



The
Fertilizer Institute

Nourish, Replenish, Grow

Statement of Billy Pirkle
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Crop Production Services

On Behalf of
The Fertilizer Institute

Before the

United States Senate Committee on Environment
and Public Works

Preventing Chemical Threats and Improving Safety:
“Oversight of the President’s Executive Order on
Improving Chemical Facility Safety and Security”

March 6, 2014

Chairman Boxer, Ranking Member Vitter and members of the committee, thank you for the opportunity to appear before you today. I am here to testify on behalf of The Fertilizer Institute (TFI), the leading voice of the nation's fertilizer industry. Tracing its roots back to 1883, TFI's membership includes fertilizer producers, wholesalers, retailers and trading firms. TFI's full-time staff, based in Washington, D.C., serves its members through legislative, educational, technical, economic information, public communication and environmental stewardship programs.

My name is Billy Pirkle and I am the Senior Director for Environment, Health, and Safety for Crop Production Services (CPS). In this role, I am responsible for the oversight of regulatory programs for the company's retail operations. CPS is headquartered in Loveland, Colorado. The company was established in 1983, but predecessor companies began operating as early as 1859. We are an innovative, full-service agriculture retailer with the vision of helping our farmer customers feed the world responsibly by growing more food, protecting the environment, supporting economic vitality, and enhancing communities.

Before I begin my testimony, on behalf of The Fertilizer Institute and its members, I would like to extend my thoughts and prayers to the families impacted by the tragedy in West, Texas as they continue working to rebuild their community.

We are taking concrete action

The fertilizer industry is accountable, responsible and committed to the safety of the communities in which we operate. Our employees often live and work in the same town, and have a deep understanding that their commitment to safe operations has a real-world impact on their family and their neighbors. We are dedicated to continuing to work with the investigators and regulators to understand the cause or causes of last April's West Fertilizer Company tragedy and have already taken concrete steps to prevent and if necessary, mitigate future incidents from occurring.

We support uniform regulatory compliance

Chairman Boxer, Ranking Member Vitter and members of the committee, I am proud to announce today that The Fertilizer Institute and the Agricultural Retailers Association (ARA) are creating ResponsibleAg, an independent, not-for-profit organization designed to support and enhance fertilizer retailers' awareness and compliance with federal safety and security regulations.

Under ResponsibleAg, all of the nation's retail fertilizer dealerships will have access to comprehensive inspections based on federal regulatory requirements. The inspections will be carried out by professionally trained auditors who will have successfully completed an intensive training course based on the objectives of ResponsibleAg.

While the vast majority of fertilizer retail businesses operate safely and securely, we are acting out of an abundance of caution and concern for the wellbeing of workers and communities. ResponsibleAg will enhance the current regulatory scheme to verify compliance at more facilities. For some retailers the myriad federal agencies that regulate our industry can be a challenge to navigate and we understand that government resources are limited. We are

choosing to act now to more quickly address these issues.

ResponsibleAg will certify auditors who will inspect and verify individual facilities' level of compliance with applicable federal regulations. Facilities that successfully complete assessments will be recognized for having done so. Any site that does not successfully complete an assessment will be provided a list of recommended corrective actions with a timeframe to complete these actions. Additionally, random quality assurance reviews to verify the assessments will be conducted.

Getting ResponsibleAg up and running is a priority for TFI and we are providing \$100,000 in startup capital to ensure a quick start up for the organization. ARA has pledged an identical financial donation and the Asmark® Institute will be providing training programs, training facilities and will administer of the ResponsibleAg website and database. As I will outline later in my testimony, the Asmark® Institute has a history of working on a cooperative basis with federal agencies, having collaborated with U.S. Environmental Protection Agency (EPA) to develop online Risk Management Plan (RMP) compliance tools for retailers that handle anhydrous ammonia and having worked with the U.S. Department of Transportation (DOT) to develop an anhydrous ammonia nurse tank inspection program.

