

# Crystal Systems Texas, Inc.

## Cross-Connection Control and Backflow Prevention Program

To protect Public Health, this Cross-Connection Control (CCC) and Backflow Prevention Program is committed to help protect our drinking water system from potential contamination.

### Definitions

**Cross-connection:** a physical connection between drinkable water and a liquid or gas that could make the water unsafe to drink (wherever there is a cross connection, there is a potential threat to public health from the liquid or gas contaminants).

**Backflow:** water flowing in the opposite direction of what it was intended to, either from a loss of pressure in the supply lines or an increase in pressure on the customer's side of the water meter (in either of these situations, if any affected customer's pipes include a cross connection, contaminants could be drawn through the cross connection into that customer's pipes and, if the backflow continues, perhaps even into the water mains)

### Crystal Systems Role

Crystal System's role begins with good system maintenance and sound operations. By repairing leaks, taking steps to insure that the distribution system pressure does not fail during periods of high demand, and asking for the cooperation of our customers to reduce the risk of backflow.

We identify locations where the risk of cross connection is high and ensure that the proper measures are taken to minimize that risk. For example, these and other businesses might be required to install backflow prevention assemblies and have them tested by a certified tester annually:

- medical clinics
- minor surgery centers
- beauty salons
- livestock areas
- non-residential water users
- public and private swimming pools
- private wells

Another aspect of our CCC program is the Customer Service Inspections. We have on staff one or more licensed customer service inspectors (CSIs) to insure that no cross connections are present in these ways:

- Inspect all new construction.
- Inspect existing service that has undergone substantial modification.
- Inspect existing service whenever there is a reason to suspect that a hazard or a potential source of contamination may be present.

## Your Role as a Water Customer

By taking steps to control cross connections and prevent the possibility of backflow at your home, you will help to protect the public water supply and ensure that your family continues to enjoy safe drinking water. Garden hoses and irrigation systems are common concerns, but there are other common residential sources of cross connections, too.

### Garden Hoses and Backflow

The garden hose is the most common cross connection. Each of these common uses of a garden hose sets up a possible cross connection:

- forcing it into a clogged gutter, downspout, or sewer pipe to flush out the clog
- connecting it directly to a hose-end sprayer to apply pesticide or fertilizer to your yard
- connecting it to a soap-and-brush attachment to wash your car, boat, or siding
- letting the end of the hose lie in a puddle or pool of water on the ground

No doubt you can think of other examples. In each of these cases, if backflow happens, your household's water lines could be contaminated. Depending on how long the backflow event lasts, the contamination could spread to the public drinking water system. Fortunately, there are two inexpensive ways to solve this problem:

- Make sure that the end of your garden hose never becomes submerged in or connected to a non-potable substance. This solution is free, but not highly reliable. Can you always be this careful?
- Install a **hose bib vacuum breaker** on each of your outside faucets. These inexpensive devices are designed to allow water to flow in only one direction. You can find them at most home supply stores and through plumbing suppliers. Before you use a hose-end sprayer, you should first install a hose bib vacuum breaker at the faucet.

### Irrigation Systems and Backflow

As a homeowner, you may have installed and/or maintain your own irrigation system, but you are still required to have a suitable backflow prevention assembly (BPA) in place and be sure that it is tested on installation, works properly and tested annually.

- Hire a licensed irrigator to install and maintain your irrigation system.
- It is now required by State law that all irrigation systems connected to any Public Water Supply must be through an approved backflow prevention assembly.
- If you install your own system or have it installed by a licensed irrigator, have a licensed BPA tester, test and confirm that the BPA is installed and operating properly.
- Have a licensed BPA tester test it annually to make sure the BPA is working.

For more information concerning backflow prevention and cross-connection see our Water Service Agreement/Application.