Reducing the Risk of Anhydrous Ammonia Theft

By Bob King, Director

Agriculture and Life Sciences – Monroe Community College

Due to increases in the number of anhydrous ammonia thefts on New York farms, it has become increasingly important to be more aware of the physical security of the storage and handling of this agricultural fertilizer. Anhydrous ammonia is a key ingredient in the manufacturing of methamphetamine, which is a powerful illegal drug that makes users feel euphoric and go days without sleep. Side effects of this drug include irritability, paranoia, aggression and violence. Thefts occur during the day and night, with most thefts occurring at night. Five to six gallons of anhydrous ammonia are sufficient to manufacture a large quantity of methamphetamine.

Tampering can cause the weakening of flow valves and result in malfunctioning valves that will leak or spill material. Physical contact and inhalation of anhydrous ammonia can result in serious injuries including chemical burns to the eyes, lungs and body.

Anhydrous ammonia theft can also increase the risk of an explosion especially when using an improper container for storage and transport. Anhydrous ammonia exerts the same pressure as a fully inflated car tire when placed in a closed container at 30 F.

Anhydrous ammonia is a known hazardous substance and creates a dangerous condition; consequently, farmers may liable for the harm to any farm visitor, including the trespassing thief. Documenting reasonable precautions to secure the chemical and posting signs warning of dangerous conditions may help reduce liability.

Since the amount of material stolen is relatively small compared to the total volume of the tank, farmers are often unaware that a theft has occurred. Signs of tampering also include footprints in the soil, stained soil, tank valves which are not tightly closed or which have been tampered with; items left near the tank such as duct tape, garden hoses, plastic tubing, bicycle inner tubes, or coolers; or the presence of barbeque grill propane tanks.

Extreme caution should be used when finding empty containers, especially small barbeque propane tanks. Propane tanks found with blue- or green-colored valves or with frost indicate anhydrous ammonia and compromised copper or galvanized valve fittings.

Light it up. At night, portable tanks and storage tanks should be kept in well-lit locations preferably with motion sensor lights that can be easily observed and monitored by family, employees, and neighbors at any time.

Just in time inventory. Inventory only what you need and receive it just before the time of application. Promptly return tender tanks back to your supplier. A just-in-time inventory schedule may significantly decrease your exposure to this crime. Bleed and remove hoses at the end of the day to remove excess liquid and prevent use of them to steal your material.

Keep it out of sight. When doing fieldwork, avoid storing portable tanks in plain view especially from a road. Move portable tanks to an inconspicuous location to avoid detection by a passerby.

Keep an eye on it. Whenever possible, take a quick look at your storage tanks and surroundings. When using the bathroom at night, take a quick look out your windows to observe any unusual activity on your farm, especially motion lights that may have turned on. Place brightly colored plastic wire ties or seals between the valve wheel and the roll cage to facilitate quick visual checks. If the tie or seal has been broken, it is likely that someone has tampered with your tank.

Report it. Call local law enforcement immediately about any suspicious vehicles or activity that you observed at any time near or on your farm. When possible, write down a license plate number and/or description of vehicle(s) and/or individual(s). Report it immediately. We highly recommend that you do not confront any suspicious vehicles and/or individuals. Individuals engaged in this crime are likely to be under the influence of methamphetamine, which can result in aggressive, violent and dangerous behaviors.

Know whom to call. When you are concerned about suspicious activities on your farm have a list of important phone numbers readily available so you can call at a moment's notice.

Call 911, Sheriff's Office or State Police.

Locking a tank valve has proven to be less than an effective measure, since perpetrators break off the lock and/or valve, which can result in, significant environmental and repair problems. Restricting access to a tank through the use of fencing and other physical barriers can be an effective deterrent.

Make sure that all tanks are labeled with caution labels to warn others of the highly hazardous nature of anhydrous ammonia.

Ultimately, sharpening your skills as an observer requires networking with your neighbors and community. The more you are aware of your surroundings, the more proficient you will be at reducing the risk of this opportunistic crime.

Sources: New York State Police; Offices of the Sheriff - Monroe, Livingston, & Wyoming