



Cross-Connection Control Program

As your water provider, the Pinehurst Water Department must follow requirements of the Texas Commission on Environmental Quality (TCEQ) and administer a Cross-Connection Control Program. This Program helps to protect the public water supply and ensure that everyone in the City of Pinehurst continues to enjoy safe drinking water. While the Water Department has had such a Program for some time, we are implementing new measures to strengthen our compliance with state requirements so that actual or potential connections between the drinking water supply and possible sources of contamination or pollution are separated. The backflow assembly that is part of your system controls cross-connections and prevents the possibility of backflow. In order to insure that this backflow assembly is working properly, it must be certified upon installation and tested periodically thereafter as required by state code. You will now be required to contact a backflow tester that has registered with VEPO.

Testing of Backflow Prevention Assemblies

The Pinehurst Water Department has chosen to partner with Vepo, LLC to allow for the online submission of Backflow Prevention Assembly Test and Maintenance Reports. All testing information will be entered directly by the tester into the online password protected system provided by Vepo, LLC. Testers will no longer be able to submit paper test reports directly to the district.

Finding or Becoming a Registered Tester

All Backflow Prevention Assembly Testers (BAPTs) are required to register with Vepo, LLC. Upon registration and verification of license, insurance, and test gauge accuracy, the tester will be added to the approved list of Backflow Prevention Assembly Testers.

Note: Backflow prevention assemblies on fire protection sprinkler systems are required by the State Fire Marshall to be tested and/or repaired by a BPAT who is a full-time employee of a fire protection sprinkler company that is licensed with the State Fire Marshall's Office.

Click here to find a BPAT registered to work in the Pinehurst Water Department. (link the above text to -http://www.vepollc.com/save_bpats.aspx?wid=1168)

Click here to download a Quick Start Guide with information on how to become a registered BPAT. (link the above text to - http://www.vepollc.com/save_bpats/Quick%20Start%20Guide.pdf)

Questions and Answers

Should backflow preventers be tested annually?

By State law (TCEQ) all backflow prevention assemblies must be tested at least annually, depending upon the health hazard. The Texas Commission on Environmental Quality oversees the state requirements. All backflow preventer testers must be licensed by TCEQ. The owner of the backflow preventer is required to obtain the test as well as pay the tester. If you need more information about annual testing, and companies that provide testing services, please call the main office at 409-886-3873.

What is a cross-connection?

A cross-connection is any temporary or permanent connection between a public water system or consumer's potable (i.e., drinking) water system and a source or system containing non-potable water or other substances. An example is the piping between a public water system or consumer's potable water system and an auxiliary water system, cooling system or irrigation system.

What is backflow?

Backflow is the reversal of the flow of water or other substances through a cross-connection into the public water system or consumer's potable water system. There are two types of backflow: backpressure backflow and back-siphonage.

What is backpressure backflow?

Backpressure backflow is backflow caused by a downstream pressure that is greater than the upstream or supply pressure in a public water system or consumer's potable water system. Backpressure can result from an increase in downstream pressure, a reduction in the potable water supply pressure, or a combination of both. Increases in downstream pressure can be created by pumps, temperature increases in boilers, differences in height, etc.

What is back-siphonage?

Back-siphonage is backflow caused by a negative pressure (i.e., a vacuum or partial vacuum) in a public water system or consumer's potable water system. The effect is similar to drinking water through a straw. Some causes of negative pressure in a public water line are water line flushing, firefighting, or breaks in water mains.

Why does the Water Department need to control cross-connections and protect its public water system against backflow?

Backflow into a public water system can pollute or contaminate the water in that system, making it unsafe to drink. Each water provider has a responsibility to supply water that is usable and safe to drink under all foreseeable circumstances. Furthermore, consumers have faith that water delivered to them through a public water system is safe to drink. Therefore, the Pinehurst Water Department must continue to take precautions to protect its public water system against backflow.

What is a backflow preventer?

A backflow preventer is a means or assembly which prevents pollutants and contaminants from flowing into the public water system. **These assemblies need to be tested upon installation and annually thereafter.**

What is an air gap?



An airgap is a vertical, physical separation between the end of a water supply outlet and the flood-level rim of a receiving vessel. This separation must be at least twice the diameter of the water supply outlet and never less than one inch.

An air gap is considered the maximum protection available against backpressure backflow or back-siphonage, but is not always practical and can easily be bypassed.

What is a reduced pressure zone assembly?



A reduced pressure zone assembly protects water from substances that may contaminate water causing illness or death. These may be used for **health hazard or non-health hazard** requirements.

A sprinkler/irrigation system that has a chemical feed requires this assembly. It is also commonly used in commercial establishments to protect against numerous contaminants. These assemblies must be installed above ground.

What is a double-check valve assembly?



A double-check valve assembly protects water from substances that may pollute but not contaminate the water. These are used for **non-health hazard** requirements.

For instance, sprinkler/irrigation systems are required to be protected by these assemblies. They are normally installed near the meter in an underground box.

What is a hose bibb vacuum breaker?



A hose bibb vacuum breaker (HBVB) is one of the least expensive and most commonly used backflow preventers. When attached to an outside water tap, these backflow preventers keep water that may be contaminated with fertilizer or insecticide from entering your drinking water.

HBVB should be attached to all outside faucets.

Why does a soft drink dispensing machine require backflow protection?

Soft drink dispensers (post-mix carbonators) use carbonated water mixed under pressure with syrup and water to provide soft drinks beverages. Many, if not most water pipes are made of copper. When carbonated water comes into contact with copper, it chemically dissolves the copper from the pipe. This copper-carbonate solution has been proven to be a risk to the digestive system. **Only a Reduced Pressure Assembly may be used.**

What is a customer service inspection?

The purpose of a customer service inspection is to identify whether one of two potential sources of contamination exists. One is a cross connection—an actual or potential connection between a drinking water supply and a possible source of contamination or pollution. The other potential source of contamination is lead plumbing materials. These inspections are performed by licensed employees of the Pinehurst Water District or contracted plumbers with a proper license.

When are customer service inspections required?

An inspection must occur in the following situations:

- When there is new construction.
- When there is a substantial plumbing modification.
- When the water district believes that a cross connection or other potential contamination hazard exists.

The following individuals are authorized to perform CSI's:

- A TCEQ-licensed Customer Service Inspector.
- A Texas State Board of Plumbing Examiners (TSBPE) licensed Plumbing Inspector.
- A TSBPE-licensed plumber with a Water Supply Protection Specialist endorsement.

All who perform backflow tests and CSI's need to register with [VEPO](#)

Where can I get more information about cross-connection control?

https://www.tceq.texas.gov/drinkingwater/trot/cc_control.html

