

CITY OF SHREVEPORT CROSS CONNECTION CONTROL PROGRAM

What is a “Cross-Connection?”

A cross-connection is an actual or potential connection between the drinking water supply and a non-potable (i.e., not suitable for drinking) source. The connection can allow contaminants to “backflow” into the system. Backflow is when water flows in the opposite direction of the way it is intended to flow. This can occur whenever (a) water pressure in the system is reduced enough to cause a vacuum (“back siphonage”) or (b) downstream pressure becomes greater than the supply pressure (“back pressure”).

Certain water customers are required to have backflow preventers installed on the customer’s side of the water meter in order to protect against this risk.

Source of Legal Requirements:

Both the Louisiana State Sanitary Code, which regulates community water systems in the state, and the Louisiana State Uniform Construction Code, which regulates construction including plumbing, have provisions pertaining to cross connection control. The State Sanitary Code contains the following provisions:

LAC 51:XII.344.B In order to protect its water supply from potential contamination, each water supplier shall develop and implement a written backflow prevention plan outlining the policies and procedures it will use to verify that its customers comply with mandatory containment practices, and shall make a reasonable effort to ensure that only customers who comply with mandatory containment practices connect or remain connected to its water supply.

LAC 51:XII.344.D If a water supplier has a reasonable basis to believe that an unprotected or improperly protected cross connection exists on the premise of any customer not required to comply with mandatory containment practices, the water supplier shall take reasonable steps to perform one or more of the following:

1. confirm that the cross connection on the premise is eliminated or does not exist;
2. confirm that approved fixture isolation backflow protection is installed at the cross connection on the premise in accordance with the fixture isolation practices prescribed in and required by the state Uniform Construction Code (LAC 17:1);
3. confirm that approved containment backflow protection is installed; or
4. discontinue water service to the customer.

The Louisiana State Uniform Construction Code (LSUCC) includes both the International Residential Code (IRC), which is applicable to one- and two-family dwellings and townhouses not more than three stories above grade with a separate means of egress (along with their accessory structures), and the International Plumbing Code (IPC), which applies to all other construction (including commercial

buildings). Both the IPC and IRC contain backflow prevention assembly requirements for certain types of premises. Below are some, but not all, situations in which backflow prevention is required:

Residential customers

- Lawn and landscape irrigation systems.
- Swimming pools with automatic fill valves.

Commercial customers

- Lawn and landscape irrigation systems.
- Fire protection systems.
- Boiler, chiller, cooling towers.
- Swimming pools with automatic fill valves.
- Medical equipment

Both the IPC and IRC state that these devices must be inspected/tested annually, to ensure they continue to function properly.

The City of Shreveport's comprehensive building code incorporates the LSUCC (including the IPC and IRC) by reference (See Section 22-26 of the City's Code of Ordinances). Section 94-21 of the City's Code of Ordinances provides that violations of the referenced plumbing codes may, in addition to other penalties or sanctions which may be applicable, result in suspension or termination of water service until the violation is corrected.

Shreveport's Cross-Connection Control Plan:

Requirement for device. When called for by the applicable state regulations/codes outlined above, the City of Shreveport requires the installation of an approved backflow prevention assembly at or downstream of the service connection, in accordance with all applicable codes/regulations. The type of backflow assembly will be commensurate with the degree of hazard and must meet the requirements of all applicable codes. Such backflow prevention assembly will be owned and maintained by the customer, and proper installation and maintenance of the device shall be a condition of water service to the premises. Failure, refusal or inability on the part of the customer to install, have tested, and maintain said assembly shall constitute grounds for discontinuing all water service to the premises until such requirements have been satisfactorily met.

Contractor certification and registration. Backflow prevention assemblies must be installed in accordance with federal, state and local regulations, manufacturer's guidelines, and in a manner that will allow for routine testing. Field testing and repair of backflow prevention assemblies must be conducted by persons certified and trained to perform such tests as required by federal, state and local regulatory guidelines.

In order for an individual to be eligible to install/test backflow preventers, he/she must be a licensed plumber and must have a current Water Supply Protection Specialist (WSPS) certification listed with the Louisiana State Plumbing Board for installation/testing of backflow preventers.

Procedure for annual inspections/testing. Per state plumbing code requirements, it is the customer's responsibility to have their devices inspected/tested annually by a duly certified licensed plumber. A list of plumbers with the proper certification can be found at the following website:

<https://app.spbla.com/rosters.php>. Once on that website, click "Any WSPS" under License Type. The query may also be narrowed by parish. Customers may wish to contact more than one tester in order to compare prices and other aspects of service.

Testers will enter all test results into the City's database via the following web portal that the City is utilizing to assist with oversight and recordkeeping related to the backflow preventer program:

www.aquaresource.app. Testers must first register at that portal before results can be entered.

Annually, notices will be sent to customers who, according to City records, have backflow prevention assemblies installed, specifying the date by which inspection/testing of the device(s) for that year shall be performed. The City is implementing this notification process in phases: Phase 1 of the City's notification program began in late 2022 and involves all commercial facilities with such devices according to City records. The City's notification program will move into Phase 2, for residential customers with such devices per City records, after it is determined that annual testing of commercial facility devices is proceeding satisfactorily.

Customers who fail to have their devices inspected/tested, with results entered into the City's database as described above, by the date specified in their notice will be subject to having water service to their premises suspended until the inspection/test is performed, any indicated repairs are completed, and results are entered into the database.

Additional administrative and enforcement provisions. For premises where a backflow prevention assembly is required, prior to activating a new water service connection, the appropriate device must be installed with proper certification of installation and testing provided. Prior to initiating water service to a previously inactive account with a backflow device, a current test report must be on file for that service location.

Existing customers who identify a need for a backflow prevention assembly, and those notified by the City that such device is required, will have 90 days to install the appropriate assembly or to demonstrate to the City's satisfaction that no such device is required. Failure to comply with this requirement may result in suspension of water service to the premises until the deficiency is corrected.