## ARTICLE 7-12 ANHYDROUS AMMONIA REGULATION

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7-12-02	Anhydrous Ammonia Nurse Tank and Storage Container Lock Pilot Program [Repealed]
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# CHAPTER 7-12-01 ANHYDROUS AMMONIA STANDARDS

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#### 7-12-01-01. Adoption of standards.

- 1. The American national standard safety requirements for the storage and handling of anhydrous ammonia ANSI/CGA G-2.1-2014 is hereby adopted; except section 5.7.10.
- 2. The 2017 edition of the American society of mechanical engineers boiler and pressure vessel code, section II; section V; section VIII, division 1; and section IX are hereby adopted and incorporated by reference as a part of this article.
- 3. The 2017 edition of the national board inspection code, an American national standard, is hereby adopted and incorporated by reference as a part of this article.
- 4. The American society for nondestructive testing standard "SNT-TC-1A" is hereby adopted and incorporated by reference as a part of this article.
- 5. The 2016 edition of ASME B31.3, the American national standard for chemical plant and petroleum refinery piping, is hereby adopted and incorporated by reference as a part of this article.
- 6. The 2016 edition of ASME B31.5, the American national standard for refrigeration piping, is hereby adopted and incorporated by reference as a part of this article.
- The American petroleum institute standard 620, recommended rules for design and construction of large, welded, low-pressure storage tanks, is hereby adopted and incorporated by reference as a part of this article.

History: Effective July 1, 1996; amended effective June 1, 2005; April 1, 2013; July 1, 2020.

**General Authority:** NDCC 4.1-37-01 **Law Implemented:** NDCC 4.1-37-01

#### 7-12-01-02. Definitions.

The following definitions are in addition to those thirty-four definitions listed in ANSI/CGA G-2.1-2014, section 2.

- 1. "Accident or incident" means an event involving nurse tanks or storage containers and their appurtenances which results in damage to pressure vessels or their appurtenances, or both, requiring repair. Leakage or discharge of more than one hundred pounds [45.36 kilograms] of anhydrous ammonia will be considered an incident.
- "Anhydrous ammonia storage facility" means a bulk anhydrous ammonia storage facility with a storage container capacity exceeding six thousand gallons [22712.47 liters] which is owned or operated by a user or vendor of anhydrous ammonia. Anhydrous ammonia nurse tank storage lots are not included in this definition.
- 3. "Bulk delivery vehicle" means a United States department of transportation inspected and approved cargo tank.
- 4. "DOT specifications" means regulations of the United States department of transportation published in 49 CFR chapter 1.
- 5. "Existing anhydrous ammonia storage facility" means any permanent anhydrous ammonia storage facility constructed before July 1, 1985.
- 6. "Hydrostatic test" means a pressure test of a storage tank using water as a medium to the standards referenced in the national board inspection code.
- 7. "Labeled" means there is attached a label, symbol, or other identifying mark of a nationally recognized testing laboratory which makes periodic inspections of the production of such equipment and whose labeling indicates compliance with nationally recognized standards or tests to determine safe use in a specified manner.
- 8. "National board" means the national board of boiler and pressure vessel inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229, whose membership is composed of the various governmental jurisdictions who are charged with the enforcement of the provisions of the American society of mechanical engineers code.
- 9. "New anhydrous ammonia storage facility" means any permanent anhydrous ammonia storage facility constructed after July 1, 1985.
- 10. "Nurse tank" means an implement of husbandry meeting the definition of section 2.2 of the ANSI/CGA G-2.1 standard.
- 11. "Refrigerated storage facility" means an anhydrous ammonia storage facility utilizing tanks for the storage of anhydrous ammonia under refrigerated conditions.
- 12. "Registered pressure vessel" means a permanent storage container identified by a decal having a unique identification number, preceded by the letters "AA".
- 13. "Reinstalled pressure vessel" means a pressure vessel removed from its original setting and reerected at the same location or erected at a new location without change of ownership.
- 14. "Retail and storage facility" means an anhydrous ammonia storage facility selling or intending to sell anhydrous ammonia to the general public.
- 15. "Secondhand pressure vessel" means a pressure vessel of which both the location and the ownership have been changed after primary use.
- 16. "SNT-TC-1A" means the society for nondestructive testing standard for nondestructive testing of pressure vessel welds, material, and the testing of personnel making nondestructive tests.
- 17. "Storage facility" means an anhydrous ammonia storage facility transferring or filling anhydrous ammonia for its own use and not for sale to the general public.

