

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

| Report:                | Valero McKee Propane Fire (Sunray, TX)     |
|------------------------|--|
| Recommendation Number: | 2007-05-I-TX-R8 and R10A, R10B, and R10C   |
| Date Issued:           | July 9, 2008                               |
| Recipient:             | R8: Valero Energy Corporation              |
|                        | R10A: Valero McKee facility                |
|                        | R10B: United Steelworkers of America (USW) |
|                        | R10C: USW Local 13-487                     |
| New Status:            | Closed- Acceptable Action                  |
| Date of Status Change: | March 11, 2014                             |

### **Recommendation Text:**

Recommendation No. 2007-05-I-TX-R8 to Valero Energy Corporation:

Audit PHA performance at [Valero] refineries to ensure adherence to company standards and good practice guidelines.

Recommendation No. 2007-05-I-TX-R10A, 10B, and 10C, to Valero McKee, USW, and USW Local 13-487:

Work together to benchmark effective PHA methods and practices and implement improvements to the McKee Refinery PHA program, including:

-involving the workforce in PHA preparation, performance, and follow-up; -training participants; -conducting PHA quality control checks; and -following up on recommendations for timely implementation and appropriate close-out.

## **Board Status Change Decision:**

## A. Rationale for Recommendation

On February 16, 2007, a propane fire erupted in the propane deasphalting (PDA) unit at the Valero McKee Refinery near Sunray, Texas. Three employees and a contractor were injured in the fire and extensive equipment damage resulted in the evacuation and total shutdown of the refinery. The refinery remained closed for two months; the PDA unit was rebuilt and resumed operation nearly a year later. Direct losses attributed to the fire were reported to be in excess of \$50 million.

The CSB investigation found a number of deficiencies in Process Hazard Analyses (PHAs) conducted at the McKee refinery, and identified several areas where the PHA for the PDA unit was ineffective in identifying hazards that contributed to the incident. The CSB found that unit operators were not effectively engaged in the review process, which is essential to performing an effective PHA; instead, a contractor performed most of the analysis. The CSB also discovered that important recommendations from previous PHAs were not properly implemented.

As a result of its investigation, the CSB issued a recommendation to Valero at the corporate level (No. R8) to audit PHA performance at its refineries. The CSB also issued joint recommendations to the Valero McKee refinery, the United Steelworkers International Union (USW) and USW Local 13-487 (Nos. R10A, B, and C) to work together to improve the site's PHA program.

### B. Response to the Recommendation

In response to Recommendation R8, Valero Energy Corporation reported updating their corporate PHA standard and making a number of improvements to the PHA Program. Valero also reported updating their Process Safety Management (PSM) auditing protocol, which includes a detailed PHA Section, and indicated that all sites now use a computer system to track the implementation of audit action items.

In response to Recommendations R10A, B, and C, USW Local 13-487 and Valero McKee representatives reported jointly developing and implementing action items to improve the PHA program at the McKee refinery. This included efforts to ensure the participation of trained workers in the PHA process and to ensure that PHAs action items are addressed timely and the findings/corrective actions communicated to the workforce.

# C. Board Analysis and Decision

Based on the actions reported by the recipients, the Board voted to change the status of CSB Recommendation Nos. 2007-05-I-TX-R8 and R10A, R10B, and R10C to: "Closed-Acceptable Action."