



**Illinois Fertilizer &
Chemical Association**
Supply • Service • Stewardship

A Guide to Anhydrous Ammonia Regulations *for* Farmers Who Own Anhydrous Ammonia Storage Facilities and Farmers Who Own Anhydrous Ammonia Nurse Tanks

This Information Provided by the Illinois Fertilizer &
Chemical Association in partnership with:



Due to its hazardous nature, anhydrous ammonia is a highly regulated product. Owners of anhydrous ammonia storage facilities and anyone who owns anhydrous ammonia nurse tanks are subject to state and federal regulations pertaining to the storage, transfer, transportation and application of ammonia as well as maintenance of the equipment. Anhydrous ammonia is also classified as a hazardous material, making it one of the more potentially dangerous fertilizers used in agriculture. This brochure is designed as a guideline to assist farmers in complying with State and Federal regulations governing the transfer, transport and application of anhydrous ammonia. In Illinois, the major agencies that regulate anhydrous ammonia are as follows:

- ◆ The US and Illinois Departments of Transportation
- ◆ The US and Illinois Environmental Protection Agency
- ◆ The Department of Homeland Security
- ◆ The Illinois Department of Agriculture
- ◆ The Illinois Secretary of State
- ◆ The Illinois State Police
- ◆ The United States Coast Guard
- ◆ Many County and Local Units of Government



Farmers who own and operate ammonia facilities and/or ammonia nurse tanks are subject to the vast majority of regulations pertaining to anhydrous ammonia. This brochure provides an overview of the regulations. If you own an ammonia storage or nurse tank, you should also inform your insurance agent about the equipment you own and how much ammonia you may store on your farm at any one time. Compliance with ammonia regulations and proper stewardship of the product will ensure your safety, the safety of the product and the long-term viability of anhydrous ammonia for agricultural production.

Illinois Department of Agriculture Rules and Regulations Relating to the Ownership of Ammonia Storage and Nurse Tanks

Although farm operations enjoy some exemptions from federal regulations, Illinois Department of Agriculture Rules and Regulations Relating to the Handling of Anhydrous Ammonia do not offer any exemptions for farmers. For federal regulations, exemptions are noted in red in this document.

BASIC RULES

- ◆ Anhydrous ammonia storage facilities must be permitted by the IDA and meet setback requirements. Facilities must have an emergency sign with letters at least 2 inches high giving the name and phone number (including area code) of the owner, manager or agent of the anhydrous ammonia storage location. Inspection and maintenance conducted on **all** anhydrous ammonia equipment must be documented.
- ◆ Any person making, breaking or testing any ammonia connection, transferring ammonia or performing maintenance or repair on an ammonia system under pressure shall wear protective gloves impervious to ammonia and chemical splash goggles. A full face shield shall **not** be worn as a substitute for a primary eye protection device (goggles) but can be worn in addition to goggles.
- ◆ Any person required to handle, transfer, transport or otherwise work with ammonia shall be trained to understand the properties of ammonia, to become competent in safe operating practices, and to take appropriate actions in the event of a leak or an emergency. Once every 3 years you must attend an approved ammonia safety course offered by IFCA and the IL Dept of Agriculture. Go to www.ifca.com to also view a video on ammonia safety, proper procedures, first aid and emergency response for farmers.
- ◆ A nurse tank shall **not** be towed or parked in public places such as, but not limited to, school yards, shopping centers or hospital grounds.
- ◆ All nurse tanks shall be securely attached to the vehicle towing them by means of drawbars (tongue) with suitable hitch pins with clips and safety chains that are **permanently** attached to the nurse tank.
- ◆ All nurse wagons operating on public roadways shall display with a slow-moving vehicle emblem (SMV) of the type recommended by the American Society of Agricultural Engineers (ASAE) specification ASAE S 276.5 NOV 97.
- ◆ For first aid purposes each nurse tank shall be equipped with at least five gallons of clean water in a container mounted on top or side of the tank to provide easy access for flushing any area of the body contacted by ammonia.
- ◆ A deluge shower or 150 gallon water tank is required at each permanent storage facility.
- ◆ The maximum hose length from the nurse tank to the toolbar is 30 feet.
- ◆ The owner of anhydrous ammonia nurse tank is responsible for all the proper maintenance and upkeep of the nurse tank including but not limited to painting, pop-off valves, proper working gauges and valves, tires, running gear maintenance, proper DOT placarding and SMV sign.
- ◆ Filling of nurse tanks can **only** be conducted at state approved anhydrous ammonia storage sites.
- ◆ Nurse tanks can **not** be filled beyond the **85%** level. Filling nurse tanks **beyond 85%** can result in a catastrophic release of anhydrous ammonia.
- ◆ Nurse tanks must be inspected by the Illinois Department of Agriculture once a year to insure they are properly maintained. It is a violation of DOT regulations for anyone to fill a nurse tank that does not meet all the criteria required for hazardous material packing as outlined in federal DOT regulations.
- ◆ A 25 cent per ton fee must be remitted to the IDA on all agricultural fertilizer used in Illinois. Make sure your supplier is registered to sell fertilizer in Illinois and is remitting the tonnage fee to IDA.

