



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

Report:	Watson Grinding Fatal Explosion and Fire
Recommendation Number:	2020-03-I-TX-R1
Date Issued:	June 29, 2023
Recipient:	Compressed Gas Association
New Status:	Closed – Acceptable Action
Date of Status Change:	March 4, 2025

Recommendation Text:

Urge member companies that handle hazardous chemicals to share information with their customers about (1) the safety issues described in this report and (2) why their customers should develop and implement effective process safety management systems as part of their own internal safety programs, including informing member companies' customers about CGA P-86, Guidelines for Process Safety Management, the Center for Chemical Process Safety's Guidelines for Risk Based Process Safety, or an equivalent approach.

Board Status Change Decision:

A. Rationale for Recommendation

On January 24, 2020, a leak of propylene from a high velocity oxygen fuel (HVOF) thermal spray process resulted in an explosion at the Watson Grinding and Manufacturing Co. (Watson Grinding) facility in Houston, Texas. The leak was caused by a disconnected hose inside one of the facility's coating booths.

The explosion fatally injured two employees and a member of the public. Two additional employees were injured. The explosion damaged hundreds of nearby structures, including homes and several businesses. Watson Grinding filed for bankruptcy on February 6, 2020, and the company is no longer in business.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including a lack of effective process safety management practices and emergency preparedness at the facility. As a result of these findings, the CSB issued one recommendation to the Compressed Gas Association (CGA). This status change summary addresses CSB Recommendation No. 2020-03-I-TX-R1.

B. Response to the Recommendation

On February 23, 2024, the CGA published Safety Alert SA-42, *Importance of Effective Process Safety Management Programs* (Safety Alert).¹ The Safety Alert outlines the Watson Grinding

¹ The Safety Alert is available here: <https://portal.cganet.com/publication/SA-42/details> (accessed January 8, 2025).

incident as well as the resulting CSB findings and recommendations that all industrial gas end users consider establishing process safety management programs, regardless of the quantities of the gases stored. The Safety Alert also identifies sources of information for establishing process safety management programs, including the Center for Chemical Process Safety's (CCPS) *Guidelines for Risk Based Process Safety* and the Occupational Safety and Health Administration's (OSHA) Process Safety Management standard. The Safety Alert notes that an effective process safety management program is beneficial to organizations looking to adopt a holistic and systematic approach to assuring the safety and integrity of their operations. The CSB reviewed the Safety Alert and concluded that the CGA's actions satisfy the requirements of the recommendation.

C. Board Analysis and Decision

Based upon the information above, the Board voted to change CSB Recommendation No. 2020-03-I-TX-R1 to "Closed – Acceptable Action."