



U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATION STATUS CHANGE SUMMARY

Report:	TS USA Molten Salt Eruption
Recommendation Number:	2024-01-I-TN-R3
Date Issued:	May 30, 2025
Recipient:	TS USA
New Status:	Closed – Acceptable Action
Date of Status Change:	December 4, 2025

Recommendation Text:

For each TS USA facility, establish a position with specific professional expertise and experience in safety management systems, such as risk-based process safety. This position shall be responsible for TS USA's safety management system, ensuring that HEF Groupe's safety information is incorporated at the site level, and implementing regulatory and industry safety guidance.

Board Status Change Decision:

A. Rationale for Recommendation

On May 30, 2024, molten sodium hydroxide and sodium nitrate erupted from an oxidizing salt bath when a part being processed exploded at the TS USA facility in Chattanooga, Tennessee. Unbeknownst to plant personnel water was trapped in the hollow part which rapidly expanded upon contacting the molten material resulting in the explosion. One employee was fatally injured as a result of this incident. \$1.3 million in property damage was reported, and the facility was shut down for approximately eight months.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including those associated with the lack of an effective safety management system specially regarding hazard analysis, operating procedures, and training. Deficiencies in learning from past incidents and corporate engagement in safety were also identified. As a result of these findings, the CSB issued three recommendations to TS USA. This status change summary addresses CSB Recommendation No. 2024-01-I-TN-R3.

B. Response to the Recommendation

TS USA hired a regional health and safety officer responsible for the execution of their safety management system. TS USA has additionally appointed a representative with health and safety responsibilities for each of their facilities. Upon review of the documentation submitted by TS USA, the CSB concluded that the recommendation has been implemented.

C. Board Analysis and Decision

Based upon the information above, the Board voted to change CSB Recommendation No. 2024-01-I-TN-R3 to: "Closed – Acceptable Action."