U.S. Chemical Safety and Hazard Investigation Board

OFFICE OF GENERAL COUNSEL

Memorandum

To: Board Members

From: Steven Messer
Acting General Counsel

Cc: Charles Barbee
Adam Henson
Leadership Team

Subject: Board Action Report – Notation Item 2025-69 | Recommendation to Kuraray America, Inc. (2018-03-I-TX-R12) from the Kuraray Pasadena Release and Fire investigation (2018-03-I-TX)

Date: July 28, 2025

On July 25, 2025, the Board approved Notation Item 2025-69, thereby designating Recommendation 2018-03-I-TX-R12 to Kuraray America, Inc. from the Kuraray Pasadena Release and Fire investigation (2018-03-I-TX) with the status of Closed – Acceptable Alternative Action.

Voting Summary – Notation Item 2025-69

Disposition: APPROVED

Disposition date: July 25, 2025

	Approve	Disapprove	Calendar	Not Participating	Date
S. Johnson	X				7/25/2025
S. Owens	X				7/25/2025
C. Sandoval	X				7/25/2025

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

Report:	Kuraray Pasadena Release and Fire
Recommendation Number:	2018-03-I-TX-R12
Date Issued:	December 21, 2022
Recipient:	Kuraray America, Inc.
New Status:	Closed – Acceptable Alternative Action
Date of Status Change:	July 25, 2025

Recommendation Text:

Acquire the services of an independent third party to perform a comprehensive assessment of its EVAL Plant's process safety management systems. In addition to meeting the requirements outlined in Appendix B of this report, this comprehensive assessment should evaluate whether existing policies meet minimum federal process safety regulatory requirements and apply the Center for Chemical Process safety model to verify both the suitability of these systems and their effective, consistent implementation.

Board Status Change Decision:

A. <u>Rationale for Recommendation</u>

On the morning of May 19, 2018, the pressure relief devices of a reactor used to make ethylene and vinyl alcohol copolymer (EVAL) activated and discharged ethylene into the air through horizontally oriented discharge piping. The resulting flammable vapor cloud found a heat source and ignited. The fire burned for approximately three minutes until enough ethylene was released to reduce the pressure inside the reactor to allow the pressure relief valve to close. Kuraray America, Inc. (Kuraray) reported releasing 2,347 pounds of ethylene. Several workers sustained injuries resulting from the fire as well as from trying to escape the fire. Twenty-one injured workers were transported to off-site medical facilities for treatment. Additionally, two workers were life-flighted from the Kuraray facility.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including failures in pressure-relief system discharge design, excluding non-essential personal during transient operations, and weakly implemented process safety management system elements. As a result of these findings, the CSB issued twelve recommendations to Kuraray. This status change summary addresses CSB Recommendation No. 2018-03-I-TX-R12.

B. <u>Response to the Recommendation</u>

Kuraray notified the CSB that they initiated audits following the incident to assess compliance with the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.119 and U.S. Environmental Protection Agency (EPA) 40 CFR 68 RMP regulations. Kuraray has stated and provided supporting documentation that the audits were conducted by competent and independent auditors who developed comprehensive audit reports containing recommendations that the company has now turned into action items. Upon review, Kuraray has met all requirements of the recommendation except that the 3rd party auditors they hired did not sign "conflict of interest" documents as described in Appendix B of the report. Despite this fact, Kuraray's actions have met the objectives envisioned by the Board in issuing this recommendation.

C. Board Analysis and Decision

Based upon the information above, the Board voted to change CSB Recommendation No. 2018-03-I-TX-R12 to: "Closed – Acceptable Alternative Action."