

## CROSS CONNECTION CONTROL PROGRAM

### Background

The South Carolina Department of Health and Environmental Control (SCDHEC) requires all public water systems to maintain a viable cross connection control program per the State Drinking Water Regulation R.61-58.7 (F). The cross-connection control program is part of the Drinking Water Protection Program.

The regulation was amended April 29, 2005 to address backflow requirements for low hazard residential lawn irrigation systems. The amendment requires BHW&S to determine the type of backflow device required for residential lawn irrigation systems and implement a change out period for the backflow device.

BHW&S maintains a viable cross connection control program (CCCP) to comply with the regulation and prevent the backflow of contaminated water into the BHW&S water system. The program includes policies for installation of residential dual check valves on all services, and installation of testable backflow devices on all commercial or hazardous services.

### Backflow Classifications

#### Degree of Hazard

- 1) **High Hazard** – An existing or potential threat to the drinking water supply of a physical or toxic nature that would be a danger to public health.
- 2) **Medium Hazard** - a connection between the BHW&S system and a system that is not cross-connected with a potentially dangerous substance. Some examples include; fire protection, Trailer Parks, Churches, Restaurants and small business.
- 3) **Low Hazard** - A hazard that does not constitutes a threat to health, but may cause an actual or potential threat to the physical properties of the water and cause a nuisance or be aesthetically objectionable.
- 4) **Low Hazard residential lawn irrigation system connections** – A lawn irrigation system without chemical addition or an unapproved auxiliary water supply.
- 5) **High Hazard lawn irrigation system connections** – Any lawn irrigation system that includes chemical additions.

#### Device Selection

- 1) **High Hazard**- an approved **Reduced Pressure Principal Assembly (RP device)** is to be used at all high hazard locations.
- 2) **Medium Hazard** – an approved **Double Check Valve Assembly (DCVA device)** is to be used at all medium hazard locations.

- 3) **Low Hazard**- An approved **Dual Check** is to be used at all low hazard locations.
- 4) **Low Hazard residential lawn irrigation system connections** - An approved **Double Check Valve Assembly (DCVA device)** is to be used at all underground lawn sprinkler systems.
- 5) **High Hazard residential lawn irrigation system connections** - An approved **Reduced Pressure Principal Assembly (RP device)** is to be used at all underground lawn sprinkler systems.

**NOTE:** The above listed are minimum requirements. Upon inspection by BHW&S personnel, BHW&S, at its sole discretion, may require a higher level of protection or testing frequency.

### **Backflow Device Monitoring and Enforcement**

Residential dual check valves that are not connected to an irrigation system are tracked by BHW&S for information only.

Double Check Valve Assemblies connected to irrigation systems, either directly or indirectly, are tracked by BHW&S. The installation / inspection date of the most recently installed device is maintained by the billing system for each low hazard connection. Each device must be tested every three (3) years of its installation date. BHW&S will notify customers of the requirement prior to the testing date. Customers who refuse to comply will be assessed a penalty, per the most recent revision of the BHW&S rates and fees schedule.

Double Check Valve Assemblies and Reduced Pressure Backflow Preventers must be tested upon installation and annually thereafter. BHW&S maintains a database of all testable devices and the five most recent test results. BHW&S notifies each customer with a testable device thirty (30) days prior to their testing deadline. Customers who fail to comply within thirty days are mailed by certified mail a second notice. Once the customer is contacted, they are given an additional two weeks to have their device tested and acceptable test results submitted to BHW&S. If acceptable test results are not submitted within two weeks of their second notice, penalties will be assessed for 30 days – at that time BHW&S will authorize the testing of the device by a certified tester payable by the customer and subject to all additional penalties per the most recent revision of the BHW&S rates and fees schedule.