous liquid program for which the state has in effect a certification to DOT under 49 U.S.C. section 60105.

Under 49 U.S.C. § 5102, "'transportation' means the movement of property and loading, unloading, or **storage incidental to the movement**" (emphasis added). That definition is part of the Hazardous Materials Transportation Act (HMTA), which Congress adopted specifically to create a "uniform national scheme of regulation regarding the transportation of hazardous materials."[100] An RMP definition that is inconsistent with DOT's understanding of the term "transportation" would disrupt that "uniform national scheme."

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[97] CAA § 112(r)(7)(B)(i).
[98] CAA § 112(r)(7)(D).
[99] 40 C.F.R. § 68.3.
[100] *Roth v. Norfalco LLC*, 661 F.3d 367, 370 (3rd Cir. 2011) ("Congress responded by enacting the HMTA in 1975. Its overriding purpose was to develop "a uniform, national scheme of regulation regarding the transportation of

DOT defines "storage incidental to movement" under the HMTA in 49 C.F.R. § 171.1(c)(4), and it identifies what is not "storage incidental to movement" in § 171.1(d). DOT has also provided numerous administrative interpretations of the term "storage incidental to movement." EPA's proposed 48-hour constraint would be based on 49 C.F.R. § 174.14(a), a safety regulation adopted by DOT, rather than a jurisdictional determination. Moreover, the DOT rule provides greater flexibility than a 48-hour rule, in that it excludes weekends and holidays.

The preamble and the public docket provide no indication that EPA has conferred with DOT on the proposed RMP text. EPA should do so if it has done so not already. EPA should also place DOT's views into the docket and make any appropriate revisions to the proposed additions to the definition in light of DOT's views.

C. Retention of Hot Work Permits

ACC does not have comments on this proposed change.

13. Regulatory Impact Analysis

A. The Assumptions and Information Used in the Analysis Are Deficient

ACC evaluated EPA's Regulatory Impact Analysis (RIA) against long-established federal criteria for regulatory analysis.[101] This review revealed two significant and interrelated problems with the proposed rule:

- EPA failed to differentiate benefits across the new requirements.
- EPA failed to construct appropriate regulatory alternatives.

To remedy these errors of omission, ACC suggests a new regulatory alternative that comports with best practices. This new alternative offers higher net benefits than EPA's three regulatory alternatives. Given the criterion of maximizing net benefits – the criterion of choice according to Executive Order 12866 and OMB Circular A-4 – ACC recommends that EPA revise its flawed economic analysis to include this new alternative.

The remainder of this section describes ACC's evaluation and construction of a new regulatory alternative.

When a rule includes a number of distinct provisions, regulatory agencies are to analyze the benefits and costs of each separately. The cost-effectiveness of each provision should be

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hazardous materials." *CSX Transp., Inc. v. Williams,* 406 F.3d 667, 674 (D.C. Cir. 2005) (Henderson, J., concurring) (internal quotation marks omitted); *Chlorine Inst., Inc. v. Cal. Highway. Patrol*, 29 F.3d 495, 496 (9th Cir.1994); *Colo. Pub. Utils. Comm'n v. Harmon*, 951 F.2d 1571, 1574 (10th Cir. 1991); *Jersey Cent. Power*, 772 F.2d at 1112-13; see also S. Rep. 93–-1192, at 1 (stating that passage of the HMTA was intended to "draw[ ] the Federal Government's now-fragmented regulatory and enforcement power over the movement of hazardous materials in commerce into one consolidated and coordinated effort under the direction of the Secretary of Transportation").

[101] These criteria appear in Exec. Order 12866 (1993) on regulatory review, Exec. Order 13563 (2011) on improving regulation and regulatory review, and OMB, Circular A-4 (Sept. 17, 2003), https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf.

estimated. When gathering information about each provision, Executive Order 12866 calls for agencies to use "the best reasonably obtainable scientific, technical, economic, and other information."

These recommendations speak directly to the proposed rule, which includes, according to the Agency, seven distinct provisions: safer technologies and alternatives analysis (STAA), root cause analysis, third-party compliance audits, employee participation, backup power for perimeter monitors, community notification of RMP accidents, and information availability.