Once established, ResponsibleAg will be funded by registration fees paid by participating fertilizer storage and handling inventory points and their suppliers. Auditor training costs will be funded by tuition paid by those seeking the ResponsibleAg auditor credential. Membership in TFI, ARA or any other organization is not a requirement for participation. A fact sheet on ResponsibleAg has been submitted with this testimony.

Fertilizer retailers play a critical role in the nation's food production system and support local economies by providing jobs and purchasing goods and services. We believe that achieving this mission must be accomplished in an environment of regulatory compliance. ResponsibleAg will help ensure that whether small or large, these essential businesses have access to the information necessary meet their federal regulatory compliance obligations.

We support reasonable regulation

After the tragic explosion in West, Texas, TFI repeatedly expressed its willingness to re-examine past policy positions and determine whether they needed to be changed based on what was learned both on the ground and as a result of ongoing investigations.

We support Executive Order 13650 Improving Chemical Facility Safety and Security's call for greater federal and state regulatory cooperation, information collection and sharing, modernization of policy regulation and standards as well as identification of best practices. We have been in constant contact with the Executive Order working group and we continue to provide information on all of the abovementioned areas.

Specifically, TFI supports efforts to better coordinate between state and federal agencies, cross reference databases, and improve federal coordination of inspections to minimize facility time and agency resources. TFI has strongly encouraged its members to contact local emergency responders and invite them into our facilities so that they will have a clear understanding of the

fertilizer business and the products that they handle. West Fertilizer Co. was not a member of TFI or any other national trade association and as such, would not have received our frequent reminders of the importance of emergency responder and community outreach. To bridge that gap, we have worked with state fertilizer and agrichemical associations to encourage their members to communicate with their local first responders, LEPC's and SERC's.

To ensure transparency and greater public awareness of products held for sale at fertilizer retail facilities, we support elimination of the fertilizer retail exemption for reporting under the Emergency Planning and Community Right to Know Act (EPCRA) section 311 and 312. It is our position that everyone should report hazardous chemicals stored on site to local emergency planning commissions (LEPC) and state emergency response commissions (SERC) and without exception, work with local fire departments to educate them on products held for sale at a retail facility. In order to make this reporting requirement effective, it is very important that it be limited to hazardous chemicals, so that LEPC's and SERC's aren't overburdened with unnecessary information. For example, if retailers are forced to report materials such as potash, a non-hazardous mined mineral fertilizer, to first responders, they are just creating more paperwork and wasting valuable resources that should be used on responding to truly hazardous materials.

While TFI believes that compliance with existing federal regulations could have prevented or mitigated the tragic accident in West, Texas, we will continue to work within the regulatory framework and with the EO working group to help attain our shared goal of increasing safety and security at our facilities and the communities in which we operate.

For many years the fertilizer industry has served on the National Fire Protection Association's (NFPA) Technical Committee on Hazardous Chemicals (NFPA 400) which is the committee of jurisdiction over the fire code for the storage and handling of ammonium nitrate. NFPA 400 outlines recommended practices that include, but are not limited to; construction of buildings and building floors, ventilation requirements, a list of contaminants that should not be stored in the same building with ammonium nitrate, requirements for electrical installations, when sprinklers are required, signage, handling equipment and fire protection procedures. I would like to point out that the fertilizer industry strongly supports and encourages adherence to NFPA 400 for ammonium nitrate. NFPA is currently revising this guidance and consistent with past practice, TFI members are lending technical assistance to this effort.

Finally, I would like to let the committee know that in addition to safety, the security of our products also remains of the utmost concern to the fertilizer industry. The fertilizer industry approached Congress in 2005 to seek traceability regulations for ammonium nitrate and the resulting Secure Handling of Ammonium Nitrate Act was signed into law in December 2007. The Act replaces a patchwork of state regulations by requiring the U.S. Department of Homeland Security (DHS) to issue regulations for a tracking system which would require anyone selling or purchasing straight solid ammonium nitrate and any mixture in a percentage to be determined by DHS to register with DHS. An Advanced Notice of Proposed Rulemaking (ANPR) was issued in October 2008 and a Notice of Proposed Rulemaking (NRPM) was issued in August 2011.

