



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

Report:	Universal Form Clamp Co. Explosion and Fire
Recommendation Number:	2006-8-I-IL-R1 2006-8-I-IL-R2
Date Issued:	April 10, 2007
Recipient:	Occupational Safety & Health Administration (OSHA)
New Status:	R1: Closed – Reconsidered/Superseded R2: Closed – Reconsidered/Superseded
Date of Status Change:	July 5, 2017

Recommendation Text:

CSB Recommendation No. 2006-8-I-IL-R1:

Amend 1910.106 Flammable and Combustible Liquids to require facilities that handle flammable and combustible liquids to implement the requirements of 1910.38 Emergency Action Plans.

CSB Recommendation No. 2006-8-I-IL-R2:

Amend 1910.38 Emergency Action Plans to require employers to conduct practice evacuation drills at least annually, but more frequently if necessary to ensure employees are prepared for emergencies.

Board Status Change Decision:

A. Rationale for Recommendation

On June 14, 2006, workers were heating and mixing flammable solvents in an open top tank in the mixing room at the Universal Form Clamp Company (UFC) facility in Bellwood, IL. During the heating process, there was a sudden evolution of flammable vapors that ignited, resulting in an explosion and fire. One worker died and five others were injured.

As a part of its investigation, the United States Chemical Safety and Hazard Investigation Board (CSB) evaluated applicable OSHA regulatory requirements that applied to the UFC facility. The CSB made two recommendations to OSHA pertaining to its emergency action plan requirements. First, the CSB recommended that OSHA amend its Flammable and Combustible Liquids standard (e.g., 29 CFR 1910.106) to require facilities that handle these liquids to implement the requirements of its Emergency Action Plans standard. As it is currently written, the Flammable and Combustible Liquids standard covers technical issues pertaining to facility design, but does not contain a requirement for these facilities to have Emergency Action Plans.

Additionally, the CSB recommended that OSHA amend the Emergency Action Plans standard (e.g., 29 CFR 1910.38) to require employers to conduct practice evacuation drills at least annually, but more frequently if necessary to ensure employees are prepared for emergencies. The rationale for this requirement is language that appears in the 2003 edition of NFPA 30, The

Flammable and Combustible Liquids Code, which requires procedures for scheduling and conducting drills at least on an annual basis.

B. Response to the Recommendation

OSHA responded that because the UFC facility was subject to the requirements of the OSHA Process Safety Management standard, 29 CFR 1910.119 at the time of the incident, the facility was already required to have an emergency action plan (EAP) that meets the requirements of 29 CFR 1910.38 as specified by 29 CFR 1910.119(n); therefore, an additional requirement in 29 CFR 1910.106 would not have affected the outcome in this incident and would similarly have no effect on other comparable non-complying worksites that are subject to the EAP requirements of other applicable standards. OSHA therefore requested that this recommendation be closed.

In regard to R2, OSHA responded that the facts of this case study did not document a causal relationship between the incident and the lack of evacuation drills. In fact, the case study shows that all employees, except for the employee who was killed, evacuated the facility. OSHA points out that since this regulation applies to workplaces with a great variety of hazards and the full spectrum of size from the smallest business to the largest corporations, it provides a degree of flexibility requiring employers to decide whether, and how often, their training should include drills. In addition, OSHA stated that its web-based guidance material assists employers in determining when drills may be beneficial. Thus, the agency felt that its current standard was appropriate and requested that this recommendation also be closed.

C. Board Analysis and Decision

The Board concurred with OSHA's response to both R1 and R2 and voted to change the status of these recommendations to: "**Closed — Reconsidered/Superseded.**"

However, as OSHA has not modified its flammable and combustible liquids standard (29 CFR 1910.106) since it was adopted in the early 1970's in response to OSHA's December 2013 Request for Information on several standards, including Process Safety Management, CSB strongly encouraged OSHA in submitted written comments to update §1910.106 to conform to the latest version of NFPA 30, *The Flammable and Combustible Liquids Code*, which would require EAPs for facility's that handle flammable liquids as well as annual evacuation drills.