How Water System Contamination Occurs

The installation of plumbing in compliance with the plumbing codes will generally provide the protection necessary to protect the customers plumbing system from contamination.

Water flows from the public water system through the meter to the customers plumbing. Under certain conditions water flow can reverse and flow back into the water system, possibly carrying contaminants with it. Below are two ways backflow can occur.

Backpressure This may be created when the customers water has pressure greater than that from the water system. This pressure may be caused from a pump, elevated connection, or thermal expansion.

Backsiphonage This may occur if the system pressure suddenly drops. A sudden drop in pressure can draw unclean water back into the public supply main to be distributed

throughout the system. Backsiphonage may occur from fire fighting, a water system break, or shutting down a section of the water system.







An efficient system will save time and

money.

P.O. Box 1000 18413 B. Street East Spanaway, WA 98387 Phone: 253-531-9024 Fax: 253-539-9526 www.spanaway-water.org



18413 B. Street East Spanaway, WA 98387 (253) 531-9024 - Fax (253) 539-9526

Irrigation System Requirements



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Assembly Types

RPBA



- The reduced pressure backflow assembly must be installed above ground to prevent the relief valve from flooding.
- The RPBA should be protected from freezing

DCVA



- The double check valve assembly is the most common backflow assembly installed for irrigation systems.
- The DCVA must be installed between the service line tip and the irrigation system.
- The DCVA may be installed below ground if the test cocks are capped and the assembly can be tested

PVBA



 A State approved pressure vacuum breaker assembly must be installed no less than 12 inches above the irrigation system.

What is a backflow assembly

These assemblies are installed in the water line to prevent the cross connection hazard from contaminating the water system. They have two resilient seated shut off valves and test cocks.

Why Do I need an Assembly

To protect public water systems. The Washington Administrative Code WAC 246-290-490 requires all irrigation systems to have an approved backflow prevention assembly that meets the degree of risk.



- The initial installation of the assembly shall be tested by a State certified and Spanaway Water Company (SWC) approved Backflow Assembly Tester (BAT) prior to being put into use. Test results shall be submitted to SWC. SWC will provide a list of approved BAT.
- The assembly shall be tested by a BAT on an annual basis. All test results shall be submitted to SWC for system acceptance.
- The proper installation and testing of cross connection assemblies is required to meet Washington State law. Failure to provide proper installation and annual testing can ultimately lead to the discontinuation of water service by the Water Company.

Yard Conservation Tips

Train Your Lawn - If you water your lawn every day, you are encouraging shallow roots. By spreading out your watering you can help your lawn to establish deeper roots that will help it survive drought periods. Generally watering deeper, less days per week will encourage deeper root growth and a more healthy lawn.

Adjust your Lawn Mower - to a higher setting. A taller lawn shades roots and holds soil moisture better than if it is closely clipped.

Soil Preparation - Using proper soil preparation and lawn maintenance practices will help to build healthy soil and vigorous, deep-rooted lawns. These lawns are more resistant to disease, tolerate some insect and drought damage, and will out-compete many weeds.

Water at Night - Make sure you only water when the sun is down to reduce evaporation losses. Many irrigation experts feel the best time to water is between midnight and 6 a.m. because evaporation is kept to a minimum.

Repair All Leaks - Check your automatic irrigation system for leaks. To detect a leak in your irrigation system, you must shut down all water use inside your home or business and be fairly certain that there is no leakage occurring indoors. Once you have done this, you can use your water meter to see if any water continues to flow into your system.



Consult with your local nursery - for

information on plant selection and placement for optimum outdoor water savings

Group plants - with the same watering needs together to avoid over watering some while under watering others.