
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 prevention requirements for low hazard residential lawn irrigation systems. The amendment requires LCWSC to determine the type of backflow device required for residential lawn irrigation systems and implement a change out period for the backflow device.

The Laurens County Water and Sewer Commission maintains a viable cross connection control program (CCCP) to comply with the regulation and prevent the backflow of contaminated water into the LCWSC 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

Low Hazard Residential: a connection between the LCWSC system and a single residence or business with only residential type plumbing. An irrigation system for a residence or business within this classification that does NOT have chemical injection or other high risk hazard is also within this classification. Businesses may be classified as low hazard residential at the sole discretion of LCWSC, based upon potential cross connections within the business, and are subject to reclassification upon notice.

Low Hazard: a connection between the LCWSC system and a system that is not cross-connected with a potentially dangerous substance. Some examples include; fire protection, trailer parks, churches, restaurants, and commercial irrigation systems.

High Hazard: a connection between the LCWSC system and a system that has or may have any material in the water that is dangerous to health. Some examples include; Fire protection with chemical addition, Irrigation systems with chemical addition, Industries with potentially dangerous cross-connections.

Backflow Prevention Devices

All Low Hazard Residential connections will be protected with a residential dual check valve.

All other Low Hazard connections will be protected with an approved double check valve assembly (DCVA).

All High Hazard connections will be protected by an air gap or an approved reduced pressure principle backflow preventer (RP).

Backflow Device Monitoring and Enforcement

Residential dual check valves are installed and tracked by LCWSC. The installation / inspection date of the most recently installed device is maintained by the billing system for each low hazard connection. **Each device will be replaced within 10 years of its installation date.**

Double Check Valve Assemblies and Reduced Pressure Backflow Preventers must be installed and maintained by the customer. Each must be tested upon installation and annually thereafter. Test Results for backflow devices on new water service accounts must be received by the LCWSC within fifteen (15) days of the new meter installation date or the meter will be locked. Replacement of an existing backflow device requires a new test result to be submitted to LCWSC within fifteen (15) days of the replacement installation.

LCWSC maintains a database of all testable devices and the five most recent test results. LCWSC notifies each customer with a testable device thirty (30) days prior to their testing deadline. Customers who fail to comply within thirty days are called to ensure they received their reminder letter. Customers who cannot be reached by phone receive a site visit from an LCWSC representative. Once the customer is contacted, they are given an additional fifteen (15) days to have their device tested and acceptable test results submitted to LCWSC. If the customer cannot be reached, or if acceptable test results are not submitted, the meter is locked until the customer provides acceptable proof that a certified tester is scheduled to test and/or repair their device.

LCWSC will perform random inspections on ten percent (10%) of the testable devices within our system each year.

Customers with double check valve assemblies or reduced pressure principal backflow preventers will be charged a testable device fee to recover the cost of administration and enforcement, including random inspections. The testable device fee will be charged per the most recent revision of the LCWSC Rates and Fees Schedule.