

Lawn Irrigation Cross Connection and Backflow Prevention

The City of Olathe works diligently to ensure safe, quality drinking water that is free from any contaminants. This effort begins with the protection of our source water and continues through the entire treatment and distribution process ending where you draw water from the faucets in your home or business.

Cross-Connection Program

The cross-connection program helps ensure safe water for all customers on our system by protecting the water distribution system from contamination through cross-connections. By eliminating cross-connections, we assure all users on our system, regardless of where they are within the systems, the same protection and assurances of safe drinking water.

What is a cross-connection?

A "cross-connection" is any actual or potential connection between the public water supply and a possible source of contaminants. Lawn irrigation systems are cross-connections because they are connected directly to the City's water supply.

Other examples of cross-connections include:

- Medical (hospitals and veterinary)
- Industrial/manufacturing
- Commercial free sprinkler systems

Why are cross-connections a problem?

Under normal conditions, water flows directly from the City's water mains to your property. However, water pressure can suddenly drop due to high water usage when fighting a fire or repairing water main breaks in the water distribution system. This can create a vacuum in the water system, drawing liquid from an unprotected cross-connection into the water supply. This reversal in the direction of the normal flow of water in a piping system is called "backflow".

Lawn irrigation systems are considered "high risk" cross-connections because backflow could introduce fertilizers, pesticides, or other lawn chemicals into the drinking water system. To prevent this and keep the water safe, the City adopted requirements that all lawn irrigation systems must be equipped with an approved backflow preventer.

How do we protect cross-connections?

Cross-connections can be protected by the use of a backflow preventer, which is a device that prevents contaminants from being drawn back into the safe drinking water supply. The City has adopted the International Plumbing Code, which requires that an approved backflow preventer be installed on all cross-connections, including lawn irrigation systems.

Backflow Preventers

There are several kinds of backflow preventers, each suited for different applications. The two kinds of backflow preventers approved by Olathe for installation on lawn irrigation systems are:



Pressure Vacuum Breaker (PVB)



Reduced Pressure Backflow Preventer (RP)

Annual Testing

The City's Cross-Connection Program requires that all backflow preventers be tested and inspected annually by a certified tester to ensure that the device is functioning properly. In the event that a lawn irrigation system is not equipped with the proper backflow preventer, a plumbing permit will be required prior to installing the device. A list of certified backflow preventers and their typical charges for testing is available online at:

http://www.olatheks.org/files/oms/February_Certified_Backflow_Testers.pdf

Other Information

http://www.epa.gov/watersense/docs/ws_grassqr_eener508.pdf
http://www.epa.gov/watersense/docs/ws_watering_508.pdf

Questions?

If you have questions, please call (913) 971-9311.

High summer water bills?

The City can provide you with tips for improving the efficiency of your irrigation system to save water & money in the summer months. Visit www.olatheks.org/waterconservation or call (913) 971-9311

