



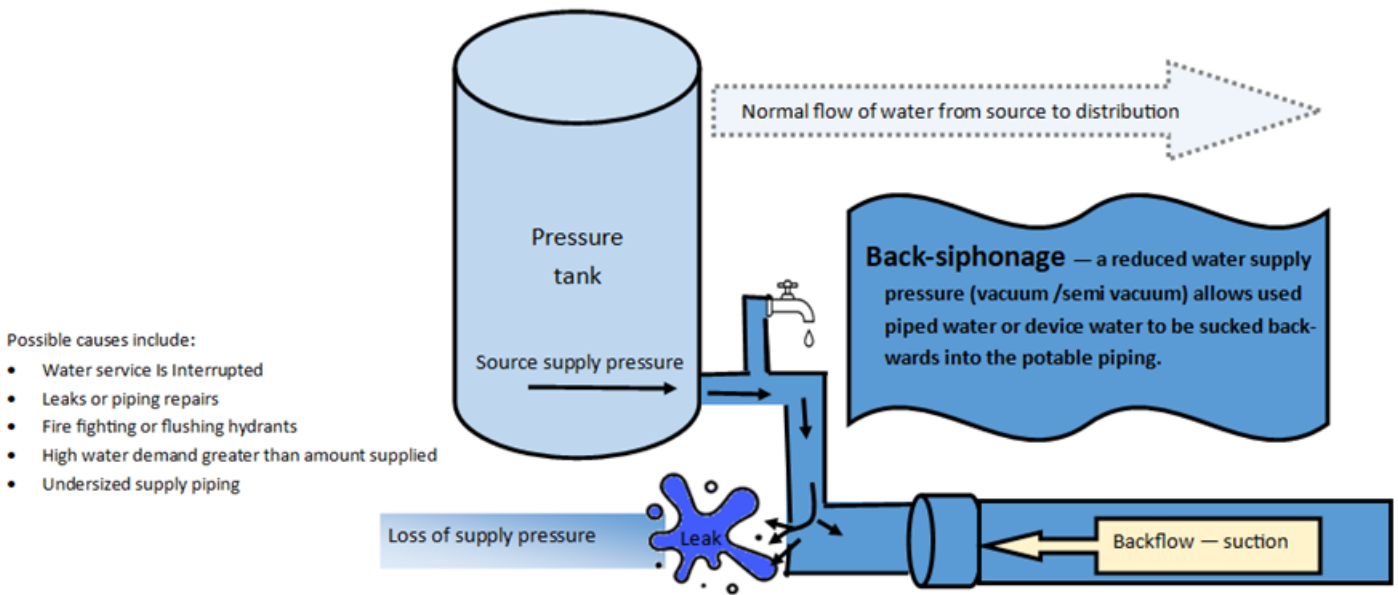
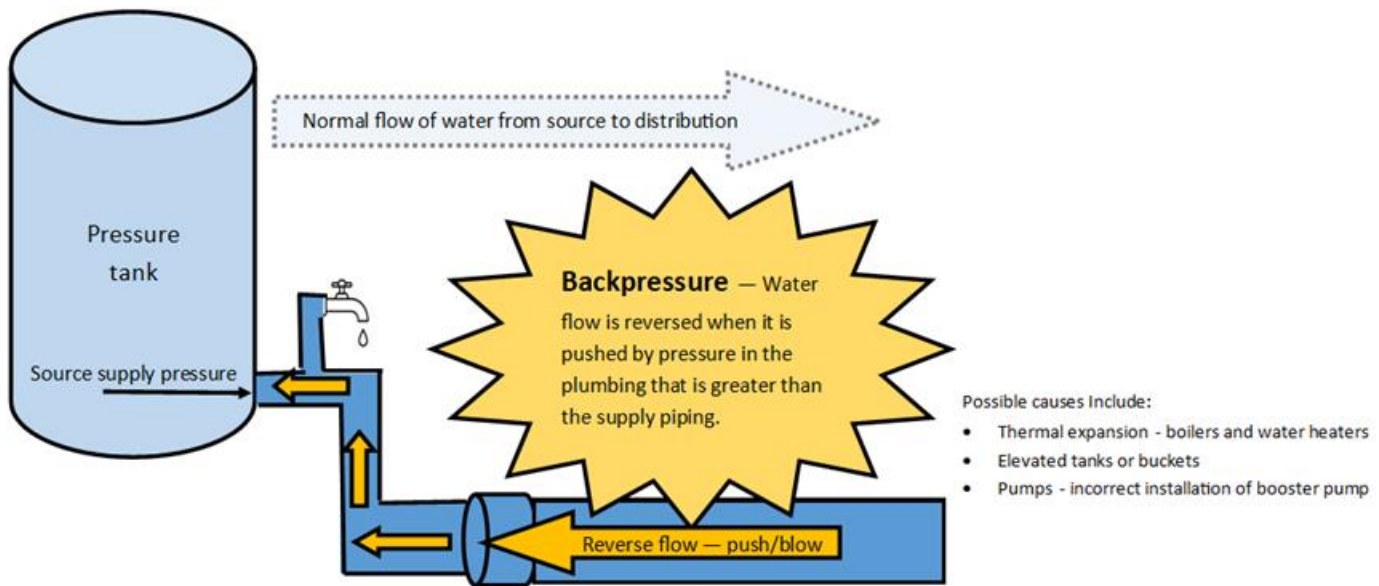
Common cross connections:

Water System Cross Connection Control Options

A cross connection is a physical connection between a possible source of contamination and the public drinking water system piping. This connection, if not properly protected, can allow contaminants into the drinking water system. Contamination can occur due to backflow.

WHAT IS BACKFLOW?

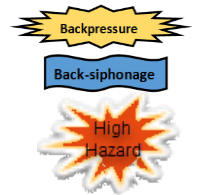
Backflow is the unwanted reverse flow (upstream) of water or substances into the distribution piping of a potable water supply. Backflow – is caused by back-pressure (blow/push forces) and back-siphonage (suction).



All backflow prevention devices protect against back-siphonage. However, air gaps and some mechanical devices are not acceptable for the protection against back-pressure.



HOSE CONNECTION CROSS CONNECTION PROTECTION



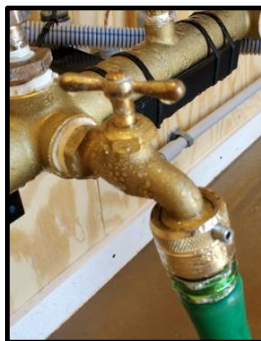
Hoses attached to faucets without built in anti-siphon protection create cross connections.

1. Acceptable for low hazard and high hazard installations
2. Not allowed for continuous pressure except for campgrounds and marinas (SPS 382.41(4)(c)1.a.)
3. Maximum of ten feet of water column backpressure (SPS 382.41(4)(c)2.)
4. No valve allowed downstream (SPS 382.41(4)(c)1.b.)
5. Newly constructed wall hydrants installed after March 1, 1994 should have backflow protection built in the device
6. ASSE standard is visible on the device

HOSE CONNECTION VACUUM BREAKER - ASSE 1011, (drain manually)



Examples



HOSE CONNECTION VACUUM BREAKER - ASSE 1052, (self/automatic draining, may be field tested)

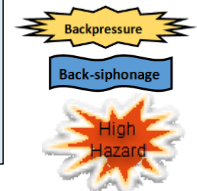
Example



WALL HYDRANT, FROST PROOF AUTOMATIC DRAINING ANTI-BACKFLOW TYPE VACUUM BREAKER

WALL HYDRANT – ASSE 1019 A or B (self/automatic draining allows hose to remain attached)

WALL HYDRANT – ASSE 1053 Dual Check Backflow Preventer, Freeze Resistant – (self/automatic draining may be field tested)



Examples