TFI strongly supported Congressional introduction of the Act as it provides a common-sense “track and trace” system for ammonium nitrate. For this reason, we have gone on the record to encourage DHS to issue the final regulations as soon as possible.

We are not waiting for the government to act

In the days following the West, Texas explosion, TFI reached out to members of congress, including this committee, as well as federal regulatory agencies including OSHA, EPA and DHS to offer assistance and serve as an information resource.

That was only the beginning of our effort to address the issues that surfaced after the West, Texas explosion. Over the past year, TFI has taken a number of concrete steps to work with federal regulators and investigators and to keep the community of fertilizer retailers informed of the most up to date technical and compliance information.

Compliance with the complex maze of federal regulations has led many retailers including CPS to invest heavily in compliance programs including dedicated personnel and the use of outside consultants. Within just days of the West explosion, TFI made an online compliance assistance module developed by the Asmark® Institute® available free of charge to every retailer in the country. Using this web-based program, retailers are able to generate a customized check list for use in auditing their compliance with current federal regulations.

When we made this free tool available, TFI and ARA enlisted assistance from the entire fertilizer industry - from producers, importers, wholesalers, retailers and state associations - to help increase retailers’ awareness of the availability of this tool and other potential regulatory compliance resources. As of February 1, more than 60,000 hits were recorded on the website with more than 2,000 completed assessments.

Additionally, we distributed information on the tool to members of the American Agronomic Stewardship Alliance (AASA), a voluntary organization with third-party auditors who inspect bulk pesticide storage at retail agricultural facilities

Although we are still awaiting the final Chemical Safety Board (CSB) report on West, Texas, it is clear today that emergency responders had insufficient information regarding safe procedures for responding to a fire involving ammonium nitrate.

In order to fill the void in emergency response guidance specific to ammonium nitrate fertilizer at retail fertilizer facilities, TFI has worked with ARA to develop updated guidelines for use as a resource by the industry, government agencies and emergency responders. Today, I am pleased to inform you that “Safety and Security Guidelines for the Storage and Transportation of Ammonium Nitrate Fertilizers,” has been finalized and will be widely disseminated throughout the industry. A copy of the guidelines is enclosed with this testimony. We will be seeking assistance from federal and state agencies in distributing this important document. TFI hopes that this fertilizer specific information will ensure that emergency responders have the best and most recent information available when responding to an incident at a retail facility.

The fertilizer industry willingly partners with regulators

TFI has a long history of voluntary cooperation with government agencies and others in the chemical industry to enhance safety, security and regulatory compliance.

As referenced earlier in my testimony, in 2007, TFI partnered with the EPA and the Asmark® Institute, to develop myRMP, a web-based compliance assistance program for retail fertilizer facilities covered under EPA's Clean Air Act, Section 112(r) Risk Management Program. EPA officially recognized the program having issued a letter of support for myRMP in August 2007. In June 2014, the five-year updates of RMP's are required by law. In an effort to ensure continued cooperation and support of this valuable compliance assistance program, TFI and the Asmark® Institute worked with EPA to review the existing myRMP materials and make beneficial updates to the current program which is now available for all retailers' use in completing their RMP plans.

Hands-on instruction is tremendously beneficial in effective emergency response and prevention. The National Agronomic Environmental Health and Safety School, established in 1978 and long-supported by TFI, provides just this type of training on the various environmental, health and safety, security and transportation issues associated with the operation of agribusinesses. TFI serves on the safety school's Board of Directors.

As I mentioned earlier, addressing security issues is also of paramount importance as we work to keep communities safe. Following the tragedy of September 11, 2001, TFI worked with the Asmark® Institute to develop a voluntary Security Vulnerability Assessment program tailored to helping agricultural retail facilities identify and correct potential vulnerabilities. In addition, the industry developed "Guidelines to Help Ensure a Secure Agribusiness," to help agricultural retailers, distributors, wholesalers and end-users begin to develop a security assessment for their facilities.

TFI has also worked closely with the Federal Bureau of Investigation (FBI) on security education and outreach efforts to help ensure agricultural retailers and suppliers are aware of necessary steps to properly secure essential crop inputs including fertilizers. These efforts are designed to help prevent these beneficial agricultural products from getting in the hands of potential terrorists.

