

- (2) for buildings and structures other than single-family residences, an appropriately sized back flow prevention device in the water service line between the booster pump and the water main.

§ 1-1112 Cross Connections

- (a) There shall be no connection between:
 - (1) Any component of a public water system and a potable water source or other components of the potable water supply.
 - (2) A well that is not a potable water source (e.g., irrigation wells and wells used for closed loop geothermal systems) and a potable water source or other components of the potable water supply.
 - (3) A well used for an open loop geothermal system and a potable water source, unless the requirements in Subsection (b) are met.
 - (4) Any pipes, pumps, or tanks that would allow non-potable water or contaminants to be discharged or drawn into a potable water source or other components of the potable water supply.
- (b) Open loop geothermal systems intended to circulate groundwater within a potable water supply may be connected to a potable water source provided the following requirements are met:
 - (1) No additive is added to the re-circulated groundwater.
 - (2) The heat exchange medium in the system is R-410A or a different heat exchange medium approved by the Secretary.
 - (3) The system has a low-pressure safety cutout circuit that will turn off the system when there is a pressure leak in the heat exchange medium containment vessel.
 - (4) All electrical components of the system are properly grounded to prevent potential electrolysis of metals.
 - (5) In the event that the heat exchange unit is disconnected as a heating or cooling source, all piping associated with the unit shall either be capped and labeled or removed.
 - (6) Neither steam condensate nor cooling water from engine jackets or other heat exchange devices shall be returned to a potable water supply.
- (c) Water loading stations that are designed to fill potable water vessels, containers, or vehicles with water from a potable water supply shall meet the following requirements:
 - (1) There shall be an air gap device between the potable water supply and water vessels being filled to prevent back flow into the supply.
 - (2) Hose inlets and outlets used at the station shall not come in contact with the ground, hands, or other sources of contamination.
 - (3) The hose bibb for the water loading station shall be equipped with a vacuum breaker or backflow preventer.
- (d) Drains from pits containing air relief and blow off valves shall not connect directly to sanitary sewer service or sanitary sewer collection lines nor shall they discharge at a point that will permit possible back-siphonage.