IMPORTANT! READ ALL

WHAT ARE THE CUSTOMER'S RESPONSIBILITIES?

If a backflow preventer is deemed necessary at your facility, the expense of the device and any plumbing needed falls on the owner. You will have <u>UP TO 45</u> <u>DAYS</u> to comply with the State's request or your water service may be discontinued and you could be subject to fines. More information on Laws and Regulations will be provided at Town Hall and the Town's website, <u>www.rangely.com</u>

Once a backflow preventer is in place, you must have it tested both when it is installed and annually thereafter (every 12 months). The test MUST be conducted by a certified backflow prevention tester with a certificate from either ASSE or ABPA. You, the customer, will be required to keep a copy of each test for a minimum of three years and be able to provide them if requested.

For your convenience, a list of local certified testers will be kept at Town Hall and on <u>www.rangely.com</u>

Who do I contact to ask

QUESTIONS ABOUT CCC?

You can either contact Town Hall or go onto <u>rangely.com</u> for more information on this program. You can also contact the Utilities Department and request to speak with a CCC technician or supervisor:





Utilities Department 209 East Main Street Rangely, Colorado 81648

Public service announcement brought to you by

The Town of Rangely

TOWN OF RANGELY

PUBLIC WATER SYSTEM

BACKFLOW PREVENTION & CROSS-CONNECTION CONTROL PROGRAM



COMMERCIAL CUSTOMERS

WHAT IS BACKFLOW?

Water systems depend on water pressure to keep water flowing in the proper direction through the pipes. However, anything causing a drop in water pressure can create a reverse flow from a customers plumbing system back into the public water system. This is called **backflow**. There are two different types of backflow:

Back Pressure: This is the result of a customer's water pressure being higher than the supply pressure.

Back Siphonage: This occurs when there is a siphon, or vacuum, created in the piping system. This is when there is negative pressure in the pipes.

Backflow can be very dangerous if there is a **Cross-Connection** present.

WHAT IS A CROSS-CONNECTION?

A **cross-connection** is any physical connection between the public water system and any possible source of non-potable, polluted, or contaminated water or substances that can enter into the public water system. Here are some examples of possible cross-connections:

- Soapy water or other cleaning compounds backsiphoned into your water supply plumbing through a faucet or hose submerged in a bucket or laundry basin.
- A hose submerged in a swimming pool creates a pathway for pool water to enter your water supply plumbing.
- Fertilizers/pesticides back-siphoned into your water supply plumbing through a garden hose attached to a fertilizer/pesticide sprayer.
- Storage tanks bearing a physical connection to the potable water system.
- Chemicals/pesticides and animal or bird droppings drawn into your water supply plumbing from a lawn irrigation system with submerged nozzles.
- Bacteria/chemicals/additives present in a boiler system back-siphon into the water supply plumbing.
- A connection made between a private well supply and the water being supplied by a public water system through the water supply plumbing.

How CAN YOU CONTROL A CROSS-CONNECTION?

There are two ways to control a cross connection; a <u>Backflow</u> <u>Preventer</u> or an <u>Air Gap</u>.

A backflow preventer is a mechanical device or assembly that can be used to stop backflow. Each device has it's own specific applications where factors such as degree of hazard or type of backflow come into play. Here are several testable types that are used for different applications;

Reduced Pressure Principle (RP): This testable device can be used in any scenario. It is essentially a double check valve with a relief valve on it. It prevents back siphonage and back pressure in high or low hazard applications. Example of use: commercial boiler

Double Check Valve Assembly (DCVA): This testable device is used to prevent back siphonage and back pressure in low hazard applications. Example of use: fire sprinklers

Pressure Vacuum Breaker (PVB): This testable device was engineered to stop a siphon by introducing air into a water line. This will cause water to spill out the top, so this is for outside use. It is used high or low hazard back siphonage scenarios. Example of use: irrigation system

Spill-Resistant Vacuum Breaker (SVB): This testable device is nearly the same as the pressure vacuum breaker. The only difference is that the SVB is made to resist spilling, so it can be used indoors or outdoors. It is used high or low hazard back siphonage scenarios. Example of use: irrigation system

Here are some non-testable devices and methods:

Atmospheric Vacuum Breaker (AVB): Like the PVB and the SVB, this non-testable device is also used in high or low hazard back siphonage scenarios. However, unlike the PVB and SVB, this device cannot be subject to continuous pressure (12 hours in a 24 hour period). Example of use: Dishwasher. There are also AVB's for hose bibs on a house.

Dual Check Valve (DCV): This is very similar to the DCVA, the only difference is that this device is non-testable. It is used to prevent back siphonage and backpressure in low hazard applications. Example of use: residential boiler

Air Gaps (AG): An air gap is an unobstructed gap that separates the potable water source from some sort of receptacle. The height an air gap is to be defined as 2 times the outlet diameter of the water fixture above the flood level rim. For example, if you have a faucet on a sink with an outlet diameter of ³/₄", then that outlet must be at least 1.5" above the flood level rim. However, the air gap must NEVER be less than 1", no matter what the outlet's diameter may be.

	Scenario:			
Device/ Method:	High Hazard Back Pressure	High Hazard Back Siphonage	Low Hazard Back Pressure	Low Hazard Back Siphonage
RP	Х	Х	Х	Х
DCVA			Х	Х
PVB		Х		Х
SVB		Х		Х
AVB		Х		Х
DCV			Х	Х
AG	Х	Х	Х	X

WHY IS THIS IMPORTANT TO COMMERCIAL CUSTOMERS?

It is now mandatory in the State of Colorado for water districts to enforce a Cross-Connection Control program on commercial facilities.

We will begin the process by sending out letters to the all of the customers to be surveyed. If your facility receives the aforementioned letter (different from the letter included with this brochure), you will be contacted soon thereafter by a Town of Rangely Employee and be asked to schedule a time for the Town to survey the facility. There is no fee for this survey.

When the survey is completed, the Town will let you know ASAP whether or not the facility needs a backflow preventer and which device or method is necessary. A written notification will also be sent within three working days.

Not all commercial customers will have their facility surveyed in 2016, as this process will extend into 2017 and possibly later.