# Agrichemical Product Security Brochure

## Introduction

As the world evolves and populations expand, conflicts between people of various ethnic, religious, social, cultural, ideological, and other differences are increasing. Methods and practices to resolve these conflicts are becoming less traditional. Some have suggested that the evolution of warfare has now entered into the "Fourth Generation" – asymmetrical warfare where belligerent's cultural, religious, and government center's are targeted for destruction. To obtain maximum effectiveness, belligerent's weapons of choice are those that exact mass destruction, terrorizing affected populations in order to gain legitimacy for their grievances and perceived relative deprivation. Recent terrorist activities in the US and abroad have highlighted this phenomenon.

Terrorist's use of weapons of mass destruction (WMD) take many forms, although the majority involves biological, chemical, or nuclear agents. Several events have occurred recently that suggests terrorists are interested in obtaining materials typically used in agriculture as a base for the manufacture of chemical weapons. The availability and widespread use of such materials by the agricultural community spawned an effort by the US Department of Homeland Security (DHS), the US Environmental Protection Agency (EPA), and national and state agrichemical trade associations to address the issue. Their efforts resulted in an awareness and educational campaign to alert agribusinesses of the threat, and recommended practices, procedures, and guidelines to ensure those products are adequately secured and used as intended. Given the threat, it is imperative that agribusinesses become knowledgeable of the damage that can be rendered through the misuse of some of the materials stored and used in their operations, and that prudent measures and actions be taken to safeguard those materials.

The information provided herein is a joint cooperative effort of the Tennessee Department of Agriculture (TDA), the University of Tennessee Agricultural Extension Service (UT AES), the Tennessee Department of Environment and conservation (TDEC), the Tennessee Valley Authority (TVA), and the Tennessee Agricultural Production Association (TAPA). The objective is to provide safety and security information to the agribusiness community in Tennessee for materials used in agricultural production that are targeted for use by others with criminal intent.

## Agrichemical Materials for Potential Use in Weapons of Mass Destruction

Several chemical materials used in agricultural production may be used as a base or precursor in weapons that can potentially cause extensive destruction to a nation's population. These include, but are not limited to, fertilizer chemicals such as ammonium nitrate (NH4NO3), anhydrous ammonia (NH3), and bulk urea (CO(NH2)2), and some pesticides, especially insecticides. To date, most clandestine operatives have generally sought fertilizer products that have potential explosive qualities. These materials, when combined with incendiary devices and mixed with specific fuel sources, can cause widespread destruction.

A more detailed list of agricultural products that may be used by terrorists or others for WMD weapons or other purposes can be obtained from the National Institute for Occupational Safety and Health (NIOSH) Pocket Guide to Chemical Hazards, the American Chemistry Council, and U.S. Department of Homeland Security. For ammonium nitrate fertilizers, contact the U.S. Department of Alcohol, Tobacco, and Firearms (ATF) at 1-800-800-3855. Additional information for the above is provided in the Contacts section of this brochure.

## Site Security Guidelines

Several organizations have developed guidelines for product security at agrichemical facilities. Two of the most recent guideline documents include a report by the Agricultural Retailers Association (ARA), Croplife America, and The Fertilizer Institute entitled "Guidelines To Help Ensure A Secure Agribusiness", and "Site Security Guidelines for the U.S. Chemical Industry", a partnership document by the American Chemical Council, Chlorine Institute, Inc., and the Synthetic Organic Chemical Manufacturers Association. Both publications include threat identification and self assessments to determine vulnerabilities, protective measures (management, physical, information) to address identified vulnerabilities, persistent training to reinforce employee awareness of security issues, and engrained, sound security programs and policies practiced by all employees. Both publications above may be obtained from the respective publishers per information provided in the Contacts section of this publication.

## Facility Vulnerability Assessment

The North Carolina Department of Agriculture and Consumer Services has developed the "Terrorism Threat Vulnerability Self Assessment Tool" to assist agribusinesses determine site vulnerability. It is an excellent assessment tool, and provides a score for specific areas, including (1) potential threat intentions (i.e. general awareness of terrorists or criminal threats to your facility), (2) specific targeting (i.e. does the nature of your organization's activity lead you to think it may be targeted), (3) visibility of the facility within the community, (4) on-site hazards, (5) population of the facility (number of people generally at the facility), (6) potential for mass casualties, (7) security environment and overall vulnerability to attack, (8) critical nature of facility products and services, (9) high-risk personnel, (10) organization communications, (11) security and response, (12) policy/procedures, and plans, (13) security equipment, (14) informational security, including mail and telecommunications, (15) employee health and potential for bio-terrorism, (16) and capacity to recognize and respond to a bio-terrorism event. Accumulation of scores of the above determines a facility's risk level. The assessment may be obtained from the North Carolina Department of Agriculture and Consumer Services at www.ncagr.com/industry_self-assessment.doc

The U.S. Office of Homeland Security has developed a system denoting various levels of threat to the U.S. During these threat conditions, agribusinesses are advised to take specific security actions. These recommended actions are as follows for a current level:

| National Threat | Business Actions |
|---|---|
| Severe | Complete actions at lower level<br>Listen to radio and TV for information and instructions<br>Work with local community leaders to meet immediate needs of the community<br>Determine need to close business in accordance with the written Emergency Response Plan<br>Be prepared to evacuate<br>Be ready to work with a smaller work group |
| High | Complete actions at lower level<br>Be alert to suspicious activity and report it<br>Review the written Emergency Response Plan<br>Determine the need to restrict access to the business or to provide security<br>Contact vendors and suppliers to confirm their emergency response procedures |

