

Cross-Connection Control

Cross-Connection Program

Help protect our drinking water from contamination through cross-connections by installing an appropriate backflow device in your home or business.

What is a Cross-Connection?

A cross-connection occurs when chemicals or substances used in a home or a business are allowed to enter the public water. Contamination occurs only if the chemicals from a business (e.g. a car wash, hospital, chemical plant, restaurant, dry cleaner) or lawn sprinkler system backflows or siphons into the water system. Cross-connections, which can occur at any pipe, valve, or fixture in the drinking water system, can be eliminated by utilizing a backflow device.

What is the State Regulation for Cross-Connections?

Tennessee [Department of Environment and Conservation](#) (TDEC) [Division of Water Supply](#) Rule 1200-5-1.17 (6) states:

Pursuant to Section 68–221–711(6) the installation, allowing the installation, or maintenance of any cross–connection, auxiliary intake, or bypass is prohibited unless the source and quality of water from the auxiliary supply, the method of connection, and the use and operation of such cross–connection, auxiliary intake, or bypass has been approved by the Department. The arrangement of sewer, soil, or other drain lines or conduits carrying sewage or other wastes in such a manner that the sewage or waste may find its way into any part of the public water system is prohibited.

All community water systems must adopt an ordinance or policy prohibiting all of the above and submit a copy of the executed ordinance or policy to the Department for approval. All community water systems shall develop a written plan for a cross–connection control program to detect and eliminate or protect the system from cross–connections. The written plan must be approved by the Department.

After adoption and approval of the cross–connection ordinance or policy and plan, each community water system must establish an ongoing program for the detection and elimination of hazards associated with cross–connections. Records of the cross–connection control program must be maintained by the water supplier and shall include such items as date of inspection, person contacted, recommendations, follow–up, and testing results.

What is a Backflow Preventer?

According to the [Tennessee Backflow Prevention Association](#), a backflow preventer is a mechanical device installed in a plumbing system to prevent water from flowing backwards in the system. State and local regulations require a properly installed, tested, and maintained backflow preventer where water pipes enter a building or property to prevent altered water from flowing back into the public water system. The correct device must be used, based on the potential hazard. High hazard (life threatening) installations must use a reduced pressure backflow preventer or an air gap. Moderate hazard installations typically use a double check valve while low hazard situations utilize vacuum breaker devices.



Who is Responsible for the Backflow Preventer?

Any water customer who has the potential for a cross-connection is responsible for purchasing, installing, and maintaining a backflow preventer. EUB is responsible for the quality of the water delivered to customers, including the execution of a cross-connection control program to monitor the presence and use of backflow preventers. Periodic testing is directed by EUB through TDEC certified employee testers or independent TDEC certified testers. The cost of testing is the responsibility of the customer.

Approved Backflow Prevention Assemblies

Only units currently approved by the Tennessee Division of Water Supply are to be used for the protection of Public Water Systems against backflow hazards. TDEC maintains a list of approved devices on their [website](#).