

# Ohio Administrative Code

Rule 901:5-3-13 Systems mounted on farm equipment for the delivery of ammonia.

Effective: November 18, 1978

### (A) Design and construction of containers

Containers shall be designed and constructed in accordance with rule 901:5-3-03 of the Administrative Code;

#### (B) Mounting containers

- (1) A suitable "stop" or "stops" shall be mounted on farm equipment or on the container in such a way that the container shall not be dislodged from its mounting due to the farm equipment coming to a sudden stop. Back slippage shall also be prevented by proper methods;
- (2) A suitable "hold-down" device shall be provided which will anchor the container to the farm equipment at one or more places on each side of the container;
- (3) When containers are mounted on four-wheel farm equipment, care shall be taken to insure that the weight is distributed evenly over both axles;
- (4) When the cradle and the container are not welded together, suitable material shall be used between them to eliminate metal-to-metal friction.

#### (C) Container appurtenances

- (1) All containers shall be equipped with a fixed maximum liquid level gage;
- (2) All containers with a capacity exceeding two hundred fifty gallons shall be equipped with a pressure gage having a dial graduated from zero to four hundred psig;
- (3) The filling connection shall be fitted with combination back-pressure check valve and excess



flow valve; one double or two single back-pressure check valves; or a positive shut-off valve in conjunction with either an internal back-pressure check valve or an internal excess flow valve;

- (4) All containers with a capacity exceeding two hundred fifty gallons shall be equipped for spray loading or with an approved vapor return valve;
- (5) All vapor and liquid connections, except safety relief valves and those specifically exempt in rule 901:5-3-03 of the Administrative Code, shall be equipped with approved excess flow valves or may be fitted with quick-closing internal valves which, except during operating periods, shall remain closed:
- (6) Fittings shall be protected from physical damage by means of a rigid guard designed to withstand static loading in any direction equal to twice the weight of the container and lading using a safety factor of two based upon the ultimate strength of the material used. If the guard is fully enclosed, the safety relief valves shall be properly vented through the guard;
- (7) If a liquid withdrawal line is installed in the bottom of a container, the connections thereto, including hose, shall not be lower than the lowest horizontal edge of the farm equipment axle;
- (8) Provision shall be made to secure both ends of the hose while in transit.
- (D) Marking of container

There shall appear on each side and on the rear end of the container in letters at least four inches high, the words "ANHYDROUS AMMONIA".

- (E) Marking of appurtenances
- (1) All container openings, except safety relief valves, liquid level gaging devices, and pressure gages shall be identified by legend or color code as specified in rule 901:5-3-04 of the Administrative Code:
- (2) Instructions for loading and unloading procedures shall be required on all containers.



## (F) Farm equipment

- (1) Any farm equipment shall be securely attached to the vehicle drawing it by means of drawbars supplemented by suitable safety chains;
- (2) Any farm equipment shall be constructed so that it will follow substantially in the path of the towing vehicle and will prevent the towed farm wagon from slipping or swerving dangerously from side to side and shall display a slow moving vehicle emblem;
- (3) Each piece of farm equipment transporting anyhydrous ammonia shall carry a container of at least five gallons of water and shall be equipped with rubber gloves and either a full face mask, or a pair of tight-fitting goggles, or one full face shield. The driver shall be instructed in their use and the proper action to take to provide for his safety.