

Residential Customer Requirements

The State requires each public water system owner to establish a program for cross connection control and backflow prevention. Such program is designed to prevent contamination of drinking water.

Contamination of the drinking water may occur under backsiphonage or backpressure conditions, whereby contaminants are siphoned or forced back into the drinking water supply. Backsiphonage of contaminants may occur when there is a pressure drop, creating a suction or partial vacuum in the system. It may happen during a waterline break or high usage in the water system, such as heavy consumption of firefighting situations (when fire hydrants are available). Backpressure may occur when there are pumps or boilers on the water system, which produce pressures higher than water system pressures.

At the residential level, various means of protection are available to protect against backflow and avoid contamination of the drinking water.



Residential Premise Examples	
Potential Cross Connection Sites	Protection Examples
Swimming Pools	Air Gap separation between Water Supply Line and Top Edge of Swimming Pool
Hose Bib Connections (Outside Water Spigots) when water asiprators are used to spray Chemicals and Detergents	Hose Bib Vacuum Breaker or Atmospheric Vacuum Breaker downstream of the last cutoff valve.
Water Softeners	Air Gap seperation between Water Supply Line and Brining Tank
Frost-Proof Hydrants	An approved hydrant or approved backflow preventer (Pressure Vacuum Breaker, Double Check Valve Assembly, or other system recommended by the manufacturer) in the Waterline leading to the Hydrant.
Connections to other Water Sources such as Springs, Individual Wells, Cisterns, etc.	No connection is allowed between the public and private water supply.
Hose Connections at Laundry Tubs	Hose Bib Vacuum Breaker or Atmospheric Vacuum Breaker downstream of the last cutoff valve.
Booster Pumps	Low Pressure cut-off switch on pump suction line or device, depending on installation type.
Storage Tanks (Excluding Hot Water Tanks)	Air Gap seperation between Water Supply outlet and Top Edge of the Tank
Photo Developing Sinks	Air Gap Separation between Water Supply Outlet and Top Edge of the Sink, or Atmospheric Vacuum Brekaer Downstream of the Last Cutoff Valve
Lawn Irrigation Systems	Reduced Pressure Principle Assembly (RP), Pressure Vacuum Breaker (PVB) are common assemblies used.