

**WAC 296-826-50030 Systems mounted on farm equipment for ammonia application.**

**Important:**

This section applies to systems mounted on farm equipment and used for the filed application 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 each container has a fixed maximum liquid-level gauge.

(2) 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 in the following ways:

(i) Away from the container in an upward, unobstructed manner into the atmosphere.

(ii) Not in or beneath a building.

(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.

(3) 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.

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

4. 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.

(4) You must follow additional requirements found in Table 13, Appurtenances for Systems Mounted on Farm Equipment for Ammonia Application.

Table 13  
Appurtenances for Systems Mounted on Farm  
Equipment for Ammonia Application

If you have:	Then make sure they:
Filling connections	Are fitted with one of the following: <ol style="list-style-type: none"> <li>1. A combination back-pressure check valve and excess flow valve.</li> <li>2. One double or two single back-pressure check valves.</li> <li>3. A positive shut off valve used with either an:</li> </ol>

If you have:	Then make sure they:
	<ul style="list-style-type: none"> <li>a. Internal back-pressure check valve; or</li> <li>b. Internal excess flow valve.</li> </ul> <p><b>Exemption:</b> An excess-flow valve is not required in either of the following:</p> <ul style="list-style-type: none"> <li>1. Vapor connection providing you meet both of the following: <ul style="list-style-type: none"> <li>a. The controlling orifice is not in excess of 7/16 of an inch in diameter; and</li> <li>b. The valve is hand-operated (attached hand-wheel or equivalent) shut off valve; or</li> </ul> </li> <li>2. In the liquid withdrawal line if the controlling opening between the contents of the container and the outlet of the shut off valve do not exceed 7/16 inch in diameter.</li> </ul> <p>Note: To assist in filling applicator tanks, you are allowed to bleed vapors into the open air if you meet the above requirements.</p>
Columnar-type gauges	<ul style="list-style-type: none"> <li>1. Are shielded against the direct rays of the sun.</li> <li>2. Are equipped with all of the following: <ul style="list-style-type: none"> <li>a. Shut off valves having metallic hand-wheels;</li> <li>b. Excess flow valves;</li> <li>c. Extra heavy glass that is adequately protected with a metal housing applied by the gauge manufacturer.</li> </ul> </li> </ul>
An applicator tank that is both of the following: <ul style="list-style-type: none"> <li>1. Trailed; and</li> <li>2. The metering device is remotely mounted (for example on a tractor tool bar)</li> </ul>	Use an automatic break-away type, self-closing, coupling. <p>Note:</p> <ul style="list-style-type: none"> <li>1. Metering devices may be connected directly to the tank withdrawal valve.</li> <li>2. A union type connection is acceptable between the tank valve and metering device.</li> </ul>
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, § 296-826-50030, filed 11/17/15, effective 12/18/15. Statu-

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06-10-067, § 296-826-50030, filed 5/2/06, effective 9/1/06.]