

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

Report:	West Fertilizer Explosion and Fire
Recommendation Number:	2013-02-I-TX-R3
Date Issued:	January 28, 2016
Recipient:	Environmental Protection Agency (EPA)
New Status:	Open – Acceptable Response or Alternate Response
Date of Status Change:	March 30, 2023

Recommendation Text:

Revise the Risk Management Program rule to include fertilizer grade ammonium nitrate (FGAN) at an appropriate threshold quantity on the List of Regulated Substances.

a. Ensure that the calculation for the offsite consequence analysis considers the unique explosive characteristics of FGAN explosions to determine the endpoint for explosive effects and overpressure levels. Examples of such analyses include that adopted by the 2014 Fire Protection Research Foundation report, "Separation Distances in NFPA Codes and Standards," Great Britain's Health and Safety Executive, and other technical guidance.

b. Develop Risk Management Program rule guidance document(s) for regulated FGAN facilities.

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.

As a part of its investigation, the U.S. Chemical Safety and Hazard Investigation Board (CSB) analyzed relevant regulatory, industry, and consensus standards for hazard analysis and safe storage and handling of FGAN and identified several gaps. Additionally, the CSB found that there was significant confusion regarding the agricultural exemption under the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 311(e)(5) and its associated regulations. As a result, the CSB issued three recommendations to the Environmental Protection Agency (EPA). This status change summary addresses **CSB Recommendation No. 2013-02-I-TX-R3**.

B. Response to the Recommendation

On February 7, 2023, the EPA communicated to the CSB that they intend to evaluate inclusion of ammonium nitrate on the RMP list of regulated substances in a future action. In EPA's Proposed Rule *Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Safe Communities by Chemical Accident Prevention*, published on August 31, 2022, in 87 Fed. Reg. Pages 53556 – 53616, they acknowledged their obligation to review the list of RMP-regulated substances and identified ammonium nitrate as a "priority chemical" for their upcoming review.

C. Board Analysis and Decision

The EPA included listing ammonium nitrate as an RMP-regulated substance as an additional consideration in a Notice of Proposed Rulemaking, discussed issues pertinent to adding ammonium nitrate to the list of RMP-regulated substances in the rulemaking's Technical Background Document, and solicited public comment on these issues from August 31, 2022, to October 31, 2022.

As EPA has stated their intention to evaluate as well as taken meaningful action in pursuit of evaluating implementation of the recommendation, the Board voted to change the status of CSB Recommendation No. 2013-02-I-TX-R3 to: "Open – Acceptable Response or Alternate Response."