



U. S. Chemical Safety and Hazard Investigation Board

RECOMMENDATION STATUS CHANGE SUMMARY

Report:	Valero McKee Refinery Propane Fire
Recommendation Number:	2007-5-I-TX-R4
Date Issued:	July 9, 2008
Recipient:	American Petroleum Institute (API)
New Status:	Closed – Acceptable Action
Date of Status Change:	January 20, 2026

Recommendation Text:

Revise API Standard 2510, Design and Construction of LPG Installations, and API Publication 2510A, Fire-Protection Considerations for the Design and Operation of Liquefied Petroleum Gas (LPG) Storage Facilities, to address effective deluge system activation during emergencies originating in nearby process units.

Board Status Change Decision:

A. Rationale for Recommendation

This recommendation was issued following the propane fire at the Valero McKee refinery near Sun Ray, TX. The CSB's investigation concluded that first responders were not able to activate the deluge system intended to protect spherical tanks storing LPG because the valves to activate the system were too close to the fire. Without deluge protection, the sphere was vulnerable to possible failure through loss of metal strength due to over-temperature. The CSB reviewed available publications by the American Petroleum Institute (API), a trade association that publishes voluntary standards, and found no detailed guidance for refineries to evaluate hazards from nearby units when locating fire water deluge valves. Therefore, the CSB issued a recommendation to API to develop such guidance. This status change summary addresses CSB Recommendation No. 2007-5-I-TX-R4.

B. Response to the Recommendation

API published a revision of Fire-Protection Considerations for the Design and Operation of Liquefied Petroleum Gas (LPG) Storage Facilities¹ (API 2510A) during November of 2025. This revision contains guidance on addressing deluge system activation during emergencies originating in nearby process units. API 2510A is a normative reference for Design and Construction of LPG Installations² (API 2510). Therefore, API 2510A is considered indispensable in the application of API 2510. As a result, updating API 2510A also effectively updated API 2510. API 2510 was reaffirmed during September of 2025.

¹ <https://www.apiwebstore.org/standards/2510A>

² <https://www.apiwebstore.org/standards/2510>

C. Board Analysis and Decision

Based upon the information above, the Board voted to change CSB Recommendation No. 2007-5-I-TX-R4 to: "Closed – Acceptable Action."