- 18. "Tank car" means a pressure vessel designed to be permanently attached to or forming a part of a railcar structure in compliance with the department of transportation specifications (formerly ICC specifications), and having the approval of the association of American railroads.
- 19. "Wet fluorescent magnetic particle test" means a nondestructive test of interior tank welds using a magnaflux procedure with fluorescent lighting to detect surface cracks, using SNT-TC-1A standards.

History: Effective July 1, 1996; amended effective June 1, 2005; July 1, 2020.

**General Authority:** NDCC 4.1-37-01 **Law Implemented:** NDCC 4.1-37-01

#### 7-12-01-03. Administration and enforcement.

- 1. The administration and enforcement of North Dakota Century Code chapter 4.1-37 and this chapter is the responsibility of the agriculture commissioner.
- 2. The agriculture commissioner shall conduct initial and periodic inspection of anhydrous ammonia storage facilities to verify compliance with this chapter and any rules adopted under this chapter.
- 3. Owners, users, or vendors of new installations will not be issued an operator's license until the completed anhydrous ammonia storage facility site has been inspected by the agriculture commissioner and complies with this chapter and North Dakota Century Code chapter 4.1-37.
- 4. Owners, users, or vendors of anhydrous ammonia must notify the agriculture commissioner of storage containers to be used in North Dakota or brought into the state for temporary purposes.
- 5. Containers found, after inspection, to be defective or otherwise unsafe to operate, or disqualified by legal requirements, must be rejected by the agriculture commissioner, who may order the container immediately depressurized and taken out of service.
- 6. Defective conditions not posing an immediate hazard, noted during initial and periodic inspections, must be corrected in a timely manner. The time allowed for corrections to take place will be at the discretion of the agriculture commissioner.
- 7. Operating licenses must be posted in a conspicuous place at the plant or office of the owner, user, or vendor and available for inspection during regular business hours.
- 8. Anyone spilling one hundred pounds [45.36 kilograms] or more of anhydrous ammonia must report this as soon as possible to the national response center at 1-800-424-8802, to the North Dakota department of emergency services at 701-328-9921, and to the appropriate county emergency manager.
- 9. The agriculture commissioner may require compliance with any local siting requirements for the issuance or maintenance of an operating license.

History: Effective July 1, 1996; amended effective April 1, 2013; July 1, 2020.

**General Authority:** NDCC 4.1-37-01 **Law Implemented:** NDCC 4.1-37-01

#### 7-12-01-04. General requirements.

 Frequency of inspection. Existing anhydrous ammonia storage facilities must be inspected once every five years by the agriculture commissioner. New anhydrous ammonia storage facilities must be inspected by the agriculture commissioner prior to any license being issued, and at an interval of once every five years thereafter.

### 2. Minimum requirements for new storage containers other than refrigerated storage containers.

- a. American society of mechanical engineers constructed and so stamped;
- b. National board registered;
- c. Metal specified tensile strength not exceeding seventy thousand pounds per square inch [482636 kilopascals];
- Head and shell materials for storage containers made in accordance with fine grain practice;
- All welds postweld heat treated after construction, for all storage containers. An
  implement of husbandry does not require postweld heat treatment if the implement is
  fabricated with hot formed heads or with cold formed heads that have been stress
  relieved; and
- f. Storage containers exceeding six thousand water gallons [22712.4 liters] in capacity must be equipped with a manhole opening.

## 3. Minimum requirements for secondhand and reinstalled storage containers other than refrigerated storage containers.

- a. American society of mechanical engineers constructed and so stamped;
- National board registered or the manufacturer's data report furnished to the chief boiler inspector;
- Metal specified tensile strength not exceeding seventy-five thousand pounds per square inch [517500 kilopascals];
- d. Heat treated heads or hot formed heads and this indicated on the manufacturer's data report, in lieu of the entire vessel welds being postweld heat treated; and
- e. All postconstruction repairs and alterations made only by a valid holder of an "R" certificate of authorization from the national board.
- 4. Exception for secondhand and reinstalled storage containers. Metal specified tensile strength may exceed seventy-five thousand pounds per square inch [517500 kilopascals] for secondhand and reinstalled anhydrous ammonia storage containers when the container is relocated within North Dakota and the container has been wet-fluorescent magnetic particle tested by a qualified firm and any stress corrosion cracking found does not extend beyond the minimum required thickness for original maximum allowable working pressure (MAWP). The minimum required thickness must be determined by code calculation, using the original code of construction. If the stress cracking extends beyond the minimum required thickness the container cannot be used for anhydrous ammonia service. In all cases, all stress corrosion cracking must be removed.
- 5. **Requirements for refrigerated storage containers.** Refrigerated storage containers must be constructed in accordance with section 7 of the ANSI/CGA G-2.1 standard. All refrigerated ammonia piping used with refrigerated systems must conform to ASME B31.5, American national standard for refrigerated piping.

