

## Why is a Backflow Preventer Required on Lawn Sprinkler Systems?

Lawn irrigation systems can backflow contaminated water into your drinking water. In order to prevent this, building codes require that these systems be protected with a backflow preventer:

### *International Plumbing Code 2006*

#### *608.16.5 Connections to lawn irrigation systems.*

*The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.*

#### *608.16.6 Connections subject to backpressure.*

*Where a potable water connection is made to a nonpotable line, fixture, tank, vat, pump or other equipment subject to back-pressure, the potable water connection shall be protected by a reduced pressure principle backflow preventer.*

Backflow events do occur. In the United States, there are documented cases of illness, injury and even death resulting from backflow of hazardous substances. Recognizing this risk, the Colorado Primary Drinking Water Regulations require public water systems to be protected from cross connections and backflow contamination.



Your lawn irrigation system is considered a hazardous cross connection.



## What is the City of Durango doing to ensure a safe drinking water supply?

The City has enacted three ordinances to protect against cross connections. We have established a Cross Connection Control Program and have hired a dedicated specialist to oversee the program.

- As mandated by the State of Colorado, we are surveying the water system and connections to locate hazards and cross connections.
- We require all cross connections to be protected with the appropriate backflow prevention assembly to protect the public water supply.
- We require all assemblies to be tested in accordance with the State law.
- We take action to protect the water system by eliminating unprotected cross connections.

A combined cooperative effort is needed in order to protect the public health with a safe drinking water supply.

For more information about our program or how you can help, please visit our website: [www.durangogov.org](http://www.durangogov.org) or by calling the CCC Program at (970) 375-4882.

## What Kind of Backflow Preventer is used on a Lawn Sprinkler Systems?

A backflow preventer is a device that prevents water from flowing backward. They are two main types that are used on irrigations systems.

One type is a Pressure Vacuum Breaker:



The Pressure Vacuum Breaker (PVB) must be installed so that the bottom of the assembly is 12" higher than the highest sprinkler head or point of use, so is best used when the lawn is level.

Another type is a Reduced Pressure Assembly:



The Reduced Pressure Assembly (RPA) can be used when there are elevations changes in the lawn.

Both backflow assemblies must be tested once a year by a licensed certified tester. A list of testers is available on our website at <http://www.durangogov.org/DocumentCenter/View/350>

The City of Durango's Cross Connection Control Program has been established to protect our potable water supply and to enforce the State mandated requirements as stated in Regulation 11.37 of the Colorado Primary Drinking Water Regulations:

**11.37 CROSS-CONNECTION CONTROL RULE**

**11.37(2) Control of Cross Connections**

- (a) The supplier must not permit any uncontrolled cross connections.
- (b) If any uncontrolled cross connections are discovered, the supplier must:
  - (i) Notify the Department no later than ten calendar days after the time of discovery.
  - (ii) Properly install and maintain a control device or remove the uncontrolled cross connection no later than ten days after being ordered by the Department in writing to correct the problem.

**11.37(3) Control of Service Cross Connections**

- (a) The supplier must identify any uncontrolled service cross connections.
- (b) If any uncontrolled service cross connections are identified, in addition to the requirements of 11.37(2)(b), the supplier must:
  - (i) Require the proper installation and maintenance of control devices at that connection.
  - (ii) Approve the proper installation of control devices upon installation.
  - (iii) Ensure that all installed control devices are tested and maintained as necessary by a Certified Cross-Connection Control Technician upon installation and then at least annually.

**For Further Information, contact the Cross Connection Control Program at (970) 375-4882 or e-mail to [cccp@durangogov.org](mailto:cccp@durangogov.org)**



**IS YOUR  
LAWN  
SPRINKLER  
SYSTEM  
PROTECTED  
FROM  
BACKFLOW?**

