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Guidelines and programs to ensure the safety and security of sites with AN and ANBF, following the West Fertilizer Company explosion in Texas in 2013

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Action after West Fertilizer

- **Fire and explosion - West Fertilizer, April 17, 2013 – 15 Deaths**
- **On August 1, 2013 Executive Order on Improving Chemical Facility Safety and Security**
- **May 2014, Report to the President, Actions to Improve Chemical Facility Safety and Security – A Shared Commitment**
 - Strengthening community planning and preparedness;
 - Enhancing Federal operational coordination;
 - Improving data management;
 - Modernizing policies and regulations; and
 - Incorporating stakeholder feedback and developing best practices.

Rule and Regulations

U.S. Occupational Safety and Health Administration (OSHA) protects employees:

- OSHA Explosives and Blasting Agents Standard 29 CFR 1910.109

U.S. Environmental Protection Agency (EPA) protects communities and the environment:

- Emergency Planning and Community Right to Know Act (EPCRA)

U.S. Department of Homeland Security (DHS) oversees security of chemical facilities:

- Chemical Facility Anti-Terrorism Standards (CFATs)
- International Maritime Dangerous Goods (IMDG) and International Maritime Solid Bulk Cargoes (IMSBC) Codes

Bureau of Alcohol, Tobacco, and Firearms (BATF) regulates explosives manufacturers:

- 27 CFR 555.206 for storage and handling of ammonium nitrate

AN Guidance

National Fire Protection Association (NFPA) Guidance

- Chapter 11, “Ammonium Nitrate Solids and Liquids,” of NFPA 400: Hazardous Materials Code
- [AN Fact Sheet](#)
- [Variables Associated with the Classification of Ammonium Nitrate – A Literature Review](#)

Additionally, the following guidance has been developed by the US government for facilities handling ammonium nitrate in the US:

- [Chemical Advisory: Safe Storage, Handling, and Management of Solid Ammonium Nitrate Prills \(EPA, OSHA, ATF\)](#)
- [Fertilizer Industry Guidance on Storage and Use of Ammonium Nitrate and Agricultural Anhydrous Ammonia](#)
- [Guidance on the Ammonium Nitrate Storage Requirements in 29 CFR 1910.109\(i\)](#)
- [Regional Emphasis Program for Fertilizer Grade Ammonium Nitrate \(FGAN\) and Agricultural Anhydrous Ammonia Facilities](#)

Lessons Learned

Some broad lessons learned are:

- There are a few different industries that use AN (explosives, fertilizers, and manufacturing), and they are at different levels of sophistication technically.*
- Smaller agricultural users of AN (like co-ops) are harder to reach and may find safe storage and safety systems more expensive or difficult to understand.*
- In some situations, AN has detonated while in others it has not. It is often difficult to replicate those circumstances and understand precise differences.*