



## **Backflow Prevention and Cross Connection Control Program**

### **Commercial and Industrial Facilities**

To protect the City's water system, the City of Shelby Backflow Prevention/Cross Connection Control Ordinance requires all commercial and industrial class customers (new and existing) to have an approved backflow prevention assemblies for all connections to the City of Shelby Water Distribution System including fire suppression systems. Testing of these assemblies is required annually. All testing, maintenance and repair may be performed only by backflow assembly technicians that the City of Shelby has certified.

All assemblies shall be installed in accordance with the City of Shelby Standard details and/or the latest edition of the North Carolina Building/Plumbing Codes. All plans and specification will be made available to the City for review and approval to determine the degree of hazard.

### **Residential Backflow Prevention**

To protect the City's water system, the City of Shelby Backflow Prevention/Cross Connection Control Ordinance requires all residential class customers with swimming pools, fire suppression systems and/or irrigation systems to have an approved Reduced Pressure Zone (RPZ) backflow prevention assembly installed and tested. Testing of these assemblies is required annually. All testing, maintenance and repair may be performed only by backflow assembly technicians that the City of Shelby has certified.

All assemblies shall be installed in accordance with the City of Shelby Standard details and/or the latest edition of the North Carolina Building/Plumbing Codes. All plans and specification will be made available to the City for review and approval to determine the degree of hazard.

### **Testing and Repair of Assemblies**

Effective May 2, 2022, the City of Shelby began utilizing AquaResource, an online backflow reporting system provided by TecNXS, Inc. The fee to submit a test result online is \$7.50 per test and will be charged by TecNXS, Inc. for maintenance/upkeep of the cloud-based system. The City will not be receiving any compensation from this fee.

Testing of backflow prevention assemblies shall be made by a certified backflow assembly tester approved by the City of Shelby. Such tests are to be conducted upon installation and annually thereafter. Passing test results must be submitted on the AquaResource portal within 10 days of the date of the passing backflow test. Only passing tests can be entered on the on the portal.

If a customer elects to use a testing company not certified with the City, the testing company must register three days prior to testing the assembly. They can register on the AquaResource website at <https://backflow.tecnxs.com/login>.

Records of all testing and repairs are to be maintained by the customer for a minimum of five (5) years. Customers can register on the AquaResources website to access the Customer Portal. The Portal allows customers access to:

- a list of approved testers
- available test records for their location
- list of all assemblies at their location
- if the assemblies are current or past due
- previous tester information
- updating of customer contact information

Customers will need their AquaResources Account Number and Zip Code or Group ID to enter the Customer Portal. The Account Number or Group ID number is located on the Annual Notification letter. If a customer needs their account number or Group ID number, they can send an email to [backflow@cityofshelby.com](mailto:backflow@cityofshelby.com).

## **Certified Tester Requirements**

A certified backflow prevention assembly technician, or “technician”, is any person who has received from the City of Shelby a certificate to install, test, repair, overhaul, or maintain approved backflow prevention assemblies. Each certified backflow prevention assembly technician has successfully demonstrated to the City that the technician:

- a) is knowledgeable of applicable laws, rules, and regulations applying to backflow prevention assemblies in the state of North Carolina and in the City of Shelby, and
- b) is a licensed plumber or has at least two (2) years of experience under and is employed by a North Carolina licensed plumber or plumbing contractor, or has equivalent qualifications acceptable to the City of Shelby, and
- c) holds a certificate of completion from an approved training program in the installation, testing, repair, overhaul and maintenance of backflow prevention assemblies.

Plumbers/contractors who meet the requirements must register at <https://backflow.tecnxs.com/login> to be able to enter passing test results on the AquaResource tester portal. School certificates and test kit calibration certificates files must be uploaded as a JPG or PNG format. Please allow two business days to be approved as a tester once the request has been submitted online. Once you have been approved, you can submit passing test results online. All tests must be submitted online within 10 days of the date of the passing backflow test. Only passing tests can be entered on the website.

Testers with expired backflow and/or equipment calibration certifications will not be able to submit tests results. Once current certifications have been submitted online and have been approved, testers can resume submitting test results.

Helpful documents and videos are available at [www.tecnxs.com/docs/](http://www.tecnxs.com/docs/) (tester manuals) and [https://www.youtube.com/watch?v=Io7\\_4iYb5VM](https://www.youtube.com/watch?v=Io7_4iYb5VM) (video).

For more information on backflow assemblies and the City's backflow and cross connection control program, contact the Backflow ORC at [backflow@cityofshelby.com](mailto:backflow@cityofshelby.com).