



Cross Connection Control Program



Surveys – click and choose residential or commercial

The City of East Moline treats up to 10 million gallons of water per day. The importance and responsibility of providing safe drinking water to our consumers cannot be underestimated. The purpose of this program is to safeguard against the contamination of the public water system.

Pursuant to the requirements of the State of Illinois Environmental Protection Agency (EPA), an operator of a public water supply (The City of East Moline) is required every 2 years, to conduct a survey of water customers both residential and commercial, and to obtain and keep records of cross-connection and backflow prevention devices. The Occupational Safety and Health Administration (OSHA), and Federal guidelines also prohibit the existence of having cross-connections in your potable water system. The City of East Moline cross-connection program requires water customers to have a survey in order to evaluate the potable water system for illegal cross-connections and potential backflow situations. The Water Customer is responsible to secure the necessary cross-connection survey, device inspection, and subsequent repairs where deficiencies are cited.

It is the City's responsibility to notify the water customer of their duty to secure a survey and inspection. **Failure to comply will result in the issuance of a Final Notice with the advisory that the water service to the building will be discontinued and shut off!**

Disconnection and shutting off the water service is never the City's preference and is only used as a last resort to ensure compliance with this Illinois EPA requirement.

What is a Backflow Preventer?

A Backflow Preventer (BFP) is a device that prevents the potential contamination of the public water supply. Your building may or may not already have backflow protection by having a BFP, or possibly multiple BFP's depending on a variety of factors related to your house, business, occupancy, or operation.

A Backflow Preventer is a mechanical device that uses valves to prevent potentially contaminated water from flowing backwards into the public water supply. The device needs to be installed immediately after the water meter on the customer side of the water service line.

Like any mechanical device, a Backflow Preventer (BFP) is subject to failure and requires maintenance. Backflow Preventers (BFP's) are required to be tested and certified that they are in proper working condition each year. Each BFP device requires the submittal of a report stating that the device passed or has been repaired and passed inspection, and the appropriate forms shall be submitted to Backflow Services Incorporated (BSI). BSI is the City of East Moline's management company, who records all the data with regards to it's cross-connection control program.



Who is qualified to perform a cross-connection survey?

The required survey and backflow device certification can only be performed by a certified license plumber in the State of Illinois and approved by the Illinois EPA as a Cross-Connection Control Device Inspector (CCCDI). A list of qualified CCCDI contractors has been provided with your initial survey notice and may also be found on the City's website at www.eastmoline.com under the Inspection Department Building Inspection Documents link.

Where are plumbing cross-connections found?

Whenever a plumbing fixture is connected to the potable drinking water supply, a potential cross-connection exists. Fortunately, many newer plumbing fixtures are now being built with some kind of built in built-in backflow protection. Here are just a few examples that can lead to backflow:

- *Outdoor Hose Faucets*
- *Wash basins and service sinks*
- *Swimming pools or spas*
- *Commercial coffee and soda machines*
- *Irrigation or lawn sprinklers*
- *Solar heat systems*
- *Boiler Systems*
- *Fire Sprinkler Systems*
- *Garden hose attachments*
- *Mortuaries*
- *RV Parks*
- *Chemical feed equipment*
- *Food processing equipment*
- *Auxilliary water supplies (wells)*
- *Photo developing equipment*
- *Laboratories*
- *Car washing facilities*
- *Cooling towers*
- *Medical equipment*
- *Improperly installed fixtures*
- *Golf Courses*
- *Floral/Garden Nurseries*

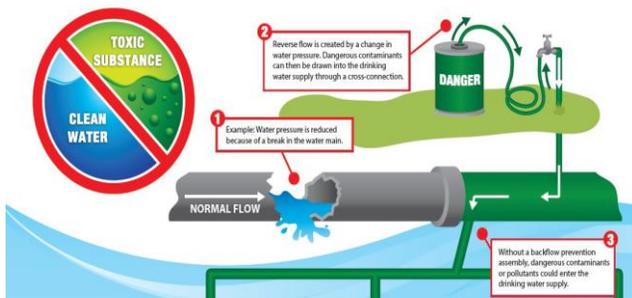
Frequently Asked Questions

What is a cross-connection?

A cross-connection is a point in a plumbing system where the potable (drinkable) water supply is or can be connected to a non-potable (non-drinkable) source.

What are we protecting the potable water supply from?

The goal is to protect your drinking water supply from contamination or pollution by keeping water that has entered a private facility from flowing back into the public water system. When water backflows in the system, it is usually caused by either backpressure or back siphonage.



What causes water to flow backwards?

The most common reason that water can flow backwards is back-siphonage. This is caused by the public water supply being less than the pressure in a private plumbing system. **Back-siphonage** occurs when there is a sudden drop in water pressure in the water distribution system during water main breaks, or due to using large amounts of water during fire fighting operations. A second can be **Back-pressure**. Heating systems, elevated tanks, and pressure producing systems can create pressure in the customer's plumbing that exceeds the pressure in the (City) water main.

