

Quick Facts and Definitions

Two Main Backflow Devices

Reduced Pressure Assembly Device (RP)

Double Check Valve Assembly Device (DCVA)

Irrigation

Annual test for irrigation backflow devices are due upon spring start-up, April 1 through June 28.

Point of Entry (POE)

As of January 1, 2017, all commercial and industrial facilities are required to have a backflow (POE) device installed before the first use of water.

Fire Protection

All fire protection system classification's 1-3, must have a minimal double check valve assembly (DCVA). Classifications 4-6 must have a reduce pressure backflow device.

Site Inspections

All commercial and industrial customers of MLGW will be inspected to identify possible or potential hazards to the public water system.

Reduced Pressure Assembly

A reduced pressure zone type backflow preventer consists of two spring-loaded resilient seated check valves in a series. A zone exists between the two valves with a relief valve that discharges water to the atmosphere with less than a minimum two psi differential pressure. It must have tight closing valves before and after the unit with appropriate test cocks on the device. Only devices approved by the Cross Connection Program shall be installed.

MLGW's Cross Connection Control Program



In order to protect the public's health and drinking water quality, Memphis Light, Gas and Water has established a Cross Connection Control Program. This program establishes requirements for residential, commercial and industrial customers to prevent potential hazard to MLGW's water system.

For more information go to
mlgw.com/commercial/crossconnection
or call 901-528-7757.



What is a Cross Connection?

A Cross Connection is any actual or potential connection between your drinking water system and any non-potable source that could result in contamination of the potable water system.

What is Backflow?

Backflow occurs when the water in your pipes goes in the opposite direction of normal flow. There are two conditions that cause backflow:

Backpressure -

when the pressure in your pipes is greater than the pressure in the water distribution system.

Backsiphonage -

when there is a sudden reduction of pressure in the water distribution system that causes fluids (water, chemicals, etc.) from your pipes to be sucked into the water distribution system.

Memphis Case History of Backflow

In 1982, a local business complained that their drinking water was a bright yellowish-green color when they came to work every morning. After they flushed their pipes, the water would be clear for the remainder of the day, but would return to the same color the next morning.

A laboratory analysis of a sample of the water determined that the drinking water had an excess of 225 parts per million of chromate. The allowable upper limit by E.P.A. standards is 0.05 parts per million.

After workers inspected the plumbing, they found that the chromate was added into the

chilled system as a corrosion inhibitor. At night, the chilled water system was building up a higher pressure than the public water mains and a faulty single check valve allowed the contaminated

water back into the potable water lines in the business. Further tests found that the contaminant had not reached the public water system.

The faulty valve was immediately replaced with an approved reduced pressure backflow preventer, and all lines were flushed until they were clear of chromate. Fortunately, no one became ill or suffered any known side effects.

How does MLGW protect the Potable Water System?

MLGW has a Cross Connection Control Program that requires customers to provide adequate protection of the water distribution system per MLGW policies and all local, state and federal regulations. MLGW requires backflow devices to be tested per requirements of Tennessee Department of Environment and Conservation (TDEC).

Any residential, commercial or industrial customer that refuses to comply and have their devices tested is subject to having the water shutoff until the devices are in compliance. A reconnect fee will be added to the MLGW utility bill if the water is cut off due to cross connection non compliance.

Customer Responsibilities

The responsibilities are explained in "Appendix C" of the "International Plumbing Code Amended;"



the consumer (as expressed in Appendix C) is responsible for preventing contaminants and pollutants from entering the water supply system.

MLGW, the water purveyor, will enforce Appendix C and other applicable regulations.

Backflow Testing

It is necessary for all backflow assemblies to be tested annually.

Testing must be accomplished by a certified tester approved by the State of Tennessee, Division of Water Supply. A full list of companies that are approved to test in MLGW's water system can be found at mlgw.com/crossconnection

Test and reports must be submitted online by the tester.

Inspections

Inspections will be conducted at all commercial and industrial businesses to determine the need for backflow protection by MLGW.

All high risk, high hazard properties must be inspected every year.

All other properties must be inspected every five years unless needs or the customer changes.

If you suspect a cross connection may exist in your facility, call 901-528-7757 or email crossconnection@mlgw.org to request an inspection.

