



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-R1
Date Issued:	June 24, 2024
Recipient:	Ohio Refining Company
New Status:	Open – Acceptable Response or Alternate Response
Date of Status Change:	December 19, 2024

Recommendation Text:

Revise the safeguards used in the refinery’s process hazard analyses high level and overflow scenarios. At a minimum, establish effective preventive safeguards that use engineered controls to prevent liquid overflow and do not rely solely on human intervention.

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 four recommendations to the Ohio Refining Company LLC. This status change summary addresses CSB Recommendation No. 2022-01-I-OH-R1.

B. Response to the Recommendation

The Ohio Refining Company (ORC) notified the CSB that they have revised the safeguards used in the refinery’s Crude 1 Unit and Coker Gas Plant process hazard analyses high level and overflow scenarios. ORC has also established engineered preventative safeguards which do not rely solely on human intervention in these units. Finally, ORC has committed to aligning its operating practices with future industry guidance related to prevention of overflow scenarios when such guidance becomes available.

C. Board Analysis and Decision

The recommendation is intended to address all refinery vessels. ORC’s actions in addressing high level and overflow scenarios applicable to the vessels most closely associated with the

incident are commendable. The remainder of the refinery's vessels will need to be addressed before this recommendation can be closed, however. In recognition of the actions taken by ORC and their commitment to further action, the Board voted to change the status of CSB Recommendation No. 2022-01-I-OH-R1 to: "Open – Acceptable Response or Alternate Response."