Solution 1 - Anti-siphon Ballcocks - For example, toilet tanks contain a ballcock device which allows water into the tank after flushing. Older style ballcocks do not have an anti-siphon feature and can allow water from the toilet tank to backflow into your drinking water line. (fig. 1) A simple anti-siphon ballcock (fig. 2) installed with a 25mm (1") air gap above the overflow tube will prevent contaminated tank water from entering your water supply.

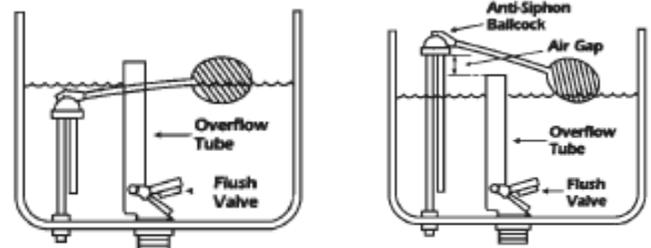
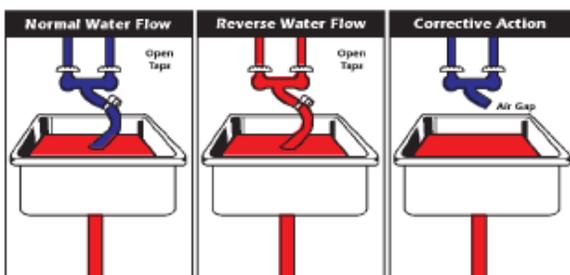


Fig. 1

Fig. 2



Solution 2 - Air Gaps - Leave a gap of at least one inch or two times the pipe diameter (whichever is greater) between the end of a hose and a source of contamination. This eliminates a link between the two. Never leave a hose where it can suck contaminants back into the drinking water supply, such as in a swimming pool, bathtub, sink or fish tank.

Outside Faucets

The garden hose is the most common cross connection in the home. It acts like an extension of the water line. The hose is attached to the outdoor faucet and the other end is connected to an aspirator that contains insecticides, fertilizer or other chemicals used with the aspirator. Another common cross connection is to leave the other end of the hose submerged in a bucket of soapy water (Fig-3) or just by laying down on the ground. If there is a drop, in pressure on the inlet side from possibly a water main break, or a large amount of water being pulled from the main from instances such as during firefighting operations, you will pull those contaminants into the drinking water supply.

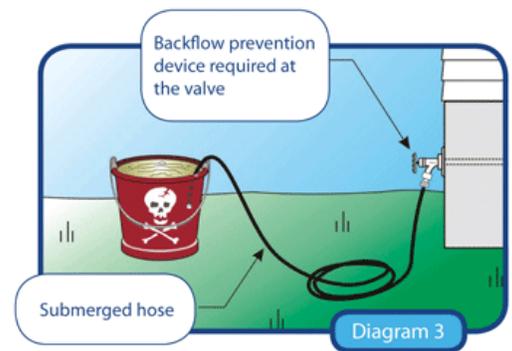


Fig-3



Fig-1

You can install a hose bib vacuum breaker like the one shown in (Fig-1). This will isolate the faucet and protect the water supply from contamination. Each spigot at your home should have a hose-bib vacuum breaker installed. This is a simple, inexpensive device, which can be purchased at any plumbing or hardware store. Installation is as easy as attaching your garden hose to a spigot. You can also check and make sure that your house or building has Outside Faucets with atmospheric vacuum breakers installed (Fig-2), this prevents having to install vacuum breakers on the end of the faucet.

Outside Water Faucets as pictured in Fig-2 also called Sill Cocks, or Hose Bibs and can come with a vacuum breaker already installed making them freezeless



Fig-2

Various types of Backflow Preventers can look like:





The five recognized methods/assemblies for protecting against cross connection hazards are:

1. Air gap may be used as protection for either type of cross connection, direct or indirect type, and for any degree of hazard.
2. Atmospheric vacuum breaker may be used as protection for indirect type cross connections only, and for any degree of hazard. This unit must be installed on the discharge side of the last control valve on a system so that it will not be subject to backpressures.
3. Pressure vacuum breaker may be used as protection for indirect type cross connections only, and for any degree of hazard. This unit must be installed so that it will not be subject to backpressure, but may be installed subject to continuous supply line pressures.
4. Double check valve assembly may be used as protection for either type of cross connection, but it is limited for use in pollutant hazard situations.
5. Reduced pressure principle backflow prevention assembly may be used as protection for either type of cross connection and it may be used in contaminant or pollutant hazard situations.

With the City of East Moline having partnered with BSI Online to assist in administering the Cross-Connection Control Program, this will better help the City in staying in compliance with regulations. BSI Online will issue a Customer Confirmation Number (CNN) to use when reports have been submitted at the [BSI Online Tracking Website](#). You may also use this email to verify when your backflow test has been filed, locate a list of testers in the area, or simply learn more about backflow.

Please contact BSI Online [via email](#) or phone at 1-800-414-4990 if you have any questions.

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