The City of Greeley is committed to protecting you and your drinking water from potential contamination.

Did you know that your drinking water system is susceptible to contamination through water usage in your own building?  This can happen when the drinking water system is connected to uses that make the water no longer potable. This is commonly referred to as a cross connection.

Common cross connections found in a building are:

* Fire Sprinkler Lines, Irrigation Sprinkler Lines, Boilers, Automatic Soap Injectors, Hoses in Sinks, Hose Bibs, Wells, Hot Tubs, Swimming Pools, and Display Fountains.

Under certain conditions the unintended reverse flow of fluids can pass through a cross connection and could potentially contaminate the drinking water distribution system presenting an immediate health risk to you and potentially to your neighbors.

Cross connections within buildings cannot always be avoided but they can be controlled. Greeley requires that private buildings be protected from contamination from cross connections in accordance with the local plumbing code. The Colorado Department of Public Health and Environment requires that public water systems control cross connections at all applicable service connections through backflow prevention assemblies and methods.

Please note that the Colorado Revised Statutes 25-1-114 (1)(h) do not allow anyone to install, maintain or permit an uncontrolled cross connection that is connected to a drinking water system that supplies water to the public. Your building is connected to a water system that supplies water to the public.

**Backflow Frequently Asked Questions**

**What is backflow?**

Backflow is the undesired, reverse flow of water, liquids or substances into the city’s public water supply. Backflow can create contamination, property damage and health risks because it has the potential to draw contaminated water in the city’s potable water lines.  The City of Greeley controls water quality throughout the public drinking water system and up to the property line or curb stop.  Backflow occurs when water, liquids or substances from inside a private property are forced or drawn back into the city's drinking water supply. On a smaller scale, backflow can be confined to a single property when water from a source, like a sprinkler system or water heater, forces or draws water back into the private property’s water lines.

**What causes backflow?**

Backflow occurs when water does not flow in the right direction and has the potential to introduce contaminants into the drinking water system. This can be caused by backpressure, "pushing" the water, or back-siphonage, "sucking" the water.  Backpressure arises when the water pressure within a private property surpasses that of the city's water pressure. Typically, pumps are the culprits behind backpressure. On the other hand, back-siphonage arises when a reverse siphon is triggered by pressure fluctuations or losses. Generally, back-siphonage occurs as a result of water main breaks or extensive water usage, such as the operation of fire hydrants. Backflow prevention assemblies protect drinking water from both backpressure and back-siphonage.

**What is a cross-connection?**

A cross-connection refers to a direct physical link between a drinkable water supply and a non-drinkable water source. It is a potential location for backflow to enter the city’s public water supply and/or the consumer’s potable water supply.

**Examples of a cross-connection include:**

* Fire sprinkler system
* Lawn irrigation systems
* Water wells
* Hot tubs, Spas & Swimming pools
* Hose bibs, Garden hoses, Yard hydrants
* Water heaters/Boilers

**What cross-connections are required to have backflow prevention assemblies?**

All Commercial and Industrial connections are required to have backflow prevention assemblies. Multi-Family units, defined as a single service with three (3) or more units are also required to have backflow prevention assemblies.

**What is a backflow prevention assembly?**

A backflow prevention assembly is a mechanical device that is incorporated into your plumbing system to stop the backward flow of water, liquids or substances.

**What is a containment backflow assembly?**

A containment backflow assembly is the first backflow after the water meter or fire service line, with no unprotected taps before the backflow assembly.

**I received a letter to test my backflow, what do I need to do?**

If you have been sent a letter by the City of Greeley requesting you to test your backflow assembly, it is imperative that you have your backflow assembly tested by a certified backflow prevention tester. After the testing is completed, you can submit the test results to the following website: <https://greeleyco.c3swift.com/>

For a list of certified backflow prevention testers, please visit our website at: [Cross Connection and Backflow Prevention | City of Greeley (greeleygov.com)](https://greeleygov.com/services/ws/system/cross-connection-and-backflow-prevention).

**Why does my backflow assembly need to be tested?**

To protect drinking water, assemblies are required to be tested annually. A backflow assembly is a mechanical device that can be subject to failure. Common causes of failure include sediment in the water, deteriorating gaskets or weakened spring mechanisms.

**How often do I need to test my backflow assembly?**

Backflow assemblies need to be tested annually and submitted to the City of Greeley no later than August 15th.

**Do all backflow assembles need to be tested?**

All containment assemblies are required to be tested annually and submitted to the City of Greeley. Tests for isolation assemblies (those after the containment assembly that protect the private drinking water system from onsite contaminants) are not required to be submitted to the city but should be performed regularly to protect your system.

**What if my backflow assembly fails a test?**

A failed backflow assembly may need to be cleaned, repaired or replaced. Once a backflow has been cleaned, repaired or replaced, a passing test needs to be submitted to the City of Greeley at this website: <https://greeleyco.c3swift.com/>

**Where can I get more information about backflow regulations?**

City of Greeley Ordinance <https://library.municode.com/co/greeley/codes/municipal_code?nodeId=PTIICOOR_TIT20PUWOUT_CH3WASASESE_ARTIIIWA_DIV3RELI_S20-191CRCOCO>

City of Greeley BPCCC

[Cross Connection and Backflow Prevention | City of Greeley (greeleygov.com)](https://greeleygov.com/services/ws/system/cross-connection-and-backflow-prevention)

Greeley Design Standards

[Design Criteria and Construction Specifications | City of Greeley (greeleygov.com)](https://greeleygov.com/services/pw/design-criteria-and-construction-specifications)

CDPHE 11.39

[Colorado CCR Document List (coloradosos.gov)](https://www.coloradosos.gov/CCR/DisplayRule.do?action=ruleinfo&ruleId=3179&deptID=16&agencyID=132&deptName=Department%20of%20Public%20Health%20and%20Environment&agencyName=Water%20Quality%20Control%20Commission%20(1002%20Series)&seriesNum=5%20CCR%201002-11)

Drinking Water Policy DW-007

[Current drinking water policies | Department of Public Health & Environment (colorado.gov)](https://cdphe.colorado.gov/water-quality/regulations-policies-and-guidance/current-drinking-water-policies)

EPA Clean Water Act

[Summary of the Clean Water Act | US EPA](https://www.epa.gov/laws-regulations/summary-clean-water-act)

EPA Safe Drinking Water Act

[Safe Drinking Water Act (SDWA) | US EPA](https://www.epa.gov/sdwa)