Chairman Boxer, Ranking Member Vitter and members of the committee, I hope that my testimony today demonstrates that the fertilizer industry's commitment to safety and security is genuine and that it is being realized through voluntary actions as well as a willingness to examine and as appropriate, revise our existing policy positions in the wake of the West, Texas explosion. I would like to thank you again for the opportunity to appear before the committee today and I look forward to answering any questions you may have.

How the System Works

Participation in ResponsibleAg is voluntary. Fertilizer distributors and retailers, regardless of size or location, are invited to participate.

Participating facilities will receive an assessment every three years. Assessments must be conducted by auditors who are credentialed on ResponsibleAg protocol. Upon enrollment, companies may choose to use an independent auditor certified by ResponsibleAg or their own internal auditor. Companies choosing to utilize an internal auditor must ensure their auditors are credentialed on ResponsibleAg's protocol before conducting an assessment.

A statistically-valid sample of assessments performed each year will be randomly selected to receive a quality assurance verification designed to evaluate the auditor's work and ensure a reliable and trustworthy end-product.

Verifications will be conducted by an auditor selected by ResponsibleAg.

Scope & Definitions

ResponsibleAg is focused on federal regulations pertaining to fertilizer storage and handling of ammonium nitrate (AN) and anhydrous ammonia (NH₃). Registrations and assessments are handled by site (rather than by company).

ResponsibleAg will develop a single assessment checklist and auditor training curriculum based on existing federal regulations.

Why We Need ResponsibleAg

The U.S. fertilizer industry seeks to continually improve its safe storage and handling practices and to ensure a high level of regulatory compliance. We intend to promote a culture of safety and demonstrate that commitment through this program. Not only is this good for business, but it's the right thing to do for our employees, customers and neighbors.

Through ResponsibleAg, the industry is taking voluntary steps to:

- ◇ Improve safety and security associated with storage and handling of fertilizer products.
- ◇ Support compliance with federal laws and regulations.
- ◇ Demonstrate accountability and transparency.
- ◇ Provide for the safety of our personnel, our customers and our communities as we serve the vital need for crop nutrients.



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ResponsibleAG
Committed. Compliant. Safe.

ResponsibleAg is an industry-led stewardship initiative designed to help fertilizer storage and handling facilities achieve and maintain federal regulatory compliance.

www.ResponsibleAg.org



Culture of Compliance

Participating facilities are assessed every three years by a credentialed, ResponsibleAg auditor.

Registered facilities receive an **assessment** every three years. Participating sites may use internal or internal auditors, provided the auditor holds a ResponsibleAg credential. Facilities passing the assessment will be listed as “fit for service” in the ResponsibleAg database. Facilities that do not pass will receive a summary of corrective actions. Once completed, the facility would certify its compliance, and its status would be reinstated. Suppliers may request documentation of completion, and ResponsibleAg may establish additional procedures to ensure completion. Out-of-compliance facilities will be removed from the “fit for service” list within the database.

Internal Certification

Internal auditors must assess participating facilities every three years. Facilities must also submit affirmation from management or ownership that self-certification assessments have been completed according to ResponsibleAg protocol. Assessment results are posted to the database.

External Certification

Participants using **external auditors** must assess each facility every three years. Results of the assessment are posted to the ResponsibleAg database.

Third-Party Verification

To assure a high degree of reliability, a sample of facilities will receive random verification from an independent auditor annually.

A random, statistically-valid sample of all registered facilities will be selected annually for **verification** by an independent auditor approved by ResponsibleAg. Selected facilities could come from the internal or external certification pool. Verifications will help ResponsibleAg monitor effectiveness of auditor training, provide an important quality assurance check on auditors, and ensure accountability.

Accountability

Reporting on progress and sharing knowledge.

An annual accountability report will include the number of registered facilities, credentialed auditors, completed assessments and random verifications. ResponsibleAg will establish procedures for appeals and dispute resolution to ensure transparency and fairness. An online dashboard will be provided to participating companies to share frequently discovered issues and discuss suggestions to address them.