- 6. Hydrostatic test procedures. Hydrostatic test procedures must comply with the specific requirements of the national board inspection code and be conducted in a manner approved by the agriculture commissioner. At least one calibrated gauge must be used on the container tested. All air must be vented prior to making the test.
- 7. Wet-fluorescent magnetic particle test procedures. Wet-fluorescent magnetic particle test procedures must comply with SNT-TC-1A procedures and the specific requirements of ASME code, section VIII. The person conducting the test must be certified as a level II technician. This test may be witnessed by the agriculture commissioner, at the agriculture commissioner's discretion.
- 8. **Welded repairs or alterations, or both, to pressure containers.** Welded repairs or alterations, or both, to pressure containers must only be made by a firm in possession of a valid "R" certificate of authorization from the national board of boiler and pressure vessel inspectors.
- 9. **Requirements for welded piping.** Welders making welds to anhydrous ammonia system piping must be certified in accordance with ASME code, section IX, and must furnish a current QW-484 qualification form upon request. The welder must weld only within the range of the welder's qualifications. Defective weld must be rejected by the agriculture commissioner.
- 10. **Requirements for reinstalled containers and systems.** When a permanent storage container is moved and reinstalled, all fittings and appurtenances must comply with all requirements for new installations.

History: Effective July 1, 1996; amended effective April 1, 1998; April 1, 2013; July 1, 2020.

**General Authority:** NDCC 4.1-37-01 **Law Implemented:** NDCC 4.1-37-01

### 7-12-01-05. Specific requirements for nonrefrigerated anhydrous ammonia storage facilities.

#### 1. Facility siting requirements:

- a. The siting of the facility must comply with North Dakota Century Code section 4.1-37-05 and this compliance must be verified by the agriculture commissioner.
- b. The facility must be properly licensed by the board of county commissioners in which the facility is located and by the agriculture commissioner.
- c. The facility must be accessible to emergency vehicles at all times.
- d. A facility identification sign must be displayed stating the name, the 911 address, and telephone number of the nearest representative, agent, or owner. An emergency telephone number must also be displayed. This sign must be posted near the entrance of the facility. Letters must be at least two inches [50.8 millimeters] high, and the sign visible from no less than fifty feet [15.24 meters].

#### 2. Storage container requirements:

- a. The ASME manufacturer's data report must be provided when requested by the agriculture commissioner should repairs, alterations, or metallurgical data be required.
- b. The container must be ASME constructed, if installed after November 1, 1987.
- c. The container must be national board registered, if installed after November 1, 1987. For secondhand and reinstalled storage containers, a manufacturer's data report must be furnished to the agriculture commissioner if the container is not national board registered.

- d. The condition of the paint shall be such that no more than ten percent of the tank surface is corroded or missing paint.
- e. Container markings and/or decals must meet the requirements of ANSI/CGA G-2.1.
- f. Postconstruction repairs and alterations, if made, must meet the requirements of the national board inspection code and the proper documentation must be available for inspection if requested by the agriculture commissioner.
- g. Container fittings, nozzles, and welded seams must be in compliance with the code of construction as judged by the requirements of the national board inspection code.
- h. Supports and saddles adequately must support the container as required by ANSI/CGA G-2.1, and there must be no concentration of excessive loads on the supporting portion of the shell.
- i. A container liquid level gauge must be installed and be operable.
- j. A pressure gauge graduated from zero to four hundred pounds per square inch [0 to 2760 kilopascals] and designated for use in anhydrous ammonia service must be installed on the container.
- k. Safety valve manifolds meeting the requirements of ANSI/CGA G-2.1 must be installed between the container and the safety valves required to be installed.
- I. Container safety valves must be ASME and national board stamped.
- m. Container safety valves must be date current and in operable condition.
- n. Container safety valves must have rain caps in place.
- o. Installed safety valve capacity must comply with appendix B of ANSI/CGA G-2.1. The installed capacity must be sufficient with a manifold or manifolds in operation as designed by the manufacturer.