The RIA describes, in qualitative terms, the benefits of these provisions. Among the claimed benefits are prevention and mitigation of accidents. No quantification is provided, apparently because "EPA has no data or empirical estimates of the precise impact of each rule provision on the probability and magnitude of an accident, or on improved efficiency due to better information."[102]

Of particular relevance is the literature review conducted by EPA to discern the evidence and strength of evidence for some of the new provisions. ACC finds particularly compelling the evidence in favor of root cause analysis to eliminate or reduce the risk of reoccurrence of an incident and similar incidents

ACC is concerned that EPA did not review and summarize literature on STAA in its proposal, since the concept has been known for decades and the academic literature is not insignificant. There is a dearth of studies on its practical effectiveness, but consensus on its theoretical value: as a tool to inform future investment decisions. Once a facility has committed to a particular production technology, STAA is not particularly useful nor informative.

ACC finds the EPA's literature review on information measures lacks relevance. The successful programs noted in the literature (e.g., TRI) are not similar to the RMP program. EPA is making an apples-to-oranges comparison. Informational measures do not have a direct impact on RMP facility performance. Because the impact is, at best, indirect, caution is required. Indeed, OMB Circular A-4 urges caution in benefits-transfer – when the known benefits of an established regulatory program are employed to estimate the unknown benefits of a new regulatory program. Not all informational measures are equal.

EPA's qualitative description of benefits is inadequate. An uninformed reader of the RIA could reasonably conclude that each of the seven provisions contributes equally to improved safety performance at RMP facilities. The evidence, however, suggests otherwise. Therefore, ACC concludes that EPA did not disclose (and presumably did not rely upon) the "best reasonably obtainable scientific, technical, economic, and other information," as required by Executive Order 12866.

[102] EPA, Regulatory Impact Analysis, Safer Communities by Chemical Accident Prevention, Proposed Rule (April 19, 2022) § 6.1.5.

B. EPA Failed to Construct Appropriate Regulatory Alternatives

A careful and deliberative approach to understanding the potential benefits of the new provisions is important because it is critical to identification and analysis of regulatory alternatives. Failure to discern differences in the benefits of the new provisions will lead to mistakes in identifying and evaluating regulatory alternatives. This is the case for the RIA.

In situations where EPA has proposed numerous distinct provisions that are separable and that are not expected to act synergistically, an agency should estimate and report the incremental net benefits of each in quantitative and monetary terms.[103] When quantification is not possible, evaluating the merits of each provision is challenging, but the goal remains the same: to evaluate each on its own merits.

The RIA did not do this. Instead, it bundled the distinct provisions in a manner that does not allow evaluation of each on its merits.[104] In fact, the three regulatory alternatives (higher cost, middle cost, and lower cost) seem designed to ensure that certain provisions (those with weaker evidence of effectiveness, including STAA) are part of every alternative, thus guaranteeing their adoption.

ACC's recommended approach to identifying regulatory alternatives starts with a focus on those provisions that are most likely to improve the safety performance of RMP facilities (as previously discussed): root cause analysis and third-party audits. Application would be to those Category 2 or 3 facilities that have had a single reported accident involving either a fatality or off-site consequences. To quantify and monetize the costs, ACC used EPA's own estimates, employing a 7% discount rate.

Table 2 compares the cost of this new regulatory alternative with those of in the RIA using EPA's numbers. This new alternative is less costly because it excludes provisions that do not have a strong evidentiary basis in improving safety (e.g., STAA), and it includes only those facilities that pose the greatest risk (i.e., emphasizing performance as a trigger for new requirements).

Table 2. Annualized Cost (millions of 2020 $) of Regulatory Alternatives.

Provision	Regulatory Alternative			
	EPA Low	EPA Preferred	EPA High	ACC
STAA	51.8	51.8	51.8	0
Root cause analysis and third-party audits	6.3	11.0	137.6	0.2

[103] OMB, Circular A-4: "You should analyze the benefits and costs of different regulatory provisions separately when a rule includes a number of distinct provisions."
[104] EPA, Regulatory Impact Analysis, Safer Communities by Chemical Accident Prevention, Proposed Rule (April 19, 2022) at 69.