Fertilizer Suppliers

Supporting and encouraging participation.

Registered suppliers will have access to the database to determine if prospective customers have successfully completed the ResponsibleAg assessment. Suppliers will use the database to inform their business decisions and play a vital role of encouraging customers to participate in the program.



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SAFETY AND SECURITY GUIDELINES FOR THE STORAGE AND TRANSPORTATION OF FERTILIZER GRADE AMMONIUM NITRATE AT FERTILIZER RETAIL FACILITIES

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SAFETY AND SECURITY GUIDELINES FOR THE STORAGE AND TRANSPORTATION OF FERTILIZER GRADE AMMONIUM NITRATE AT FERTILIZER RETAIL FACILITIES¹

1.0 SCOPE AND PURPOSE

1.1 These Guidelines cover the storage and transportation of Fertilizer Grade Ammonium Nitrate (FGAN) at fertilizer retail facilities.

1.1.1 The U.S. Department of Transportation (DOT) has three entries for FGAN:

- Class 5 Oxidizer, Division 5.1, UN1942², PG III material – Defined as ammonium nitrate (AN), with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance.
- Class 5 Oxidizer, Division 5.1, UN2067³, PG III material – Defined as uniform mixtures of fertilizers containing AN as the main ingredient within the following compositional limits:
 - Not less than 90% AN with not more than 0.2% total combustible, organic material calculated as carbon, and with added matter, if any, that is inorganic and inert when in contact with AN; or
 - Less than 90%, but more than 70%, AN with other inorganic materials, or more than 80%, but less than 90%, AN mixed with calcium carbonate

¹ TFI and ARA made considerable efforts to ensure the information contained herein is accurate. Users of these guidelines are strongly recommended to confirm that the information contained within them, is correct by way of independent sources. TFI and ARA accept no responsibility for any inaccuracies, does not make any warranty or representation, either express or implied, regarding its accuracy, completeness, or utility; nor does TFI and ARA assume any liability of any kind whatsoever resulting from the use or reliance upon, any information, material, or procedure contained herein, including but not limited to any claims for damages, loss or injury regarding health, safety, or environmental effects.

² 49 C.F.R. § 172.101

³ 49 C.F.R. § 172.102 (150)

and/or dolomite and/or mineral calcium sulphate, and not more than 0.4% total combustible, organic material calculated as carbon; or

- AN-based fertilizer containing mixtures of AN and ammonium sulphate with more than 45%, but less than 70%, AN, and not more than 0.4% total combustible, organic material calculated as carbon such that the sum of the percentage of compositions of AN and ammonium sulphate exceeds 70%.
- Division 9, UN2071⁴, PG III material, by highway only – Defined as uniform, AN based fertilizer mixtures, containing nitrogen, phosphate or potash, meeting the following criteria (1) contains not more than 70% AN and not more than 0.4% total combustible, organic material calculated as carbon, or (2) contains not more than 45% AN and unrestricted combustible material.

1.1.2 FGAN is a U.S. Department of Homeland Security (DHS) chemical of interest listed in Appendix A of the Chemical Facility Anti-Terrorism Standards (CFATS) as a theft-diversion security risk. For purposes of the CFATS program, FGAN is defined as solid AN with a minimum concentration of 33% or greater, and a nitrogen concentration of 23% or greater, and has a Screening Threshold Quantity for risk of theft-diversion of 2,000 pounds.

1.1.3 FGAN and mixtures in vessels and waterfront facilities are regulated as a certain dangerous cargo in 33 C.F.R. § 126.28 and, therefore, are also regulated by the U.S. Coast Guard in 33 C.F.R. Part 105 (security requirements).

1.2 The purpose of these Guidelines is to outline best practices for the safety and security of FGAN in storage and in transportation at fertilizer retail facilities.

