

1513.0330 PRESSURE RELIEF DEVICES.

Subpart 1. **Required valves.** A container must be provided with one or more pressure relief valves of spring-loaded or equivalent type which comply with items A to C.

A. Relief valves must be installed in a manifold so that they can be replaced while the container remains pressurized.

B. The discharge from pressure relief valves must be vented away from the container, upward and unobstructed to the open air to an area such that persons, property, and the environment will not be harmed. Vent pipes must not be restrictive or smaller in size than the pressure relief valve outlet connection. All pressure relief valves must have rain caps that will allow free discharge of the vapor and prevent the entrance of water. Provision must be made for draining condensate which may accumulate.

C. Noncorrosive vent pipes from two or more pressure relief devices located on the same unit, or similar lines from one or more different units, may be run into a common header, provided the cross-sectional area of the header is at least equal to the sum of the cross-sectional areas of the individual vent pipes.

Subp. 2. **Rate of discharge.** The rate of discharge of spring-loaded pressure relief valves installed on underground containers may be reduced by not more than 30 percent of the rate of discharge specified in part 1513.1100. Containers so protected must not be uncovered after installation until the liquid ammonia has been removed. Containers which may contain liquid ammonia before being installed underground, and before being completely covered with earth, are to be considered aboveground containers when determining the rate of discharge requirements of the pressure relief valves.

Subp. 3. **Discharge from underground installations.** On underground installations where there is a probability of the manhole or housing becoming flooded, the discharge from vent lines must be located above the high water level. Manholes or housings must be provided with ventilated louvers or their equivalent, the area of such openings equaling or exceeding the combined discharge areas of the pressure relief valves and vent lines which discharge their content into the manhole housing.

Statutory Authority: *MS s 18C.121*

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