



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

Report:	Improving Reactive Hazard Management
Recommendation Number:	2001-01-H-R10
Date Issued:	October 8, 2002
Recipient:	American Chemistry Council (ACC)
New Status:	Closed – Reconsidered/Superseded
Date of Status Change:	May 19, 2016

Recommendation Text:

Work with NIST in developing and implementing a publicly available database for reactive hazard test information. Promote submissions of data by your membership.

Board Status Change Decision:

A. Rationale for Recommendation

After a number of high-consequence incidents resulting from runaway chemical reactions, including the April 21, 1995, explosion and fire at the Napp Technologies specialty chemical plant in Lodi, New Jersey, which killed five workers, and the April 8, 1998, explosion and fire at the Morton International dye manufacturing plant in Paterson, New Jersey, which injured nine, the CSB undertook a comprehensive study of reactive chemical hazard management in the United States.

In total, the CSB identified 167 serious accidents in the United States between 1980 and 2001; 48 of these accidents resulted in 108 fatalities. In addition, more than half of these incidents involved chemicals not covered by existing Occupational Safety and Health Administration (OSHA) or Environmental Protection Agency (EPA) standards. While the bulk of incidents were in the chemical manufacturing industry, thirty percent occurred at industrial facilities that use or consume chemicals in bulk quantities.

The report concluded that, “There is no publicly available database for sharing lessons learned from reactive incidents...[or] to share reactive chemical test information.”¹ Therefore, the CSB issued a recommendation (2001-01-H-R5) to the National Institute of Standards and Technology (NIST) to develop a publicly available database for reactive hazard test information. The CSB also issued a recommendation (2001-01-H-R10) to the ACC to work with NIST in developing a database for reactive hazard test information. This status change summary only addresses the recommendation that the CSB made to the ACC.

¹ *Improving Reactive Hazard Management*, pp. 99-100

B. Response to the Recommendation

In April 2014, the ACC requested that the CSB reconsider the issuance of this recommendation due to “numerous unresolved questions regarding legal protections that would necessarily need to be overcome for any companies volunteering thermodynamic data for such a database” and because the accompanying Recommendation No. 2001-01-H-R5 to NIST was designated with the status, “Closed – Reconsidered,” in March 2008.

The ACC also noted that, since this recommendation was issued in 2001, other organizations, such as the National Oceanographic and Atmospheric Administration, the Center for Chemical Process Safety, and the Organisation for Economic Co-operation and Development, have developed publicly available reactive chemical resources, software and databases. These resources partially address the CSB recommendation.

C. Board Analysis and Decision

Since the related CSB recommendation to NIST has been designated with the status, “Closed - Reconsidered,” there is no process for developing a NIST reactive hazard database to which the ACC can contribute. In addition, the other resources described by ACC partially address the recommendation. Therefore, the Board voted to change the status of CSB Recommendation No. 2001-01-H-R10 to: **“Closed – Reconsidered/Superseded.”**