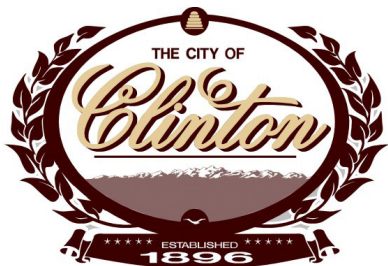


cross connections

in Household Plumbing

Clinton City is hard at work to deliver the purest water possible to your home. However, once the water enters your property, there are problems that may occur due to improper changes in your plumbing system.



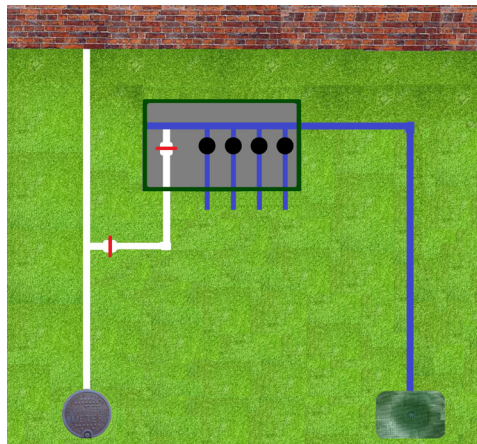
What is a cross connection?

A cross-connection is any temporary or permanent connection between a public drinking water system and any source or system containing nonpotable water or other substances. An example is the piping between a public drinking water system and a secondary irrigation system.

Backflow

Backflow occurs whenever there is a flow reversal and water from the customer's plumbing system goes back into the public water system.

Back Pressure is the reversal of normal flows caused by a high pressure water source being connected to the drinking water system such as the pressure irrigation/secondary water system. Water pressure in the drinking water system is lower than that in the pressure irrigation system. A connection between the two systems will result in irrigation water flowing into the drinking water system.



An illegal cross connection of the drinking water system (white pipe) and the pressure irrigation system (blue pipe).

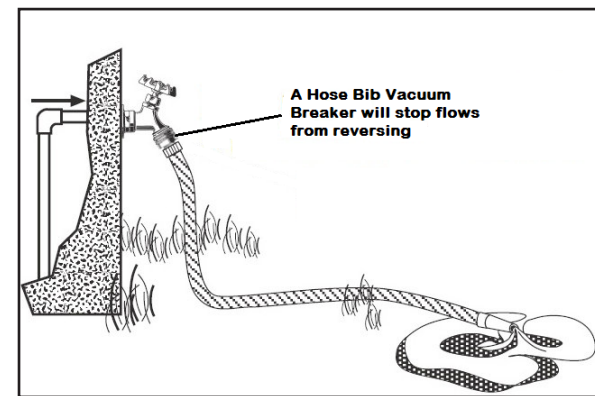
A connection between the two systems even temporarily is not allowed in Clinton City.

This type of illegal connection caused the backflow of thousands of gallons of untreated secondary water into the drinking water system resulting in boil orders issued for the entire city at great expense.

An inadequately protected cross connection in the home could result in a backflow situation. Backflows due to cross-connections can contaminate drinking water leading to sickness and even death.

Backflows are caused in two ways: **backpressure** or **back siphonage**.

Back Siphonage is the reversal of normal flow in a system caused by negative pressure. A vacuum is created when there is a stoppage of the water supply due to firefighting or mainline breaks.



Outside faucets can create back siphonage.

Leaving the end of a hose in a swimming pool or a bucket of soapy water or connected to a simple vacuum weed or insecticide sprayer can have dangerous consequences if a backflow situation occurs.