⁴ 49 C.F.R. § 172.102 (132)

2.0 SAFETY

2.1 Owners/operators of all FGAN facilities should be aware that the safety of their workplaces and operations may be subject to the “General Duty Clause” of the Occupational Safety and Health Act at 29 U.S.C. § 654(a)(1).⁵

2.1.1 Where applicable, owners/operators must comply with the U.S. Occupational Safety and Health Administration’s (OSHA’s) Process Safety Management Standard (PSM) at 29 C.F.R. § 1910.119. FGAN is not a chemical substance currently listed in 29 C.F.R. § 1910.119, Appendix A and, therefore, facilities solely storing FGAN are not subject to the PSM. However, facilities storing FGAN and involved in other activities (storing other fertilizers or engaging in blending operations) may be subject to the PSM if they have quantities of chemical substances listed in 29 C.F.R. § 1910.119, Appendix A in excess of the corresponding threshold quantities.

2.1.2 Avoid heating FGAN in a confined space above 170°C (*e.g.*, processes involving FGAN should be designed to avoid this possibility).

2.1.3 Owners/operators should ensure that facilities have implemented a “hot work” program consistent with OSHA requirements at 29 C.F.R. § 1910.252. It is important to avoid heating or welding on a machinery or piping where AN might be confined.

2.1.4 Ensure that FGAN is not exposed to shock (*e.g.*, shock waves from explosives).

2.1.5 Avoid contamination of FGAN with combustible materials or organic substances including, but not limited to: (i) organic chemicals, acids, or other corrosive materials; (ii) compressed flammable gases; (iii) flammable and combustible materials, solids or liquids; and, (iv) other contaminating substances such as wood chips, organic materials, chlorides, phosphorus, finely divided metals, charcoals, diesel fuels and oils, sulfur.

⁵ The Clean Air Act (section 112(r)(1) (42 U.S.C. § 7412(r)(1)) contains a similar “General Duty Clause” requiring owners and operators of stationary sources to “identify hazards which may result from . . . releases using appropriate hazard assessment techniques, design and maintain a safe facility taking such steps as are necessary to prevent releases, and minimize the consequences of accidental releases which do occur.” Since these Guidelines focus on safety and security, we do not address the Clean Air Act’s “General Duty Clause” herein.

2.1.6 Avoid contamination of FGAN with inorganic materials that may contribute to its sensitivity to explosion, including chlorides and some metals, such as chromium, copper, copper alloys such as brass or bronze, cobalt, and nickel, and finely divided or powdered metals that may act as fuels.

2.1.7 Ensure that all electrical components/systems are in compliance with the National Electrical Code.

2.1.8 Ensure that the facility has implemented a Lock Out/Tag Out program in accordance with 29 C.F.R. § 1910.147.

2.1.9 Facility access points should be posted “NO SMOKING, NO OPEN FLAMES.”

2.1.10 All facility access points should be posted with a durable, reflective danger warning sign at least 4ft. x 4ft. where it is visible to fire responders and police. The warning sign text and important Hazard Communication information should state, at a minimum: “WARNING. Do not fight fires at this facility without consulting the facility operator. Refer to ERG Guide 140 and Safety Data Sheet (SDS). In case of an emergency CALL 9-1-1 or [local emergency number] and the facility owner/operator.”

2.1.11 Owners/operators of facilities should develop a written emergency plan in accord with 29 C.F.R. § 1910.120 for responding to releases of, or substantial threats of releases of, AN. Provide training to employees implementing the emergency plan. Plans should be specific to the facility and community. Also, plans should be specific as to when a fire is considered to have engaged AN. The rule of thumb is **if outside emergency responders are necessary, do not fight AN fires**. For fires that have engaged AN, plans should focus on evacuation of the area. When the facility in question is close to the public, plans should focus on evacuation. For facilities in areas with inadequate water supplies and fire hydrants, plans should focus heavily on evacuation.

2.1.12 Plans prepared under section 2.1.12 should be provided to, and coordinated with, local emergency responders. In addition, owners/operators should provide local emergency responders with current copies of SDSs and review appropriate fire response. Further, owners/operators should conduct exercises with local emergency responders to train personnel on how to carry out proper emergency response and to revise the plans, as necessary.