Federal and State Department of Transportation Regulations Related to the Handling and Transportation of Anhydrous Ammonia

- ◆ Once an anhydrous ammonia nurse tank pulls out onto a public roadway, it falls under regulatory authority of USDOT, IDOT, the IL Secretary of State and Illinois Law Enforcement.
- ◆ Since anhydrous ammonia is classified by the U.S. Department of Transportation (DOT) as a hazardous material, all nurse tanks must be painted white and affixed with the proper DOT placarding. Nurse tanks must be registered with the Secretary of State and are required to have license plates.
- ◆ Nurse tanks are required to have a permanently affixed legible data plate detailing the specifications of the package (nurse tank). If the data plate is missing or is not clearly legible you must enroll in the Nurse Tank Inspection Program (NTIP) or the tank can not be used in ammonia service. Go to www.ifca.com or www.tfi.org for more information on this program. **Only R stamp welders can weld on nurse tanks.**
- ◆ Anhydrous ammonia is a USDOT placarded material, therefore you must come to a complete stop prior to crossing any active railroad tracks. Federal and State DOT regulations **prohibit** driving through a rail road crossing without coming to a complete stop while transporting a placarded hazardous material.
- ◆ **Farmers are exempt from needing a CDL with HAZMAT endorsement to haul less than 3,500 gallons of anhydrous ammonia.** However, if you offer anhydrous ammonia for sale and will transport the tanks to property other than your own, you must have a CDL with HAZMAT endorsement.
- ◆ DOT shipping papers are not required for anhydrous ammonia nurse tanks but are required for cargo tank motor vehicles greater than 3,500 gallons. **If you sell ammonia to anyone, you must also obtain a USDOT Hazardous Material Registration # and pay the annual registration fee.**
- ◆ If your farming operation grosses more than \$500,000 per year in revenue, you are required to have a DOT Transportation Security Plan. You are also required to conduct a Security Vulnerability Assessment.
- ◆ If you cross a state line with a nurse tank, you are required to register under the Uniform Carrier Registration and pay the appropriate fee based on the number of tanks crossing state lines.
- ◆ If you store over 10,000 lbs of ammonia, you may need to register with the Dept of Homeland Security.

USEPA Regulations for Storage of Anhydrous Ammonia

- ◆ **Farmer-owned storage facilities are exempt from the requirements to have a USEPA Risk Management Plan and implement a Risk Management Program.** However, if you store or sell ammonia for use other than on your own farm, you **must** comply with the RMP regulations. This includes registering the storage facility with USEPA, conducting a worst case accident scenario and hazard assessment analysis, documenting operating procedures and equipment maintenance and train employees on the RMP program.

Emergency Notification Requirements

- ◆ If you store ammonia you must notify the Illinois Emergency Management Agency and file a Tier 2 report indicating the amount of product stored and also provide a Material Safety Data Sheet to IEMA, your local emergency planning committee and local fire departments.
- ◆ If a release of ammonia greater than 18 gallons or 100 pounds occurs, you must immediately notify:
 - IEMA (800) 782-7860*
 - The National Response Center (800) 424-8802*
 - Your Local Emergency Planning Committee and Local Emergency Responders (Fire Dept, Sheriff Dept)*

For Assistance

This brochure is an overview of the regulations. Some of these requirements are complex and cannot be fully outlined in this document. The Illinois Fertilizer & Chemical Association has established fee-based services to assist farmers with compliance. You can contact the IL Dept of Ag to schedule an appointment to have your nurse tanks inspected and also consult with the Illinois DOT regarding transportation regulations. Help is a phone call away. Non-compliance with these laws can result in substantial civil and criminal penalties.

- ◆ **Illinois Fertilizer & Chemical Association** (309) 827-2774 or visit us at www.ifca.com
- ◆ **Illinois Department of Agriculture** (217) 785-8212
- ◆ **Illinois Department of Transportation** (217) 785-1181



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