#### 3. Requirements for piping and appurtenances:

- a. Excess flow valves must be installed at all tank openings, or in lieu thereof, approved quick-closing internal valves may be installed which, except during operating periods, must remain closed.
- Main stop valves must be labeled for anhydrous ammonia service and be in good operating condition.
- c. Main stop valves must be labeled or color coded to indicate liquid or vapor service.
- d. System piping must be at least schedule 40 where welded and schedule 80 where threaded. Threaded and seal welded connections must be at least schedule 80. Piping must be at least ASTM A-53 grade B seamless or electric resistance welded (ERW) pipe. ASTM A-53 type F piping is prohibited.
- e. Welded piping must be welded by an ASME section IX certified welder, and proof of the certification must be available if requested by the agriculture commissioner.
- f. Threaded piping must not be used underground for new installations.
- g. Pipe and pipe fittings must not be cast iron, brass, copper, zinc, or galvanized.
- h. Flexible fittings or expansion joints, or both, must be used where necessary.

- i. Underground piping must be installed using approved corrosion protection.
- j. For new systems, the system piping must be pneumatically or hydraulically pressure tested to 1.1 times the design pressure of the system and the integrity of the system proven. A written report of the testing must be retained for a minimum of five years and be furnished to the agriculture commissioner upon request. Underground piping shall be evaluated at a minimum of every five years to ensure leak tightness. To perform the leak test, the underground piping must be isolated and pressurized to two hundred pounds per square inch. The test pressure of two hundred pounds per square inch must be maintained for a minimum of ten minutes. A report of the leak test must be retained for at least five years and furnished to the agriculture commissioner upon request. All tests must be performed with a calibrated gauge.
- k. Approved bulkheads or breakaways, or both, must be provided at nurse tank fill stations. Emergency shutoff valves must be in place on liquid and vapor piping before the bulkhead or breakaways, or both. Approved cables must be connected to the emergency shutoff valves and these cables can be activated both at the valves and at a remote location. Breakaway action will close the valves.
- I. Approved bulkheads or breakaways or both must be provided at truck unloading stations. There must be an emergency shutoff valve on the vapor piping on the system side of the bulkhead and a backcheck valve is installed on the liquid piping on the system side of the bulkhead. Approved cables must be connected to the emergency shutoff valve and these cables can activate the valve both at the valve and at a remote location.
- m. Date current hydrostatic relief valves must be installed wherever liquid may become trapped between closed valves.
- n. Transfer hoses must be date current and not be weather checked or cut to expose the cords and must comply with all provisions of ANSI/CGA G-2.1 except provision 5.7.10.
- o. Transfer pump, if used, must be rated for anhydrous ammonia service.
- p. A pressure gauge graduated from zero to four hundred pounds per square inch [0 to 2760 kilopascals] and designated for use in anhydrous ammonia service must be installed on the discharge side of the pump, before the bypass piping loop. This gauge must be a liquid filled gauge.
- compressors, if used, must be rated for anhydrous ammonia service.
- r. Approved pressure gauges and stop valves must be installed on the suction and discharge sides of the compressor.
- s. An approved date current pressure relief valve of sufficient capacity must be installed on the discharge side of the compressor prior to any shutoff valve.
- Locks and lock boxes must be installed on the main system stop valves, when the facility is unattended.
- u. The system must be leak free in operation.
- v. Adequate provisions for protection of exposed piping and appurtenances from moving vehicles at the facility must be in place.
- w. Loading platforms or other equivalent method must be used to allow safe filling of nurse tanks. Climbing on tires is not permitted for filling nurse tanks.

- x. Bleeder valves must be installed at truck unloading stations to relieve pressure prior to connecting or disconnecting the truck transfer hoses. The bleeder hoses must be vented to a suitable closed water container.
- y. Excess flow protection is required for nurse tank filling station risers to shut down ammonia flow should a transfer hose break or a pull-away occur. Storage facilities utilizing bulkheads with emergency shutoff valves below the bulkhead must install the required excess flow valves integral with the riser shutoff valves or as in-line excess flow valves. For these systems, an approved installed location cable must be used between the emergency shutoff valve actuator and the riser shutoff valve. Storage facilities utilizing breakaway devices with positive closure must install excess flow valves integral with the riser shutoff valve or as an approved in-line excess flow valve installed prior to the positive closure device. The installer must verify the operation of any excess flow valve covered by this section.

