

Cross Connection Control Device Inspection and Certification

The State of Illinois and the Village of Bloomingdale require mandatory backflow protection in certain residential, commercial and business park facilities where high health-hazard-type cross connections are normally found. The following is a partial list of those locations:

1. Underground lawn sprinkling systems.
2. Fire protection systems.
3. Hospitals, mortuaries, clinics.
4. Laboratories.
5. Food and beverage processing.
6. Car washes.
7. Manufacturing Processes.

In Bloomingdale, reduced pressure zone cross connection control devices are required on these types of facilities. They must be inspected annually in accordance with the Village of Bloomingdale Village Code Title 9 Chapter 2 Section 9-2A-1 thru 9-2A-6.

The inspection and certification must be performed by a licensed plumber, for further protection consider having a licensed plumber trained in cross connection control check your home.

For more information, please contact the Village of Bloomingdale Water Production Division at 630-671-5830 or email: CCCsurvey@vil.bloomingtondale.il.us

Simple ways to keep our water safe: Do not use a hose to unplug a drain. Do not leave a hose submersed in water while using a bucket or filling a pool. Do not leave fertilizer applicators attached to a hose while not in use.

Frequently Asked Questions

Q. *What is the most common form of a cross connection?*



A. The garden hose is the most common offender as it can be easily connected to the potable water supply and used for a variety of potentially dangerous applications.

Q. *What is potentially dangerous about an unprotected sill cock/hose bibb?*

A. The purpose of a sill cock/hose bibb is to permit easy attachment of a hose for outside watering purposes. However, a garden hose can be extremely hazardous when it is submerged in swimming pools, laid in an elevated location (above sill cock) watering shrubs, and when chemical sprayers are attached to hoses for weed-killing.



Q. *What protection is required for sill cocks /hose bibbs?*

A. A hose bibb (sill cock) vacuum breaker should be installed on every sill cock/hose bibb to isolate garden hose applications thus protecting the potable water supply from contamination.

Q. *What causes backflow?*

A. There are two kinds of backflow backsiphonage & backpressure. Back siphonage is the reversal of normal flow in a system caused by negative pressure in the supply system. A factor that could cause backsiphonage is a stoppage in the water supply due to nearby firefighting or a main break.

Backpressure occurs when the downstream pressure is above that of the supply pressure causing a reverse in flow. This could be caused by pumping systems and high temperatures in boilers.

Keeping Our Drinking Water Safe Through Cross Connection Control



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What is a Cross Connection?

A cross connection is a point in a plumbing system where the potable (safe, drinkable) water supply is connected to a non-potable (polluted, untreated) source. A cross connection is present whenever the drinking water system is or could be connected to any non-potable source.

If cross connections are not properly protected, and there is a drop in the potable supply system pressure, untreated sources can be pulled into the potable plumbing system.

Why Be Concerned?

Lake Michigan provides the Village of Bloomingdale its valuable source of fresh water. The City of Chicago treats the lake water to produce clean, drinkable water through its water treatment plant. The treatment process produces high quality water exceeding EPA standards. The DuPage Water Commission delivers the treated water to the Village system. Millions of dollars are spent providing clean, safe water to the residents of Bloomingdale. However, once the water is in the water distribution system, there is still a potential for contamination. Drinking water can become contaminated through uncontrolled cross connections.

There are cross connections throughout the Village of Bloomingdale. It is important to be aware of the problems they could create and understand how to protect our drinking water supply.

Where are Cross Connections Found?

Cross connections are found in all plumbing systems. It is important that each cross connection be identified and evaluated as to the type of backflow protection required to

protect the drinking water supply. Some plumbing fixtures have built-in backflow protection in the form of a physical air gap. However, most cross connections will need to be controlled through the installation of an approved mechanical backflow prevention device or assembly. Some common cross connections found in plumbing and water systems include:

1. Wash basins and service sinks.
2. Hose bibs.
3. Laboratory and aspirator equipment.
4. Photo developing equipment.
5. Processing tanks.
6. Boilers.
7. Water recirculating systems.
8. Swimming Pools.
9. Solar heat systems.
10. Fire sprinkler systems.
11. Underground lawn sprinkling systems.

Locations where cross connections may occur in the home: hoses left in laundry sinks & buckets and connections to underground sprinkling systems



How is Backflow Prevented?

The best method of preventing backflow is an air gap. An air gap prevents used water or contaminants from entering the clean water system. An air gap is the physical separation of clean water systems and contaminated sources by an air space. The vertical distance between the supply pipe and the flood level rim should be two times the diameter of the clean water supply pipe, but never less than one inch. Many plumbing configurations such as bath tubs, kitchen sinks and drinking fountains use air gaps to prevent backflow.

If an air gap is not possible a mechanical backflow preventer, usually a Reduced Pressure Zone Backflow Preventer is the next best approved method. It provides a physical barrier to backflow.

Reduced Pressure Zone backflow preventers have internal seals, springs, and moving parts that are subject to foul weather and wear. They can also be, as well as air gaps, by-passed. Therefore, all backflow preventers have to be inspected, certified and tested annually by a licensed plumber to ensure that they are functioning properly.



The reduced pressure backflow assembly is the safest cross connection control device and is required for all cross connections considered high hazard.



PLEASE HELP KEEP OUR DRINKING WATER SAFE