



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

Report:	West Fertilizer Fire and Explosion
Recommendation Number:	2013-02-I-TX-R17
Date Issued:	January 28, 2016
Recipient:	Texas Department of Insurance (TDI)
New Status:	Closed – Unacceptable Action/No Response Received
Date of Status Change:	July 28, 2021

Recommendation Text:

For companies that provide insurance to agricultural facilities storing bulk fertilizer grade ammonium nitrate (FGAN) in Texas, including surplus lines insurers and Texas-registered risk retention groups, develop and issue guidance to assist in underwriting risk and conducting annual loss control surveys. Guidance should include the following:

- a. Combustible materials of construction for facilities and bins storing FGAN*
- b. Storage of combustible materials near FGAN piles*
- c. Adequate ventilation for indoor FGAN storage areas*
- d. Automatic sprinklers and smoke detection systems for indoor FGAN storage areas*
- e. Separation distances between FGN and other hazardous materials onsite*
- f. Potential for offsite consequences from a fire or explosion, including the proximity of FGAN facilities to nearby residences, schools, hospitals, and other community structures.*

Provide references in the guidance document to existing materials from the following sources or to other equivalent guidance:

- a. National Fire Protection Association (NFPA), NFPA 400 Hazardous Materials Code, 2016 Edition, Chapter, “Ammonium Nitrate”*
- b. FM Global, “Property Loss Prevention Data Sheet 7-89”*
- c. U.S. Environmental Protection Agency, Occupational Safety and Health Administration, and Bureau of Alcohol, Tobacco, Firearms and Explosives; “Chemical Advisory: Safe Storage Handling, and Management of Solid Ammonium Nitrate Prills”*
- d. TDI, “Best Practices for the Storage of Ammonium Nitrate”*
- e. National Fire Protection Research Foundation, “Separation Distances and NFPA Codes and Standards.”*

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 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.

Although the U.S. Chemical Safety and Hazard Investigation Board (CSB) was unable to determine the exact cause of the fire, the CSB concluded that the presence of combustible materials used for construction of the facility and FGAN storage bins, in addition to the WFC practice of storing combustibles near the FGAN pile, contributed to the progression and intensity of the fire and likely resulted in the detonation.

As a part of its investigation, the CSB found that WFC's insurance policy was cancelled by their previous insurance provider due to a lack of compliance with recommendations from its loss control surveys. The CSB also found little evidence of onsite activity or inspections by WFC's subsequent insurance provider. The CSB analyzed relevant regulatory, industry, and consensus standards for hazard analysis and safe storage and handling of FGAN. The analysis determined that the Texas Department of Insurance (TDI) does not require companies that insure FGAN facilities to conduct loss control surveys or inspections to minimize losses. As a result, the CSB issued a recommendation to TDI.

B. Response to the Recommendation.

TDI informed the CSB that state inspections have found storage facilities of ammonium nitrate are in compliance with the 2015 Texas House Bill (HB) 942 which amended the Texas Agricultural Code. TDI also stated that the Texas State Fire Marshal (SFMO) conducted inspections of all agribusiness ammonium nitrate storage facilities in Texas for compliance with HB 942. Finally, though Texas law does not prohibit the requirements in the CSB recommendation, TDI stated that they do not intend to issue guidance on FGAN, loss control surveys, or any guidance beyond that which is required by Texas law.

C. Board Analysis and Decision

As most CSB recommendations are intended to exceed minimum statutory requirements, the CSB does not consider TDI's position to be an acceptable response. However, should TDI decide at some point in the future to issue guidance per the CSB's recommendation, the CSB will evaluate the guidance and may reconsider the status of this recommendation.

Based on TDI's statement that it does not intend to develop guidance on FGAN safety and loss control surveys, the Board voted to change the status of Recommendation **No. 2013-02-I-TX-R17** to: **"Closed - Unacceptable Action/No Response Received."**