



AMERICAN COLLEGE OF
OCCUPATIONAL AND
ENVIRONMENTAL MEDICINE

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U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Docket No.: EPA-HQ-OLEM-2025-0313 - Public Comment on Proposed Changes to the Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Common Sense Approach to Chemical Accident Prevention

Dear Administrator,

On behalf of the American College of Occupational and Environmental Medicine (ACOEM), we appreciate the opportunity to provide input on proposed changes to the federal chemical accident prevention framework. ACOEM represents physicians and health professionals dedicated to the prevention of occupational and environmental injury and illness. We write to express strong concern that the proposed changes would weaken established approaches to chemical risk management, increase risk to workers and surrounding communities, and diverge from well-supported principles of public health, occupational medicine, and process safety science.

Chemical facilities handling highly hazardous substances represent a substantial and ongoing source of preventable risk in the United States. Approximately 12,000 to 13,000 such facilities operate nationwide, and an estimated 131 million individuals reside within close proximity to these sites, often within distances where acute exposures from accidental releases can occur.¹ A large body of epidemiologic and environmental health research demonstrates that populations living near industrial facilities experience increased risk of both acute and chronic health effects, including respiratory disease, neurological impacts, and psychological stress.^{2,3} Industrial chemical incidents continue to result in injuries, fatalities, and community disruptions, including evacuations affecting hundreds to tens of thousands of individuals in a single event, reflecting the well-documented public health burden of accidental releases.^{4,5} Modern chemical safety frameworks are grounded in the principle of primary prevention, which emphasizes eliminating or reducing hazards at their source rather than relying on downstream mitigation or emergency response. This principle is operationalized through the hierarchy of controls and inherently safer design strategies, both of which are foundational in occupational health and process safety science.⁶⁻⁹ Research consistently demonstrates that strategies such as

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substituting less hazardous chemicals, reducing hazardous inventories, and simplifying process conditions are among the most effective approaches to preventing catastrophic releases.¹⁰ The proposed policy changes represent a shift away from this prevention-based model toward a more reactive, compliance-driven framework. Of particular concern is the reduction in emphasis on systematic evaluation of safer technologies and alternatives. Limiting such evaluations to new or modified processes effectively excludes the existing population of high-risk facilities—those with the longest operational histories and often the greatest embedded hazards—from consideration of inherently safer design. This approach allows legacy risks to persist indefinitely and shifts the burden of safety from hazard elimination to hazard management, which is inherently less reliable and more susceptible to failure.^{8,9}

Similarly, the movement toward reactive oversight mechanisms, in which independent safety evaluation is triggered only after multiple incidents, is inconsistent with the established understanding of accident causation. Research on organizational safety and high-reliability systems demonstrates that major industrial accidents arise from the accumulation of latent conditions, including deferred maintenance, progressive acceptance of unsafe practices, and failure to effectively manage changes to systems or processes.^{11,12} Independent, proactive safety audits are essential for identifying latent hazards before they lead to catastrophic outcomes. Delaying such oversight until after repeated incidents represents a fundamental departure from prevention principles and increases the likelihood of avoidable harm.¹¹ The removal or reduction of requirements to evaluate environmental and natural hazards further compounds these risks. A growing body of scientific literature documents the increasing frequency and severity of extreme weather events and their impact on industrial systems, including chemical facilities.^{13,14} Events such as flooding, extreme heat, and power loss have been identified as triggers for chemical releases, often with significant consequences for surrounding communities. Failure to incorporate these risks into hazard analyses is inconsistent with current scientific understanding and undermines efforts to build resilient industrial systems.¹³

Equally concerning is the reduction in meaningful worker participation in safety processes. Workers are uniquely positioned to identify emerging hazards and are often the first to observe deviations from normal operating conditions. Evidence from occupational safety research shows that strong safety cultures—characterized by worker engagement, open communication, and empowerment to intervene—are associated with lower rates of injury and incident occurrence.¹⁵ The removal of mechanisms that support worker participation and the ability to halt unsafe operations weakens these protective factors and increases the risk that early warning signs of system failure will be overlooked.¹⁵

The proposed limitations on access to chemical hazard information also have important public health implications. Transparency and community awareness are essential components of effective risk communication and emergency preparedness. Research demonstrates that access to information about these hazards improves community readiness, supports coordinated emergency response, and contributes to risk reduction.^{16,17} Restricting access to such

information may impair the ability of communities, healthcare systems, and emergency responders to anticipate and respond effectively to chemical incidents.¹⁷


From an economic and risk-management perspective, the costs of chemical accidents extend far beyond regulatory compliance costs. Industrial incidents impose substantial direct and indirect costs, including emergency response, healthcare utilization, long-term disability, lost productivity, and community disruption.¹⁹ Analyses of major industrial accidents consistently demonstrate that the societal costs of these events often exceed the costs of preventive measures that could have mitigated or avoided them.^{20,21} In this context, facilities should carefully assess which compliance investments remain durable and which may be rescinded under a revised regulatory framework, and whether rolling back crisis management safeguards—such as stop-work authority and anonymous hazard reporting—could increase exposure to accidental release liability or negligence claims in the event of a future incident. A shift away from prevention does not eliminate risk; it redistributes that risk across workers, communities, and, ultimately, the systems that bear the consequences of failure.

Taken together, the proposed changes represent a fundamental shift in how chemical risk is defined and managed—from a proactive, prevention-oriented model to a reactive framework that relies on incident occurrence to trigger intervention. This shift is inconsistent with decades of scientific evidence in occupational health, safety engineering, and public health, all of which support the effectiveness of primary prevention, inherently safer design, proactive hazard identification, and worker engagement in reducing risk.^{7,11}

For these reasons, ACOEM strongly recommends maintaining and strengthening prevention-oriented approaches to chemical safety. Policies should continue to emphasize hazard elimination and substitution, proactive and independent safety evaluation, integration of environmental and climate risks into hazard analyses, meaningful worker participation, and transparency in communication of chemical hazards. These elements are essential components of an evidence-based framework for protecting worker and community health.

Chemical accidents are preventable events with well-characterized causes and consequences. The scientific evidence is clear that prevention-oriented strategies reduce risk more effectively than reactive approaches. ACOEM therefore urges the EPA to ensure that future policy decisions are aligned with established principles of occupational and environmental medicine and grounded in the best available scientific evidence.

Respectfully submitted,



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