### 4. Requirements for safety equipment:

- The following personal safety equipment must be available at a readily accessible location:
  - (1) A minimum of two emergency escape-only respirators shall be provided at a prominent and marked location at the storage facility. The escape-only respirator and training must be in compliance with title 29 Code of Federal Regulations part 1910.134 section 12;
  - (2) One pair of protective gloves impervious to ammonia for each of the maximum number of employees that may be storing, handling, transferring, or otherwise working with anhydrous ammonia at the same time, plus one spare pair;
  - (3) Chemical splash goggles or chemical splash goggles with full-face shield to be worn over the goggles for each of the maximum number of employees that may be storing, handling, transferring, or otherwise working with anhydrous ammonia at the same time, plus at least one spare pair;
  - (4) One pair of protective boots impervious to ammonia:
  - (5) One "slicker suit" impervious to ammonia;
  - (6) Safety shower or open top container holding at least one hundred fifty gallons [567.8 liters] of clean water; and
  - (7) One class C fire extinguisher or class C-compatible fire extinguisher.
- b. A telephone, or other method of communication, is required to be on location at each anhydrous ammonia storage facility during transfer operations.

History: Effective July 1, 1996; amended effective April 1, 1998; June 1, 2005; April 1, 2013; July 1,

2020.

**General Authority:** NDCC 4.1-37-01 **Law Implemented:** NDCC 14.1-37-01

### 7-12-01-06. Specific requirements for nurse tanks.

- 1. The ASME manufacturer's data report must be provided, if requested by the agriculture commissioner, should repairs or alterations become necessary.
- 2. The container must be ASME constructed, if installed after November 1, 1987.

- 3. The container must be national board registered, if installed after November 1, 1987.
- 4. The data plate must be readable and not painted over or obscured.
- 5. The condition of the paint shall be such that no more than ten percent of the tank surface is corroded or missing paint. Tanks must be painted white or aluminum.
- 6. Container markings and decals must meet the requirements of ANSI/CGA G-2.1-2014:
  - a. "1005" department of transportation decal must be in place on sides and heads.
  - b. "ANHYDROUS AMMONIA" decal must be in place on sides and heads.
  - c. "INHALATION HAZARD" decal must be in place on each side.
  - d. Legible transfer and safety decals must be in place.
  - e. A legible decal depicting first-aid procedures to follow if injured by ammonia.
- 7. The container must be numbered and identified with the name and contact information of the owner.
- 8. A department of transportation-approved slow moving vehicle sign must be in place and in good condition.
- 9. Postconstruction repairs and alterations, if made, must meet the requirements of the national board inspection code and the proper documentation must be available for inspection if requested by the agriculture commissioner.
- 10. Container fittings, nozzles, and welded seams must be in compliance with the code of construction as judged by the requirements of the national board inspection code.
- 11. A container liquid level gauge must be installed and must be operable.
- 12. A pressure gauge graduated from zero to four hundred pounds per square inch [0 to 2760 kilopascals] and designated for use in anhydrous ammonia service must be installed on the container.
- 13. Container safety valves must be ASME and national board stamped.
- 14. Container safety valves must be date current and in operable condition.
- 15. Container safety valves must have rain caps in place.
- 16. The transfer hose, if installed, must be date current and not be weather checked or cut to expose the cords. If the transfer hose is not installed on the nurse tank, an approved male "ACME" type fitting with protective dust cap must be installed on the liquid withdrawal valve.
- 17. An "ACME" type fitting must be used to secure the transfer hose.
- 18. Protective gloves and Z87 rated goggles must be in a safety kit attached to the container or the frame of the wagon.
- 19. Five gallons [18.93 liters] of clean water in a container must be carried on the nurse tank.
- 20. A hydrostatic relief valve or approved built-in hydrostatic relief must be installed at the main liquid stop valve. This hydrostatic relief valve must be date current and equipped with a rain cap.

- 21. Protective caps must be in place for the main liquid and vapor connections.
- 22. Excess flow valves must be in place on the liquid and vapor connections at the tank. Excess flow valves may be incorporated into the main stop valves on the tank.
- 23. The wagon tires must be in a safe and serviceable condition, with no cords showing, and a tread of at least two-thirty-secondths of an inch.
- 24. The wagon must be equipped with two suitable safety chains and a hitch pin.
- 25. The wagon tongue and undercarriage must be in a condition to provide safe transport.
- 26. The pressure vessel and appurtenances must be leak free in service.
- 27. Fittings and safety valves must be protected from physical damage, such as rollover, by roll cages or other protective devices.
- 28. An implement of husbandry may be fabricated from steel having a specified tensile strength not to exceed seventy-five thousand pounds per square inch [517110 kilopascals].

