



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Hardin County Extension News Release

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Working Safely with Anhydrous Ammonia

Hardin County – Many farmers are applying anhydrous ammonia as a part of their spring planting season. Anyone working with anhydrous ammonia should be familiar with the safe use of the product, understand the potential for injury and know how to respond to an emergency.

There are several hazards associated to working with anhydrous ammonia in the field. One hazard is that anhydrous ammonia is stored under high pressure. An unintended release can occur if the equipment is not well maintained, equipment becomes damaged, or workers are not trained to follow exact procedures.

Additional hazards can be based on anhydrous ammonia's chemical properties. Contact with skin can cause freezing of tissue or chemical burns. Severe irritation to eyes can take place since anhydrous ammonia seeks out water. And because of the strong odor, inhaling anhydrous ammonia can irritate the lungs and respiratory system. Some simple suggestions when working with anhydrous ammonia in the field include the following guidelines.

Always have water readily available. This should include a squirt bottle of water with you and five gallons of emergency water mounted on the nurse tank. Personal protective equipment should include long sleeve clothing, goggles, chemical gloves, and respirator with approved cartridge. Wear the proper personal protective equipment when connecting or disconnecting nurse tanks from the applicator or when making minor repairs or adjustments in the field. Ensure that a set of personal protective equipment is located in the cab of the tractor and in any vehicle used to transport nurse tanks.

Follow the recommended procedures for connecting and disconnecting nurse tanks and applicators. Shortcuts can lead to unintended release or unexpected exposure. When changing nurse tanks or making field repairs, always work upwind of the applicator and the nurse tank. Applicator knives, flow meter, hose connections, bleeder valves, and nurse tank valves can be exposure openings for an unintended release.

When changing nurse tanks, park the tractor upwind before opening bleeder valves or disconnecting hoses. This can minimize the chance of anhydrous ammonia from entering the cab. Watch for pinch points and crush points when hitching the nurse tank to the applicator. Point the hose end away from you and make sure connectors and connection points are clean when coupling the nurse tank hose to the applicator.

Hand-tighten valve handles, over-tightening with a wrench can cause damage to the valve or seals. Ensure hitch pins are secure and secondary chains are attached before moving the nurse tank. Park nurse tanks (empty or full) downwind and away from neighboring houses, public areas, and businesses.

Additional information can be found on Ohioline with the “Safe Handling of Anhydrous Ammonia” fact sheet at: <https://ohioline.osu.edu/factsheet/aex-594>

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