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| Elevated | Complete actions at lower level<br>Be alert to suspicious activity<br>Contact security service and determine availability of support |
| Guarded | Complete actions at lower level<br>Be alert to suspicious activity and report it<br>Establish a dialogue with emergency management, government agencies and utilities about disaster preparedness<br>Ensure emergency communications plan is updated and needed equipment is purchased |
| Low | Develop a written Emergency Response Plan<br>Develop an emergency communications plan to notify employees of activities<br>Develop a plan to relocate facilities if needed |

**Transportation Issues**

Since most targeted agricultural products indicated above are transported by motor vehicles, security of those vehicles and loads during transport is important and of heightened concern. Practices such as (1) having only qualified drivers with background checks operating the vehicles, (2) never leaving loaded vehicles unattended while in insecure areas, (3) maintaining integrity of secure seals on the loads from origin to destination, (4) developing varying routes of travel and following road plans, (5) developing schedules for contact and adhering to those periods for continuous communication while traveling, and (6) having an emergency plan and following the plan if needed should be standard procedures when transporting those materials.

Application equipment, especially aerial applicators, used in agricultural crop production is also targeted by terrorists as a means of delivery for both chemical and biological agents. Law enforcement agencies have documented several cases in which terrorists attempted to rent or confiscate airplanes normally used for aerial application of pesticides on crops. It is thought their intent was to use those vehicles to disperse harmful biological agents in vapors or aerosols over wide areas.

For additional information, see the American Chemistry Council's "Transportation Security Guidelines for the U.S. Chemical Industry". In addition to transportation issues, the publication also contains the hazard ranking of specific chemicals normally found at agrichemical sites. It may be obtained at www.americanchemistry.com

## Site Visits/Inspections

As a standard business and security practice, site managers should make periodic inspections during operating hours to ensure products are handled and stored in a secure manner, and site security policies and practices are being maintained. Any discrepancies should be noted, addressed, and reported immediately per the site security emergency response plan.

The U.S. Environmental Protection Agency's (EPA) Chemical Emergency Planning and Preparedness Office (CEPPO) is responsible for the Risk Management Program. Under the President's National Strategic Plan for Homeland Security, EPA is working to obtain information on retailer's efforts to secure products against terrorists and criminals. Given their objective, EPA recently began making "voluntary" and "non-enforcement" visits to agrichemical facilities that handle and store anhydrous ammonia and other chemicals that require a Risk Management Plan (RMP Rule) on file.

Facility operators should receive a telephone request and an agreement letter from EPA prior to the inspection. If an inspection is scheduled, the facility operator should establish the ground rules of the visit and manage the inspection as much as possible. He/she should establish who will be on the inspection team from EPA and the facility and what will be inspected. He/she should also thoroughly check the identification documents of the inspectors and ensure they are all EPA officials. The facility manager should make copies of all notes and evidence taken by the agency prior to their departure from the site, and should not allow pictures to be taken of anything that could compromise facility security. In addition, the Agricultural Retailers Association (ARA) and The Fertilizer Institute (TFI) requests notification of the pending inspection. ARA and TFI may be notified per the Contacts section contained herein.

**Incident Response Hotline Key Contacts**

Note: In an emergency, dial 911

Incident Response Hotline
Tennessee Office of Homeland Security
Jerry D. Humble, Major General, USMC (Retired), Director
Ph. (615) 532-7825
Email: jerry.humble@state.tn.us

Tennessee Emergency Management Agency
Director (non-emergency)
Ph. (615) 741-4332

Tennessee Bureau of Investigations
Larry Wallace, Director
Ph. (615) 744-4000

Tennessee Department of Transportation
Jerry Nicely, Commissioner
Ph. (615) 741-0349

**Other Key Contacts**

Tennessee Department of Agriculture
Ken Givens, Commissioner
Ph. (615) 837-5103

Tennessee Agricultural Production Association
Wayne Jackson, Board Member
Ph. (931) 477-0133

American Chemistry Council
1300 Wilson Blvd.
Arlington, VA 22209
Ph. (703) 741-5000
www.americanchemistry.com

Agricultural Retailers Association
Steve Hensley, Director of regulatory Policy
1156 15th Street N.W., Suite 302
Washington, D.C. 20005
Ph. (202) 457-0825
www.agretailer.com

Croplife America
Karen Reardon
Washington, D.C.
Ph. (202) 872-3864
Email: kreardon@croplifeamerica.org

Florida Fertilizer and Agrichemical Association
58 Fourth Street N.W., Suite 200
Post Office box 9326
Winter Haven, FL 33883-9326
Ph. (863) 293-4827
Email: mhartney@ffaa.org

Synthetic Organic Chemical Manufacturers Association
1850 M Street N.W., Suite 700
Washington, D.C. 20036
Ph. (202) 721-4100
www.socma.com

The Chlorine Institute, Inc.
2001 L Street N.W., Suite 506
Washington, D.C. 20036
Ph. (202) 775-2790
www.c12.com

The Fertilizer Institute
Pam Guffain, Director – Government Relations
820 First Street N.E., Suite 430
Washington, D.C. 20002
Ph. (202) 962-0490
Email: pguffain@tfi.org

U.S. Department of Health and Human Services
Public Health Service
Centers for Disease Control and prevention
National Institute for Occupational Health and Safety
NIOSH Publications Dissemination
Division of Standards Development and Technology Transfer
4676 Columbia Parkway
Cincinnati, OH 45226-9966

USDA Department of Agriculture
www.usda.gov