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

| | |
|---|---|
| **Report:** | West Fertilizer Fire and Explosion |
| **Recommendation Number(s):** | 2013-2-I-TX-R15 |
| **Date Issued:** | January 28, 2016 |
| **Recipient:** | Texas A&M Engineering Extension Services (TEEX) |
| **New Status:** | Closed – Acceptable Action |
| **Date of Status Change:** | October 11, 2018 |

**Recommendation Text 2013-2-I-TX-R15:**

*Develop and administer a hazardous materials training module for career and volunteer fire departments that addresses the fertilizer grade ammonium nitrate (FGAN) and other hazardous materials or chemicals that could pose new specialized hazards. Ensure that the training includes multiple delivery methods to enable a broad reach. The training should allow for instructor-led, web-based, and train-the-trainer courses; initial orientation; and refresher training. The training also should accommodate both resident and mobile capabilities to facilitate flexibility in delivery.*

*Objectives of the training course should address the following:*

*a. How to respond to industrial fires involving FGAN and other hazardous materials or chemicals that could pose new specialized hazards to responding firefighters*
*b. Previous FGAN fire and explosion incidents, incorporating lessons learned*
*c. Hazards posed by other materials and chemicals stored near the FGAN, including FGAN incompatibility with those materials and chemicals*
*d. Pre-incident planning for fires involving FGAN and other hazardous materials or chemicals that could pose new specialized hazards to responding firefighters*
*e. On-scene emergency response and decision-making requirements for FGAN fires, including risk assessment, scene size-up, and situational awareness*
*f. National Incident Management System and Incident Command System.*

**Board Status Change Decision:**

A. Rationale for Recommendation

On April 17, 2013, an explosion and fire occurred at the West Fertilizer Company (WFC), a fertilizer blending, retail, and distribution facility in West, Texas. The violent detonation of fertilizer grade ammonium nitrate (FGAN) fatally injured 12 emergency responders and three members of the public. Local hospitals treated more than 260 injured victims, many of whom required hospital admission. The blast completely destroyed the WFC facility and caused widespread damage to more than 150 offsite buildings.

As a part of its investigation, the U.S. Chemical Safety and Hazard Investigation Board (CSB) found that both Federal and the state of Texas curriculum manuals used for hazardous materials (HAZMAT) training and certification of firefighters placed little emphasis on emergency response to storage sites containing FGAN. In addition, lessons learned from previous FGAN-related fires were not shared with other fire departments, including the West Volunteer Fire Department. If previous lessons learned had been applied at West, the firefighters and emergency personnel who responded to the incident might have better understood the risks associated with FGAN-related fire. As a result, the CSB made two recommendations to the Texas A&M Engineering Extension Services (TEEX). This status change summary pertains only to Recommendation No. 2013-02-I-TX-R15.

B. Response to the Recommendation

In 2017, TEEX finalized a comprehensive FGAN training curriculum that addresses the content identified in the CSB's recommendation and offers it to emergency responders at no cost.

C. Board Analysis and Decision

As TEEX has met the intent of the recommendation, the CSB voted to change the status of Recommendation No. 2013-2-I-TX-R15 to **"Closed-Acceptable Action."**