



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

<b>Report:</b>	Remote Isolation of Process Equipment
<b>Recommendation Number:</b>	2024-01-H-R1
<b>Date Issued:</b>	July 25, 2024
<b>Recipient:</b>	American Petroleum Institute (API)
<b>New Status:</b>	Open – Awaiting Response or Evaluation/Approval of Response
<b>Date of Status Change:</b>	Not Applicable – Initial Status

### Recommendation Text:

*Develop a new publication or revise an existing publication or publications that should be applicable to various facility types such as refineries, chemical and petrochemical facilities, terminals, etc. with major process equipment and atmospheric storage tanks, that details conditions that necessitate the installation of remote isolation devices [use “shall” instead of “should” language] that may be automatically activated or remotely activated from a safe location, particularly during an emergency. When establishing these conditions refer to the guidance published by CCPS entitled Guidelines for Fire Protection in Chemical, Petrochemical, and Hydrocarbon Processing Facilities, Sections 8.1.10 and 8.1.11. At a minimum, the conditions should address major process equipment and atmospheric storage tanks, material volumes/weight as well as flammability, corrosivity, and toxicity.*

### Board Status Change Decision:

#### A. Rationale for Recommendation

The U.S. Chemical Safety and Hazard Investigation Board (CSB) has reviewed and investigated numerous incidents where the consequences escalated following a loss of containment due to the lack of effective remote isolation equipment. These incidents resulted in serious injuries, fatalities, environmental contamination, and severe damage to facilities.

Following the 2019 incident at the TPC Group chemical plant in Port Neches, TX, the CSB concluded that improved requirements for remote isolation are necessary. The CSB initiated this Safety Study to review the incidents investigated by the CSB and determine the action needed to address deficiencies in both industry guidance and federal regulations.

The CSB found that although guidance has been available for many years, it has not been consistently followed. The CSB concluded that stronger remote isolation requirements are needed. As a result of these findings, the CSB issued one recommendation to the American Petroleum Institute (API). This status change summary addresses CSB Recommendation No. 2024-01-H-R1.