



U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATION STATUS CHANGE

SUMMARY

Report:	Bio Lab Lake Charles Chemical Fire and Release
Recommendation Number:	2020-05-I-LA-R6
Date Issued:	April 24, 2023
Recipient:	Environmental Protection Agency (EPA)
New Status:	Open – Awaiting Response or Evaluation/Approval of Response
Date of Status Change:	Not Applicable – Initial Status

Recommendation Text:

Implement the five open recommendations issued in the 2022 U.S. Government Accountability Office Report titled Chemical Accident Prevention: EPA Should Ensure Regulated Facilities Consider Risks from Climate Change, which are:

- a. *The U.S. Environmental Protection Agency (EPA) should provide additional compliance assistance to Risk Management Plan (RMP) facilities related to risks from natural hazards and climate change;*
- b. *The EPA should design an information system to track common deficiencies found during inspections, including any related to natural hazards and climate change, and use this information to target compliance assistance;*
- c. *The EPA should issue regulations, guidance, or both, as appropriate, to clarify requirements and provide direction for RMP facilities on how to incorporate risks from natural hazards and climate change into their risk management programs;*
- d. *The EPA should develop a method for inspectors to assess the sufficiency of RMP facilities' incorporation of risks from natural hazards and climate change into risk management programs and provide related guidance and training to inspectors; and*
- e. *The EPA should incorporate the vulnerability of RMP facilities to natural hazards and climate change as criteria when selecting facilities for inspection.*

Board Status Change Decision:

A. Rationale for Recommendation

On August 27, 2020, extreme winds from Category 4 Hurricane Laura caused severe damage to multiple buildings and structures storing trichloroisocyanuric acid (TCCA) at the Bio-Lab, Inc. Lake Charles (Bio-Lab) facility in Westlake, Louisiana. Once the buildings at the Bio-Lab facility were damaged, rainwater made contact with the TCCA stored inside and initiated a chemical reaction and the subsequent decomposition of the TCCA. The resulting heat initiated a

fire, and the decomposition reaction released a large plume of hazardous gases, including toxic chlorine.

The plume was seen over a large portion of the nearby community. As a result, the Calcasieu Parish Office of Homeland Security and Emergency Preparedness issued a shelter-in-place order. Additionally, a portion of the nearby Interstate 10 was closed for over 28 hours. Fortunately, there were no injuries reported from this incident. The Bio-Lab facility resumed production operations in March of 2023 following an approximately \$250 million redesign and reconstruction effort.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including ineffective preparation for extreme weather, process hazard analysis implementation, and emergency planning, preparedness, and response, as well as the lack of adherence to applicable hazardous materials codes. As a result of these findings, the CSB issued one recommendation to the Environmental Protection Agency (EPA). This status change summary addresses **CSB Recommendation No. 2020-05-I-LA-R6**.