

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

Report:	BP - Husky Oregon Chemical Release and Fire
Recommendation Number:	2022-01-I-OH-R6
Date Issued:	June 21, 2024
Recipient:	American Petroleum Institute (API)
New Status:	Open – Awaiting Response or Evaluation/Approval of
	Response
Date of Status Change:	Not Applicable – Initial Status

Recommendation Text:

Develop a publication that addresses preventing the overflow of pressure vessels such as towers and drums. The publication should be applicable to both new and existing pressure vessels. Include the following at a minimum:

- a) Description of typical overflow events that could result during normal, upset, or transient operations (startup, shutdown, standby) including the formation of a vapor cloud,
- *b) Recommended practices for instrumentation to monitor and detect a pressure vessel overflow,*
- c) Process hazard analysis guidance for pressure vessel overflow scenarios,
- *d) Recommended practices for safeguards to prevent a pressure vessel overflow,*
- *e)* Recommended field and board operator process safety training topics and methods to prevent a pressure vessel overflow,
- *f) Guidelines for process safety assessments to prevent a pressure vessel overflow, and*
- g) Incorporate lessons learned from this CSB investigation and the CSB's BP Texas City Refinery investigation throughout the document.

Board Status Change Decision:

A. Rationale for Recommendation

On September 20, 2022, a vapor cloud ignited at the BP-Husky Refining LLC ("BP Husky") refinery in Oregon, Ohio. The vapor cloud formed when flammable liquid naphtha was intentionally released from a pressurized vessel to the ground in response to an abnormal situation. Two employees were fatally injured. BP Husky estimated that over 23, 000 pounds of naphtha was released during the event, and that \$597 million in damage was incurred.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including inadequate safeguarding to prevent liquid overflow, ineffective abnormal situation management, and failure to learn from previous incidents. As a result of these findings, the CSB issued two recommendations to the American Petroleum Institute (API). This status change summary addresses **CSB Recommendation No. 2022-01-I-OH-R6**.