



## U. S. Chemical Safety and Hazard Investigation Board RECOMMENDATION STATUS CHANGE SUMMARY

|                               |   |
|-------------------------------|---|
| <b>Report:</b>                | Bio Lab Lake Charles Chemical Fire and Release              |
| <b>Recommendation Number:</b> | 2020-05-I-LA-R2   |
| <b>Date Issued:</b>           | April 24, 2023  |
| <b>Recipient:</b>             | Bio-Lab Lake Charles  |
| <b>New Status:</b>            | Open – Awaiting Response or Evaluation/Approval of Response |
| <b>Date of Status Change:</b> | Not Applicable – Initial Status                             |

### Recommendation Text:

*Develop and implement an improved Process Hazard Analysis (PHA) action item management system. At a minimum the PHA action item management system should:*

- a. Ensure that each PHA action item or recommendation is assigned to an appropriate person with a deadline for initial evaluation;*
- b. Document and maintain the rationale if the action item or recommendation is modified or rejected; and*
- c. Track the status of all PHA action items or recommendations until they are resolved.*

*Additionally, periodic audits must be conducted on the PHA action item management system to ensure its effectiveness.*

### 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 four recommendations to Bio-Lab Lake Charles. This status change summary addresses **CSB Recommendation No. 2020-05-I-LA-R2.**