



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

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| Report: | Valero Refinery Propane Fire |
| Recommendation Number: | 2007-05-I-TX-R5 |
| Date Issued: | June 9, 2008 |
| Recipient: | Valero Energy Corporation |
| New Status: | Closed – Acceptable Action |
| Date of Status Change: | March 31, 2015 |

Recommendation Text:

Identify all processes in this and other refineries where Valero's mandatory Emergency Isolation Valve standard is applicable, and ensure that Remotely Operable Shut-off Valves (ROSOVs) are installed to control large accidental releases of flammable materials.

Board Status Change Decision:

A. Rationale for Recommendation

The U.S. Chemical Safety and Hazard Investigation Board (CSB) conducted an investigation of a fire that injured four workers and caused the total shutdown and evacuation of the Valero McKee Refinery in Sunray, Texas, in February 2007. The investigation concluded that water leaked through a valve, froze, and cracked an out-of-service section of piping in the propane deasphalting unit (PDA), causing a release of high pressure liquid propane. Direct losses attributed to the fire reported to exceed \$50 million.

A key finding of the investigation was that the fire prevented field operators from closing manual isolation valves or reaching local pump controls to isolate the high pressure propane being vented to the atmosphere. In addition, control room operators were unable to shut off the flow of propane because remotely operable shut-off valves (ROSOVs) were not installed in the PDA. The lack of remote isolation significantly increased the duration and size of the fire, resulting in extensive damage to the PDA, the main pipe rack, and an adjacent process unit.

B. Response to the Recommendation

Valero has identified all processes where Valero's Emergency Isolation Valve standard is applicable and has installed 96% of the identified ROSOVs.

C. Board Analysis and Decision

The CSB concluded that the recipient's response to this meet the intent of the recommendation, and the Board has voted to designate CSB Recommendation No. 2007-05-I-TX-R5 as: "**Closed – Acceptable Action.**"