



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

<b>Report:</b>	BP - Husky Oregon Chemical Release and Fire
<b>Recommendation Number:</b>	2022-01-I-OH-R2
<b>Date Issued:</b>	June 21, 2024
<b>Recipient:</b>	Ohio Refining Company LLC
<b>New Status:</b>	Open – Awaiting Response or Evaluation/Approval of Response
<b>Date of Status Change:</b>	Not Applicable – Initial Status

### Recommendation Text:

*Revise the Abnormal Situation Management policy to incorporate guidance provided by the ASM Consortium and the Center for Chemical Process Safety (CCPS). The revised policy should include, at a minimum:*

- a) A broader definition of abnormal situations, such as that defined by the CCPS,*
- b) Additional predictable abnormal situations and their associated corrective procedures. At a minimum include the following abnormal situations:*
  - 1) unplanned crude slate changes,*
  - 2) continued operation of the Crude 1 unit with the naphtha hydrotreater unit shut down, and*
  - 3) an emergency pressure-relief valve opening.*
- c) Guidance to determine when an abnormal situation is becoming too difficult to manage and the appropriate actions to take, such as shutting down a process, putting it into a circulation mode, or implementing proper procedures for bringing it to a safe state.*

### 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-R2**.