



Backflow Prevention: Frequently Asked Questions



Why is Backflow Prevention so important?

Backflow is a situation that can occur when hydraulic conditions within a water system deviate from "normal" conditions, possibly allowing contaminated water to enter through a cross connection into the drinking water distribution system. In order to prevent this situation from occurring the Palm Beach County Water Utilities Department requires non-residential and customers with a meter size of 1.5" or larger to install and maintain testable backflow prevention assemblies to protect the public drinking water distribution system.

What causes Backflow?

Backflow is possible in two situations: backsiphonage and backpressure.

What causes Backsiphonage?

When there is a sudden reduction in water pressure in the public drinking water distribution system, such as during fire fighting or when a water main breaks, water flow can potentially be reversed. This could create a suction effect, possibly drawing contaminated water into the drinking water system.

What causes Backpressure?

Backpressure is created when the pressure in a private non-drinking water system, such as in recirculating system containing soap, acid, or antifreeze, exceeds the pressure in the public drinking water system that it is connected to. This could force contaminated water to enter the public drinking water system.

How can Backflow be prevented?

To protect the public drinking water system, the Palm Beach County Water Utilities Department requires a Reduced Pressure Principle Assembly (RP) on all non-residential accounts, service for buildings with more than three stories, and new residential services with 1½" potable water meters or larger. Class 1-4 fireline systems require, at a minimum, a Double Check Detector Assembly (DCDA) and Class 5 and 6 firelines require a Reduced Pressure Principle Detector Assembly (RPDA).

What is a Backflow Prevention Assembly?

A backflow prevention assembly is an approved, testable assembly that uses valves in different configurations to prevent potentially contaminated water from reversing direction and flowing into the public water distribution system.

How is an assembly approved?

The Palm Beach County Water Utilities Department recognizes and approves only those testable backflow prevention assemblies completing the entire testing procedure of the Foundation for Hydraulic Research and Cross Connection Control at the University of Southern California.

How do I know if I need a backflow prevention assembly?

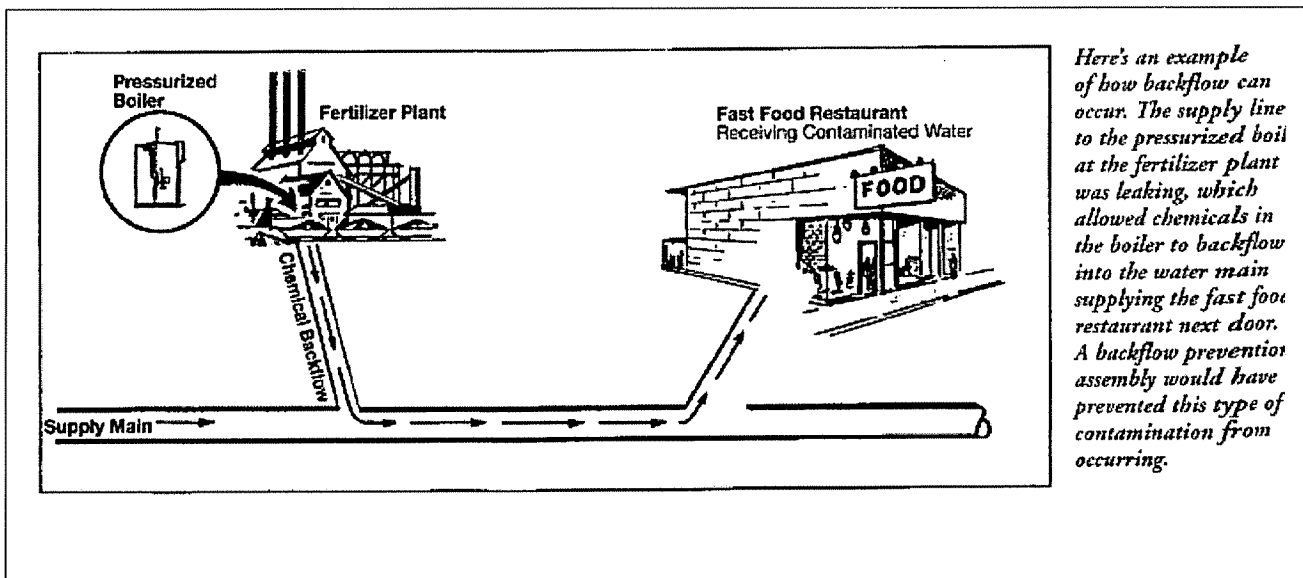
New Customers Connecting to a Newly Installed Water Service: will be notified if a backflow prevention assembly must be installed prior to service activation.

New Customers Connecting to a Water Service with an Existing Backflow Prevention Assembly(ies) Installed: will be notified by letter that the backflow prevention assembly requires annual testing.

Existing Customers with a Backflow Prevention Assembly(ies) Installed: will be notified by letter that the backflow prevention assembly requires annual testing.

Is there a general compliance schedule and process?