2.1.13 Suppliers should provide information to customers describing the hazards associated with FGAN, proper management and housekeeping requirements, and information regarding regulatory requirements applicable to the safe storage of the material. At a minimum, this should include a FGAN SDS.

2.2 Storage

2.2.1 General Requirements

2.2.1.1 All FGAN storage sites should consider various government agency chemical advisories on the safe storage, handling, and management of AN. The most current and comprehensive advisory is “Chemical Advisory: Safe Storage, Handling, and Management of Ammonium Nitrate (EPA 550-S-13-001 August 2013). Owner/operators of FGAN storage sites should be aware that these advisories will be updated, as necessary, with any new information.

2.2.1.2 Steel and wooden bins and other structural materials in immediate contact with FGAN should be protected by special coatings (29 C.F.R. § 1910.109(i)(4)(ii)(b)). Steel and wooden bins can be protected by special coatings such as sodium silicate (water glass), or epoxy coatings, or polyvinyl chloride coatings.

2.2.1.3 AN storage areas should have automatic fire detection and alarm system if the areas are not continuously occupied. Water supplies and fire hydrants shall be available in accordance with recognized good practices. (29 C.F.R. § 1910.109(i)(7)(ii)(b)). Situations where water supplies, rate of flow, and fire hydrants are not available should be accounted for in the emergency response plan (See 2.1.12). Smoking, open flames, and unauthorized sparking or flame-producing devices should be prohibited in the immediate area.

2.2.1.4 If firefighters consider it appropriate to engage an AN fire, flooding quantities of water from a distance should be used as promptly as possible.

2.2.1.5 Bins should have appropriate ventilation and be constructed to self-ventilate in the event of a fire to avoid pressurization.

2.2.1.6 Bulk piles should not exceed 40 feet in height. Piles should be no higher than 36 inches below roof. Piles should not contact supporting beams or other related supporting structures.

2.2.1.7 Owners/operators of FGAN storage sites should ensure that facilities are in full compliance with applicable requirements of the Emergency Planning and Community Right to Know Act. 42 U.S.C. §§ 11001 – 11050.

2.2.1.8 Storage areas should be inspected regularly by an individual(s) trained to identify potential hazards and ensure that all safety control measures are being properly implemented. Any identified hazards should be addressed immediately.

2.2.2 Notification Warnings

2.2.2.1 Buildings and bins where FGAN is stored should be marked with a hazard rating “fire diamond” meeting the standards of NFPA 704. The NFPA fire diamond should be situated, with the concurrence of the authority having jurisdiction, where it is clearly visible to first responders, police, or other individuals attempting to access the area.

2.2.2.2 The contents of each bin should be clearly identified by the proper shipping name of the material, “AMMONIUM NITRATE” written in 2- inch high, capital letters below the NFPA fire diamond.

2.2.2.3 The NFPA diamond codes for FGAN are generally recognized to be:

Health Hazard (Blue).....1
Flammability (Red).....0
Reactivity (Yellow).....3
Other.....(OX)

2.2.2.4 Owners/operators should consult appropriate fire codes such as NFPA 400 (Chapter 11) for guidance regarding storage of FGAN.

3.0 SECURITY

3.1 Storage Facilities

3.1.1 Owners/operators must comply with applicable regulations promulgated by DHS at 6 C.F.R. Part 27 and the U.S. Coast Guard at 33 C.F.R. Part 105 as well as applicable state and local requirements.

3.1.2 The owner/operator should conduct a thorough site vulnerability assessment to identify gaps in FGAN security and develop and implement appropriate security control measures that will mitigate these security gaps. Considerations should be given to deter, to delay, to detect, and to respond to the identified potential security issues.

3.1.3 Access by visitors, service subcontractors, and third-party transporters should be approved by management.

3.1.4 All FGAN storage facilities should institute a system for accountability of bulk FGAN. Accurate inventory records and accounting for product shrinkage should be maintained.

3.1.4.1 Owners/operators of storage facilities should document and report unexplained losses, thefts, or otherwise unaccounted for shortages of FGAN to the local Joint Terrorism Task Force, as well as local law enforcement.

