



U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATION STATUS CHANGE

SUMMARY

Report:	Evergreen Packaging Paper Mill – Fire During Hot Work
Recommendation Number:	2020-07-I-NC-R1
Date Issued:	September 24, 2021
Recipient:	Occupational Safety and Health Administration (OSHA)
New Status:	Closed – Acceptable Action
Date of Status Change:	February 2, 2024

Recommendation Text:

Issue a safety information product (such as a letter of interpretation) addressing the analysis and control of hazards that are not pre-existing but which result from work activities inside permit-required confined spaces.

Board Status Change Decision:

A. Rationale for Recommendation

On September 21, 2020, a paper mill operated by Evergreen Packaging (Evergreen) in Canton, North Carolina, was undergoing a planned shutdown, and associated maintenance and capital project work was ongoing throughout the facility. In one of Evergreen’s pulp bleaching units, two contract companies were performing simultaneous maintenance work inside two connected process vessels, called an “upflow tower” and a “downflow tower,” when a fire started inside the upflow tower after an electric heat gun, which was being used to warm resin, fell into a five-gallon bucket containing the flammable resin. The fire fatally injured two contractors.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found that the workers did not recognize or control the ignition hazard presented by the electric heat gun. The CSB concluded that an Occupational Safety and Health Administration (OSHA) publication is needed that includes actionable guidance on addressing hazards and implementing controls when using flammables in confined spaces. As a result of the investigation, the CSB issued two new recommendations to OSHA. This status change summary pertains to CSB Recommendation No. 2020-07-I-NC-R1.

B. Response to the Recommendation

OSHA published a fatal facts document titled “[Confined Space Fire](#)”¹ in the summer of 2023. This document provides a brief description of the Evergreen incident and its likely causes. The document also contains recommended actions for incident prevention cross referenced with the requirements of OSHA’s standard on Permit-Required Confined Spaces (29 CFR 1910.146). The incident prevention section recommends following the hierarchy of controls and advocates for

¹ Available at https://www.osha.gov/sites/default/files/publications/OSHA_FF-4278.pdf (Accessed December 14, 2023)

removal of the hazard or at least substitution. Identifying hazards that are created by the work being performed within the space are called out specifically in the incident prevention section.

C. Board Analysis and Decision

Based upon the information above, the Board voted to change the status of CSB Recommendation No. 2020-07-I-NC-R1 to: “Closed – Acceptable Action.”