Yes, your backflow prevention assembly must be in compliance with the Department's testing requirements. You will receive a follow up notice after 30 days. After 60 days (if compliance has not already been achieved), you will receive a notice informing you that your water service may be discontinued unless you achieve compliance.



Who can install a Backflow Prevention Assembly?

The Palm Beach County Water Utilities Department recognizes only Backflow Prevention Technicians who are State or County licensed Plumbing Contractors and their employees that are certified as Backflow Prevention Assembly Testers to install and perform annual testing and maintenance of a backflow prevention assembly.

Where should a Backflow Prevention Assembly be located?

Backflow prevention assemblies must be located on the customer's side of the water meter, and installed in accordance with the Department's Minimum Engineering Standards, the Palm Beach County Plumbing Code and manufacturer specifications. The assembly must not obstruct any maintenance required on the meter, and the Backflow Prevention Assembly must remain on private property. Contact the Palm Beach County Water Utilities Department for engineering information.

Who owns and is responsible for testing and maintenance of the backflow prevention assembly?

The customer owns and is solely responsible to ensure that the assembly is installed and in satisfactory operating condition at all times.

New Service Customers Requiring a Backflow Prevention Assembly:

The customer is responsible for hiring a Certified Backflow Prevention Technician to install the Backflow Prevention Assembly. Palm Beach County Water Utilities Department will perform the Initial Backflow Prevention Assembly Certification at the time the water service is activated. The customer will be billed an Initial Backflow Certification Fee of \$40.00 per assembly. Service will not be activated until the assembly passes this Initial Backflow Prevention Assembly Test and Certification. If the assembly does not pass this certification, the customer must contact a Certified Backflow Prevention Technician to have the problem corrected. The customer must then contact Palm Beach County Water Utilities Department to have the assembly retested and water service activated. The customer will be billed an additional \$40.00 per assembly. After initial certification by the Department, all subsequent certifications must be performed by the customer's Certified Backflow Prevention Technician.

New Customers with Existing Services that have a Backflow Prevention Assembly Already Installed:

The customer is responsible for ensuring that a Certified Backflow Prevention Technician tests and certifies the backflow prevention assembly. The Palm Beach County Water Utilities Department will send a notification letter to each customer, advising when the annual test is due. The customer must contact a recognized Certified Backflow Prevention Technician to perform the test and ensure that a Test and Maintenance Report is received by the Regulatory Compliance Section at Palm Beach County Water Utilities Department. The customer is responsible for having all repair and maintenance performed on the Backflow Prevention Assembly by a Certified Backflow Prevention Technician. After any repair or maintenance, the assembly must be re-tested immediately and test results submitted to the Regulatory Compliance Section at Palm Beach County Water Utilities Department.

Existing Customers with Backflow Prevention Assemblies:

The customer is responsible for ensuring that a Certified Backflow Prevention Technician tests and maintains the Backflow Prevention Assembly. The Palm Beach County Water Utilities Department will send a notification letter to the customer advising when the annual test is due. The customer must contact a Certified Backflow Prevention Technician to perform the test and ensure that a Test and Maintenance Report is received by the Regulatory Compliance Section at the Palm Beach County Water Utilities Department. The customer is responsible for having all repair and maintenance performed on the Backflow Prevention Assembly by a Certified Backflow Prevention Technician. After any repair or maintenance, the assembly must be re-tested immediately and test results submitted to the Regulatory Compliance Section at Palm Beach County Water Utilities Department.

The customer is responsible for making sure that a Certified Backflow Prevention Technician obtains all required permits from the plumbing code officials responsible for the location.

How do I find an approved Certified Backflow Technician?

Plumbing Contractors who are Certified Backflow Prevention Technicians can be found in the plumbing section of your phone book. You may also contact Palm Beach County Water Utilities Department Regulatory Compliance Section at 561-493-6023 for names of recognized Certified Backflow Prevention Technicians. Due to the fact that test prices vary, you may want to contact several Certified Backflow Prevention Technicians to obtain quotes for the test of your assembly(ies).

How often do I have my Backflow Prevention Assembly tested?

Palm Beach County Water Utilities Department requires that you test your Backflow Prevention Assembly at the following times:

- 1) *When your Backflow Prevention Assembly is first installed.*
A Palm Beach County Water Utilities Department employee will perform this test.
- 2) *The Backflow Prevention Assembly must be tested annually thereafter.*
Your Certified Backflow Prevention Technician must perform this test.
- 3) *After any repair or replacement of the Backflow Prevention Assembly.*
Your Certified Backflow Prevention Technician must perform this test.

Who is responsible for obtaining all permits?

The customer is responsible for making sure that the Certified Backflow Prevention Technician obtains all required permits from the plumbing code officials responsible for the location. The customer must submit a copy of your Certification of Completion to Palm Beach County Water Utilities Department's Regulatory Compliance Section after replacement of a Backflow Prevention Assembly.

For more information, contact the Palm Beach County Water Utilities Department Regulatory Compliance Section at 561-493-6023.