



# OREGON CITY PUBLIC WORKS

## CROSS CONNECTION / BACKFLOW PREVENTION PROGRAM

### Frequently Asked Questions

#### **What is a cross connection?**

A cross connection is a point in a plumbing system where the drinking water supply comes in contact with an objectionable or harmful substance. A cross connection could be any physical arrangement whereby a potable water supply is connected, directly or indirectly, with any non-potable or unapproved water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or any other device which contains, or may contain, contaminated water, liquid, gases, sewage or other waste, of unknown or unsafe quality which may be capable of imparting contamination to the potable water supply as a result of backflow.

#### **How are cross connections controlled?**

When fixtures or appliances do not have built-in backflow prevention then backflow prevention must be added. The type of backflow assembly needed is dependent on the degree of hazard presented by the backflow water source. An example of a low hazard is a residential irrigation system, with no chemicals added. A high hazard example is the water service to a sewer lift station.

#### **What types of backflow prevention assemblies/devices are there?**

There are basically five different ways to prevent backflow: air gap (AG), atmospheric vacuum breaker (AVB), pressure vacuum breaker (PVB), double check valve assembly (DC), and reduced pressure principle assembly (RP). Each method has specific installation requirements. Three of the five (PVB, DC, and RP) are testable assemblies and must be tested by a state-certified tester after installation, repair or relocation, and annually.

#### **Who needs to comply with the CC/BPP?**

All water customers, including the city! Oregon City has over 100 testable backflow prevention assemblies installed at city facilities. Other customers, for example Providence Willamette Falls Medical Center, have numerous assemblies due to the number of plumbing fixtures and variety of processes within their facilities. Residential customers generally only have irrigation systems and/or fire sprinkler systems.

#### **Why do assemblies need to be tested annually?**

Testable backflow prevention assemblies (PVB, DC, and RP) are mechanical assemblies that can fail because of improper installation, normal wear on moving parts, or corrosion. Annual testing ensures the assembly is

working properly and maintenance records can indicate when repair might be needed before the assembly fails to perform the job for which it is intended – protecting your drinking water from backflow contamination.

### **How are test results reported to the city?**

According to the Oregon Administrative Rule that requires water suppliers to have a cross connection control program, backflow assembly testers should provide a copy of each completed test report to the water user or premise owner and the water supplier (Oregon City Public Works) within 10 working days of the test. Testers can submit the city's copy to **EcosConnect**, the city's online portal for backflow test report submission. If the testing company does not have an **EcosConnect** account, they can contact city staff for guidance at [cc-bpp@orcity.org](mailto:cc-bpp@orcity.org). Newly installed assemblies need to be tested and the test results submitted in one of three ways:

Mail to:  
CC/BPP  
13895 Fir Street  
Oregon City OR 97045

Fax to:  
503.908.1128

Email to:  
[cc-bpp@orcity.org](mailto:cc-bpp@orcity.org)

Upon receiving the test report for the newly installed backflow assembly, city staff will check for proper installation and assembly information. Once verified, city staff will enter assembly information into EcosConnect and the tester will be able to enter the test report.

We suggest customers keep their copy of the report as part of the maintenance records for the irrigation system.

### **What is the cost of the test?**

Individual backflow assembly testers and testing companies set their own rates and their charges vary widely. We recommend that you obtain more than one quote. Over the past several years the average cost for testing a double check on an irrigation system has been \$35 - \$50.

Coordinating with your neighbors when scheduling the test could save you money. Many testers will offer discounts when there are multiple customers in the same neighborhood – their travel expenses are less and they can pass those savings along to their customers.