

WAC 296-826-50025 Systems mounted on farm trucks or trailers for transportation of ammonia.

Important:

This section applies to containers of three thousand gallons capacity or less and pertinent equipment mounted on farm trucks or trailers used for the transportation of ammonia.

In addition to this section, you need to follow the Appurtenances requirements for all systems, WAC 296-826-50005.

(1) You must make sure all containers are equipped with a fixed maximum liquid level gauge.

(2) You must make sure vapor and liquid connections have either of the following:

(a) An approved excess flow valve; or

(b) An approved quick-closing internal valve that remains closed except during operation.

EXEMPTION: The following do not need to be fitted with excess flow valves:

1. Safety relief valves;

2. Those with openings from the containers or through fittings that are attached directly onto the container where pressure gauge connections are made as long as the openings are not larger than a No. 54 drill size.

(3) You must provide one or more spring-loaded safety relief valves, or an equivalent type, on all containers, that do all of the following:

(a) Discharges away from the container in an upward, unobstructed manner into the atmosphere;

(b) Has raincaps that allow free discharge of the vapor and prevent the entrance of water;

(c) Has a method for draining accumulated condensation;

(d) Has a start to discharge, related to the design pressure of the container, according to Table 6, Safety Valve Start to Discharge Rate;

(e) Are arranged to minimize the possibility of tampering;

(f) Provided, when the pressure setting adjustment is external, with a means of sealing the adjustment;

(g) Has direct communication with the vapor space of the container.

(4) You must make sure shut off valves are not installed between the safety relief valve and the container or system. A shut off valve may be used if arranged so that the required capacity flow is maintained.

EXEMPTION: You are exempt from the requirement not to install the shut off valve between the safety relief valve and the container or systems in the following situations:

1. A three-way valve installed under two safety relief valves, each with:

a. The required rate of discharge; and

b. Installed to allow either of the safety relief valves to be closed off but not at the same time.

2. Two separate relief valves are installed with individual shut off valves.

The two shut off valve stems must be mechanically interconnected to allow the full required flow of one safety relief valve at all times.

3. When a safety relief valve manifold that allows:

a. One valve of two or more to be closed off; and

b. The remaining valve or valves will provide not less than the rate of discharge shown on the manifold nameplate.

(5) You must secure both ends of the hose while in transit.

(6) You must make sure all containers with a capacity exceeding two hundred fifty gallons are equipped with both of the following:

(a) A pressure gauge with a dial graduated from 0-400 psig; and

(b) A method for spray loading or with an approved vapor return valve.

(7) You must follow additional requirements found in Table 12, Appurtenances for Systems Mounted on Farm Trucks or Trailers.

Table 12
Appurtenances for Systems Mounted on Farm
Trucks or Trailers

If you have:	Then make sure they:
Filling connections	Are fitted with one of the following: <ol style="list-style-type: none"> 1. A combination back-pressure check valve and excess flow valve. 2. One double or 2 single back-pressure check valves. 3. A positive shut off valve used with either an: <ol style="list-style-type: none"> a. Internal back-pressure check valve; or b. Internal excess flow valve.
A fully enclosed guard	Have properly vented safety relief valves.
Fittings	Are protected from physical damage by a rigid guard designed: <ol style="list-style-type: none"> 1. To withstand static loading in any direction equal to twice the weight of the container and lading. 2. With a safety factor of 4 based on the maximum strength of the material used.
Liquid withdrawal lines installed in the bottom of the container	Have connections, including the hose that are not lower than the lowest horizontal edge of the truck axle.
Columnar-type gauges	<ol style="list-style-type: none"> 1. Are shielded against the direct rays of the sun. 2. Are equipped with all of the following: <ol style="list-style-type: none"> a. Shut off valves having metallic hand-wheels; b. Excess flow valves; c. Extra heavy glass that is adequately protected with a metal housing applied by the gauge manufacturer.
Hydrostatic relief valves	Are installed between each pair of valves in the liquid ammonia piping or hose.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050. WSR 15-23-086, § 296-826-50025, filed 11/17/15, effective 12/18/15. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 06-10-067, § 296-826-50025, filed 5/2/06, effective 9/1/06.]