Employee participation	0.4	0.8	0.8	0
Back-up power	0.1	0.1	0.1	0
Community notification	3.8	3.8	3.8	0
Information availability	3.0	3.0	3.0	0
TOTAL*	**71.5**	**76.7**	**231.9**	**0.3**

*Numbers in each row may not sum to the totals due to rounding and exclusion of certain costs (e.g., rule familiarization).

Given a lack of quantification of benefits, how can the Agency maximize net benefits? The answer is to start by identifying those requirements that are more likely to be beneficial than others (based on the best available information) and then to apply these requirements to only facilities reporting the most incidents. The resulting alternative offers the largest portion of potential benefits at the least cost. Given the decisional criterion to maximize net benefits,[105] we recommend the Agency revise its economic analysis to include this new regulatory alternative.

14. Regulatory Flexibility Analysis

ACC has no comments on this topic.

15. Other – The Proposed Rule Fails to Adhere to the Paperwork Reduction Act

Congress has given OMB responsibility for management of the Paperwork Reduction Act (PRA) across all federal agencies.[106] Central to its responsibility is approval of agency information collection requests (ICRs) based on standards of practical utility and burden.[107] When federal agencies adhere to PRA standards, net benefits to the public are maximized and agency rulemakings involving information collections are more robust to judicial challenge.

When an agency proposes a significant increase in paperwork burden associated with a proposed regulation, it must adhere to PRA standards. For example, EPA's proposed RMP rule must

[105] Exec. Order No. 12866 (1993): "Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach."
[106] The Paperwork Reduction Act of 1980 (Pub. L. No. 96-511, 94 Stat. 2812, codified at 44 U.S.C. §§ 3501–3521) (Dec. 11, 1980). The PRA established the Office of Information and Regulatory Affairs within OMB.
[107] An information collection is a requirement for facts or opinions by or for a federal agency. Practical utility refers to an agency's ability to use this information, and burden refers to the resources required to generate, maintain, or provide the information to an agency.

"maximize practical utility and public benefit."[108] The PRA regulations[109] clarify that practical utility "means actual, not merely the theoretical or potential, usefulness of information."

In its ICR associated with the proposed rulemaking, EPA estimates the incremental annual increase in burden for 11,740 covered facilities at nearly 800,000 hours and imposing an annualized cost of $79 million. We find two serious deficiencies:

- The Agency provides no proof that the proposed requirements (separately or in aggregate) will "maximize practical utility and public benefit."
- The Agency offers no explanation that the proposed requirements "minimize burden".

Given a lack of evidence of practical utility for most of the proposed requirements, EPA would be wise to offer a regulatory alternative that confines itself to just those requirements shown to have practical utility. It should apply those requirements only to those facilities where safety is likely to benefit from the generated information. Curiously, EPA fails to do this; it limits its regulatory alternatives to just three bundles of some or all of the seven substantive requirements, each of which is independent of the others. For example, STAA is included in each of the three regulatory alternatives, even though STAA has theoretical or potential, and not actual usefulness (which is required under the PRA regulations) and is the most burdensome of the proposed requirements.

EPA does not explain why its proposed rule minimizes burden, and it cannot. For example, EPA does not offer an alternative that applies just to facilities with the most reported incidents – a clear sign it has not tried to minimize burden. There is little to no practical utility to imposing any new information burden on facilities absent a reportable accident. Indeed, the vast majority of RMP facilities have an exemplary safety record. Only a very small subset have reported an accident involving a fatality or external impact.

Because the proposed rule fails to meet the core standards of the PRA, EPA should revise it, lest OMB disapprove it. EPA could meet PRA standards by limiting the requirements to just those that are likely to reduce accidents at RMP facilities and to just those facilities that are likely to benefit from these new requirements. For more information, see section 13 of these comments on the Regulatory Flexibility Analysis.

[108] According to § 3501 of Pub. L. No. 104-13 (May 22, 1995), the purpose of the PRA is to "ensure the greatest possible benefit from and maximize the utility of information … collected."
[109] 5 C.F.R. Part 1320.