U.S. Chemical Safety and Hazard Investigation Board

OFFICE OF GENERAL COUNSEL

Memorandum

To: Board Members

From: Steven Messer
Acting General Counsel

STEVEN MESSER
Digitally signed by STEVEN MESSER
Date: 2026.03.17 10:21:56 -04'00'

Cc: Charles Barbee
Adam Henson
Leadership Team

Subject: Board Action Report – Notation Item 2026-24 | Recommendation to American Petroleum Institute (API) (2018-02-I-WI-R14) from the Husky Energy Superior Refinery Explosion and Fire investigation (2018-02-I-WI)

Date: March 17, 2026

On March 16, 2026, the Board approved Notation Item 2026-24, thereby designating Recommendation 2018-02-I-WI-R14 to American Petroleum Institute (API) from the Husky Energy Superior Refinery Explosion and Fire investigation (2018-02-I-WI) with the status of Open – Acceptable Response or Alternate Response.

Voting Summary – Notation Item 2026-24

Disposition: APPROVED

Disposition date: March 16, 2026

	Approve	Disapprove	Calendar	Not Participating	Date
S. Johnson	**X**				3/13/2026
S. Owens	**X**				3/16/2026

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

Report:	Husky Energy Superior Refinery Explosion and Fire
Recommendation Number:	2018-02-I-WI-R14
Date Issued:	December 29, 2022
Recipient:	American Petroleum Institute (API)
New Status:	Open – Acceptable Response or Alternate Response
Date of Status Change:	March 16, 2026

Recommendation Text:

Modify the appropriate existing recommended practice (for example, API RP 553, Refinery Valves and Accessories for Control and Safety Instrumented Systems) to include information about the purpose, design, maintenance, and testing of additional FCC catalyst slide valve components, including the slide valve body. If an API product other than API RP 553 is modified, API RP 553 should guide the reader to that reference.

Board Status Change Decision:

A. Rationale for Recommendation

On the morning of April 26, 2018, the primary and sponge absorber of the Husky Energy Superior Refinery exploded during the planned shutdown of the facility's fluidized catalytic cracking (FCC) unit. Debris from the explosion struck an asphalt storage tank approximately 200 feet away. Asphalt leaked from the damaged tank and over the containment wall spreading into the FCC and crude unit operating areas before eventually catching fire. Husky Superior Refinery reported that 39,000 pounds of a flammable hydrocarbon vapor mixture as well as approximately 17,000 barrels of asphalt were released during the incident.

36 refinery and contract workers received medical treatment as the result of the incident. Of those 36 injuries, 11 met the criteria to be considered OSHA recordable. None of the injuries suffered were deemed life-threatening. It was reported that the explosion shook buildings up to a mile away. The plume from the burning asphalt was visible from neighboring communities. An evacuation order was issued by county officials to protect the public from the smoke plume and as a precaution for fear the incident would escalate.

As a result of the incident the facility was destroyed. The incident resulted in $550 million of on-site and $110,000 of off-site property damage. This incident was recorded as having the 33rd largest adjusted property damage loss in the hydrocarbon extraction, transport, and processing industry since 1974[1]. In September 2019 a permit was issued to rebuild the refinery and

[1] Marsh JLT Specialty, "100 Largest Losses in the Hydrocarbon Industry," 2022. [Online]. Available: https://www.marsh.com/us/insights/research/100-largest-losses-hydrocarbons-industry-html. [Accessed 5 October 2022].

construction began soon after. Husky Energy merged with Cenovus Energy, Inc., a Canadian oil and natural gas company, on January 1, 2021. The refinery is expected to resume operations in 2023 as Cenovus Superior Refinery.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including ineffective transient operation safeguards, a lack of process knowledge, ineffective process safety management systems, a lack of available industry knowledge and guidance, and failures in emergency preparedness. As a result of these findings, the CSB issued three recommendations to the American Petroleum Institute (API). This status change summary addresses CSB Recommendation No. 2018-02-I-WI-R14.

B. Response to the Recommendation

API has notified the CSB that they intend to implement the recommendation. They have provided a plan of action and proposed language for inclusion in API Recommended Practice 553 *Refinery Valves and Accessories for Control and Safety Instrumented Systems* that appears to satisfy the objectives of the recommendation. Additionally, they have provided a timetable for completion.

C. Board Analysis and Decision

Based upon the information above, the Board voted to change CSB Recommendation No. 2018-02-I-WI-R14 to: "Open – Acceptable Response or Alternate Response."