History: Effective July 1, 1996; amended effective April 1, 1998; June 1, 2005; April 1, 2013; July 1, 2020.

**General Authority:** NDCC 4.1-37-01 **Law Implemented:** NDCC 4.1-37-01

### 7-12-01-07. Documented training.

- 1. Any person handling, transferring, transporting, or otherwise working with anhydrous ammonia at anhydrous ammonia storage facilities must be competent in safe operating practices and be able to take appropriate actions when faced with minor leaks as well as with emergency conditions.
- 2. Any person making, breaking, or testing any ammonia connection, transferring ammonia, or performing maintenance or repair on an ammonia system under pressure, at anhydrous ammonia storage facilities, must wear protective gloves and chemical splash goggles.
- 3. Documented training must occur initially and then at intervals of not less than once per year for those persons handling, transferring, transporting, or otherwise working with anhydrous ammonia at anhydrous ammonia storage facilities. Documentation must consist of signed forms indicating the type of training, the date the training occurred, the persons trained, and the supervisor or training coordinator. Signed forms must be kept on file for at least three years and made available for review by the agriculture commissioner during normal business hours.
- 4. Training may include audio and video media, demonstrations and lectures, but must include actual hands-on training for those persons initially required to handle, transfer, transport, or otherwise work with ammonia at anhydrous ammonia storage facilities. The type and amount of training must be consistent with the duties and responsibilities of the person at a particular storage facility. Personnel must be trained for and designated to act in emergency conditions.

History: Effective July 1, 1996; amended effective April 1, 2013.

**General Authority:** NDCC 4.1-37-01 **Law Implemented:** NDCC 4.1-37-01

### 7-12-01-08. Requirements for downloading anhydrous ammonia from a mobile storage container into a nurse tank.

- 1. Cargo tanks used as mobile storage containers must have current United States department of transportation certification and container labeling and proof of such certification must be furnished to the agriculture commissioner initially and within thirty days of the recertifications required by the department of transportation.
- 2. Adequately sized wheel chocks must be used to prevent movement of both nurse tanks and cargo tanks prior to the start of any transfer operations.
- 3. Cargo tanks must have all safety equipment required by ANSI/CGA G-2.1-2014:
  - a. At least five gallons [18.93 liters] of clean water in a container;
  - b. One pair of protective gloves impervious to ammonia;
  - c. A full facepiece gas mask with an ammonia canister and at least one spare canister; and
  - d. Chemical splash goggles.
- 4. Nurse tanks must be equipped with all safety equipment required by ANSI/CGA G-2.1-2014:
  - a. At least five gallons [18.93 liters] of clean water in a container;
  - b. A legible decal depicting step-by-step ammonia transfer instructions; and
  - c. A legible decal depicting first-aid procedures to follow if injured by ammonia.
- 5. Transfer operations must take place:
  - a. Only on firm, well-prepared, level surfaces;
  - b. Only during daylight hours, or with proper lighting;
  - c. Only on the owner's or consignee's own property, to include rented or leased property;
  - d. At least fifty feet [15.24 meters] from the line of any adjoining property which may be built upon, or any highway or railroad mainline;
  - e. At least four hundred fifty feet [137.16 meters] from any place of public assembly or residence:
  - f. At least seven hundred fifty feet [228.6 meters] from any institutional residence; and
  - g. No closer than one mile [1.61 kilometers] from any city limits.
- 6. Transfer operations that transfer anhydrous ammonia directly from a bulk delivery vehicle to a separate cargo tank not connected to a truck are prohibited.
- 7. Designated downloading sites must be approved by local jurisdictions prior to licensing. Any additional siting or emergency response requirements of the local jurisdiction (county and township) must be complied with fully.
- 8. Systems mounted on trucks, semitrailers, and trailers for transportation of ammonia must follow the requirements of CGA G-2.1-2014 as well as all United States department of transportation requirements and must be connected to a mode of transportation while in use.
- 9. Mobile storage containers may not be used for permanent anhydrous ammonia storage.

History: Effective July 1, 1996; amended effective April 1, 1998; June 1, 2005; April 1, 2013; July 1,

2020.

General Authority: NDCC 4.1-37-01 Law Implemented: NDCC 4.1-37-01