

567—49.22(455B) Backflow prevention for chemical injection systems for nonpotable wells.

49.22(1) *Backflow prevention for irrigation.* Where a chemical injection system is connected directly to a well used for irrigation that is not used as a potable water supply, a single-check spring-loaded backflow preventer shall be installed between the point of chemical injection on the pump discharge piping and the well, in accordance with the manufacturer's instructions. The check valve shall withstand a minimum hydraulic pressure of 150 psi without leaking. The backflow device shall be provided with:

- a. Valving so that water can be drained from the system to prevent freezing;
- b. A vacuum relief valve to prevent backsiphoning of chemicals into the well;
- c. An automatic low-pressure drain at least $\frac{3}{4}$ inch in diameter, positioned so that when draining occurs liquid will flow away from the well. This drain shall be at least six inches above grade, and shall quickly drain the check valve water when operation of the well pump is discontinued;
- d. A watertight seal around the check valve; and
- e. An inspection port four inches in diameter to allow inspection of check valve operation.

49.22(2) *Pump control interconnection.* The well pump and the chemical injection pump shall be electrically connected so that, when the well pump stops, the chemical pump will shut off automatically.

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