

**U.S. Chemical Safety and
Hazard Investigation Board**

1750 Pennsylvania Avenue NW, Suite 910 | Washington, DC 20006
Phone: (202) 261-7600 | Fax: (202) 261-7650
www.csb.gov

Katherine A. Lemos
Chairman and CEO



July 30, 2021

U.S. Environmental Protection Agency
Office of Land and Emergency Management
1200 Pennsylvania Ave NW
Washington, DC 20004

Attention: Docket No. EPA-HQ-OLEM-2021-0312, EPA's Risk Management Plan Rule

The U.S. Chemical Safety and Hazard Investigation Board (CSB) appreciates the U.S. Environmental Protection Agency (EPA) holding "listening sessions" on the Risk Management Plan (RMP) Rule and for allowing the CSB the opportunity to speak and provide comments. The CSB has issued 25 recommendations to the EPA since 2001, of which nine remain open. Specific to the RMP Rule, the CSB has issued six recommendations to the EPA, three of which remain open.

Reactive Hazards

We first would like to express our appreciation to the EPA for successfully implementing two of these recommendations, both involving reactive hazards. One involved their modification of the accident reporting requirements in RMP to define and record reactive incidents as a part of the "release event". In another recommendation, they participated in a special hazard investigation of reactive chemical process safety conducted by the CSB.

One of the most critical recommendations to the EPA that remains open from the CSB's "Improving Reactive Hazards" case study involves expanding the RMP Rule to cover catastrophic reactive hazards that have the potential to seriously impact the public.

Inherently Safer Systems Analysis / Hierarchy of Controls

The other two open recommendations were for the EPA to consider mandating evaluations for inherent safety as an additional management system element. Although industry good practice guidance provides that inherently safer technology is the preferable and most effective safety precaution in the hierarchy of controls, it is not currently required by the EPA's RMP regulations. As a result of the CSB's Tesoro Refinery Fatal Explosion and Fire investigation, the CSB recommended that the EPA revise its RMP Rule to require the documented use of both inherently safer systems analysis and the hierarchy of controls to the greatest extent feasible when facilities are establishing safeguards for identified process hazards. The second CSB recommendation is to develop guidance for the required use of inherently safer systems analysis and the hierarchy of controls for enforcement under the RMP Rule and the General Duty Clause.

U.S. Chemical Safety and Hazard Investigation Board

The CSB has long advocated for the use of inherently safer systems analysis and hierarchy of controls, and a level of implementation to reduce risks to a goal of as low as reasonably practicable (ALARP), and once again urges the EPA to implement these recommendations.

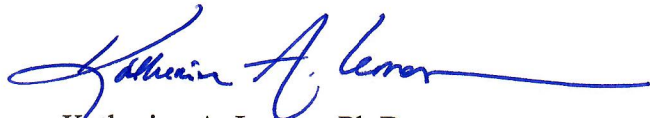
Extreme Weather

The CSB is concerned with facility preparedness in the face of extreme weather and the frequency of such, as these events provide limited advance warning and are challenging to predict in terms of intensity and specific locations. Rigorous advance planning is critical to react successfully to emergency states, and requires both equipment and process design, as well as training and routine practice.

The CSB will monitor chemical incidents across the United States for trends or causal links involving accidental facility releases resulting from extreme weather and identify any related gaps in the RMP regulations.

Thank you, once again, for the opportunity to provide input. If you have any questions or need further information on the recommendations process, please contact Mr. Charles B. Barbee, Director of Recommendations at: (202) 261-7621, or via e-mail: charles.barbee@csb.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Katherine A. Lemos", with a long horizontal flourish extending to the right.

Katherine A. Lemos, Ph.D.

cc: Stephen J. Klejst, Executive Director - Investigations & Recommendations, CSB
Charles B. Barbee, Director of Recommendations, CSB
Bruce V. Walker, Senior Advisor, CSB
David A. LaCerte, Managing Director (Acting) and Executive Counsel, CSB