



# U. S. Chemical Safety and Hazard Investigation Board

## RECOMMENDATION STATUS CHANGE

### SUMMARY

<b>Report:</b>	Intercontinental Terminals Company (ITC) Tank Fire
<b>Recommendation Number:</b>	2019-01-I-TX-R5
<b>Date Issued:</b>	July 6, 2023
<b>Recipient:</b>	Intercontinental Terminals Company, LLC
<b>New Status:</b>	Open – Acceptable Response or Alternate Response
<b>Date of Status Change:</b>	November 9, 2023

#### Recommendation Text:

*Conduct an evaluation of the design of all new and existing tank farms at the ITC Deer Park terminal against the applicable sections of the Third Edition of API [American Petroleum Institute] STD 2610, Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities and the 2021 Edition of NFPA 30, Flammable and Combustible Liquids Code. At a minimum the evaluation should include, but is not limited to the following sections of API STD 2610:*

*Section 4 Site Selection and Spacing Requirements  
Section 7 Fire Prevention and Protection  
Section 8.1 Aboveground Petroleum Storage Tanks  
Section 9 Dikes and Berms  
Section 10 Pipe, Valves, Pumps, and Piping Systems  
Section 11 Loading, Unloading, and Product Transfer Facilities*

*and the following chapters of NFPA 30:*

*Chapter 21 Storage of Ignitable (Flammable or Combustible) Liquids in Tanks – Requirements for All Storage Tanks and  
Chapter 22 Storage of Ignitable (Flammable or Combustible) Liquids in Tanks – Aboveground Storage Tanks*

*The evaluation should identify additional engineering controls needed to address minimal tank spacing, subdivisions between tanks, and placement of process equipment in containment areas. In addition, the evaluation should assess the adequacy of the containment wall and drainage system designs, accounting for the impact of firefighting activities, including the application of firewater and foam on these systems. Develop and implement recommendations based on findings from the evaluation.*

#### Board Status Change Decision:

##### A. Rationale for Recommendation

On March 17, 2019, a loss of containment and massive fire occurred at the Intercontinental Terminals Company (ITC) terminal facility in Deer Park, Texas. The incident resulted from the

seal failure of a pump operating in conjunction with Tank 80-8, an 80,000-barrel (3.36 million gallon) above ground atmospheric storage tank containing a mixture of naphtha and butane.

The incident did not result in any injuries. However, the fire burned for three days and spread from Tank 80-8 to the other fourteen tanks located within the same containment area. All fifteen tanks were destroyed. On March 22, 2019, the containment area wall partially collapsed releasing approximately 500,000 barrels (21 million gallons) of a mixture of petroleum products, firefighting foam, and water into Tucker Bayou and adjacent waterways including the Houston Ship Channel.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including ineffective mechanical integrity and maintenance practices for the facility's product transfer pumps, a lack of safety systems at the facility's 80s tank farm, and a lack of regulatory coverage under the Occupational Safety and Health Administration's (OSHA's) Process Safety Management (PSM) standard and the U.S. Environmental Protection Agency's (EPA's) Risk Management Program (RMP) rule for the contents of Tank 80-8 at the time of the incident. As a result of these findings, the CSB issued five recommendations to ITC. This status change summary addresses CSB Recommendation No. 2019-01-I-TX-R5.

#### B. Response to the Recommendation

ITC notified the CSB that the company is developing an evaluation process and will conduct an evaluation of the design for all new and existing tank farms that will include consideration of the relevant industry standard sections identified by the CSB in the recommendation. The company also provided a timeframe for completion of the evaluation.

#### C. Board Analysis and Decision

Based upon the information above, the Board voted to change CSB Recommendation No. 2019-01-I-TX-R5 to: "Open – Acceptable Response or Alternate Response."