3.1.5 Report all suspicious behavior to an appropriate supervisor or, if unavailable, to local law enforcement.

3.1.6 Owners/operators should maintain regular communications with local law enforcement agency(ies) and should encourage regular patrols in the area of the facilities.

3.1.7 Owners/operators should institute a “KNOW YOUR CUSTOMER” program. Information should include (but not be limited to) sales records and statements of intended use of purchased FGAN. A record of this information should be retained for at least two (2) years.

3.1.8 Owners/operators should make provisions to prevent unauthorized persons from accessing the FGAN storage area.

4.0 TRANSPORTATION

4.1 Owners/operators must ensure that all transportation-related activities are in full compliance with applicable DOT hazardous materials requirements at 49 C.F.R. Parts 171-178.

4.1.1 As a Division 5.1 oxidizer, AN transport is regulated under DOT's 49 C.F.R. § 172.800 security regulations. Facilities must have a DOT security plan, including transportation security training for employees.

4.2 Truck

4.2.1 Motor carriers must comply with hazardous materials requirements at 49 C.F.R. Parts 177 and 397.

4.2.2 Motor carriers must maintain financial responsibility as required by 49 C.F.R. § 387.9.

4.2.3 Employee facility drivers should possess a current, state-issued commercial driver's license with a hazardous materials endorsement as required under 49 C.F.R. § 383.121. Employee facility drivers should have received hazardous materials training as required by 49 C.F.R. § 172.704.

4.2.4 The parking of vehicles under or near a bin for any purpose other than loading or unloading FGAN or necessary maintenance of the bin is prohibited. The engine of the power unit should be shut off while under a FGAN bin except as needed for loading or unloading operations. Wheel chocks should be used and the ignition key removed when loading or unloading FGAN from a bin when the vehicle is unattended. After loading is completed and loading equipment has been properly disconnected, the vehicle should immediately be moved to a location at least 50 feet from the bin.

4.2.5 Fork trucks, tractors, front-end loaders and other internal combustion powered equipment must not be permitted to remain unattended in a building where FGAN is stored.

4.2.6 Owners/operators should implement a Proof-of-Delivery program for all truck shipments (bulk or bagged) of FGAN.

4.3 Highway

4.3.1 Owners/operators should consider implementing relevant and appropriate voluntary Security Action Items recommended by the Transportation Security Administration for Tier 2 Highway Security-Sensitive Materials. Refer to: <http://www.tsa.gov/highway-security-sensitive-materials-hssm-security-action-items-sais>

4.4 Rail

4.4.1 Rail transporters must comply with applicable DOT hazardous materials regulations at 49 C.F.R. Part 174.

4.4.2 Rail cars should arrive at the rail siding with the shipper's security seals affixed to all top hatches and bottom gates.

4.4.3 All shipper seal serial numbers should be checked to ensure they match the bill of lading for the rail car. If any seal number is incorrect, the owner/operator should call the shipper. If any seal shows signs of tampering or unauthorized removal, the shipper and local law enforcement should be contacted immediately.

4.4.4 When a rail car containing other than residual amounts of AN is unattended and outside a secure area, the owner/operator should affix a padlock or other device to the door or gate to deter unauthorized opening of an unloading compartment.

4.4.5 If any shipper's security seal is removed from the top hatches of a rail car by the rail siding operator to gain access for any reason, the rail siding operator's security seal should be affixed to the hatch.

4.5 Barge

4.5.1 Owners/operators shipping FGAN by barge should comply with applicable provisions of 46 U.S.C. § 70103 for “certain dangerous cargo”.

REFERENCES

Agricultural Retailers Association, 1525 15th St. N.W., Washington, D.C. 20006, (202) 457-0825, www.aradc.org

The Fertilizer Institute, 425 Third St. SW, Suite 950, Washington, D.C. 20024, (202) 962-0490, www.tfi.org

U.S. Department of Labor, Occupational Safety and Health Administration, Washington, D.C., www.osha.gov

U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Washington, D.C., www.dot.gov

Compliance Assistance Tool for Agricultural Retailers, Asmark Institute, Owensboro, Ky., www.asmark.org/ComplianceAssessmentTool