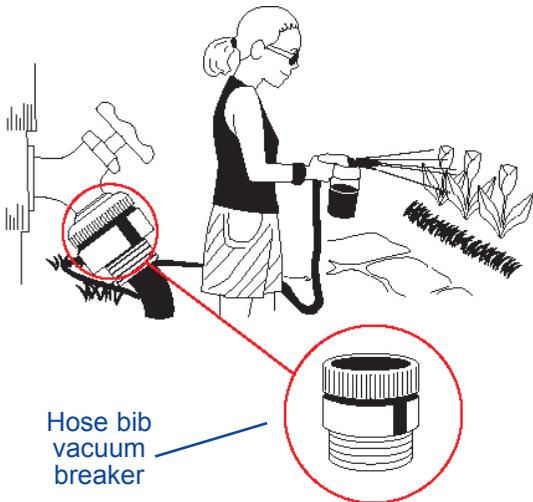




CROSS-CONNECTION

An example of a cross-connection that may be present at your home would be a hose end sprayer used to apply lawn chemicals.



Problem
If the pressure in the water main drops, the chemicals in the hose end sprayer could be siphoned into the home and public drinking water supply.

Solution
This situation is easily remedied by installing a self-draining vacuum breaker onto the faucet. Hose bib vacuum breakers are easy to install and readily available.

DEFINITIONS

Isolation
Installation of a backflow preventer at the cross-connection on each piece of water-using equipment, such as a boiler.

Containment
Installation of a backflow preventer on the water service line immediately following the meter.

Backflow prevention device
A mechanical device designed to prevent the backflow of used water, contaminants or pollutants from the customers' piping into the public drinking water supply.

Non-potable
Water that is not safe for human consumption; contaminated in some manner.

Potable
Water that is considered safe for human consumption

Water quality is important to all our customers and we hope that you will assist us in maintaining a safe drinking water supply. If you have questions about cross-connection and backflow, please contact your licensed plumber or Des Moines Water Works at (515) 283-8775.



PROTECTING OUR WATER SUPPLY

Des Moines Water Works
Cross Connection Control Program



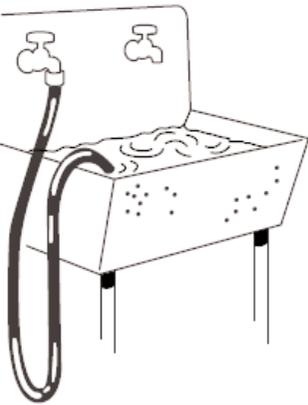
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(515) 283-8700 | www.dmww.com



CROSS-CONNECTION

Drinking water is one of our most precious resources and Des Moines Water Works is committed to providing the best water possible to our customers. Your compliance with State and Local plumbing codes helps to protect the drinking water from possible contamination or pollution through cross-connections.

What is cross-connection?



An actual or potential connection between the public drinking water supply and a customer's plumbing system that makes it possible for used water, pollutants, or contaminants to enter the public drinking water supply.

How can a cross-connection be harmful?

A pollutant or contaminant that enters the drinking water supply through a cross-connection can cause illness and spread of disease.

What is backflow?

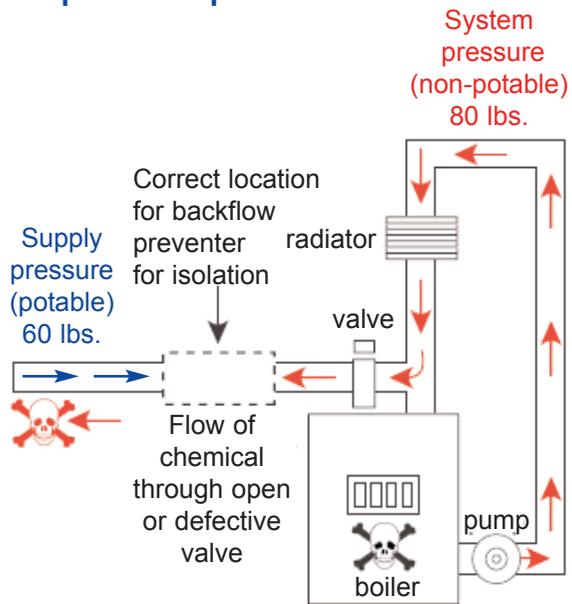
The undesirable reverse flow of used water contaminants or pollutants into the public drinking water supply as a result of a cross-connection. Backflow can occur through backpressure or backsiphonage.

BACKPRESSURE

What is backpressure backflow?

Backflow caused by water pressure in a facility that is higher than the pressure of the public drinking water supply. This may be caused by pumps, boilers, gravity or other sources of pressure.

Example of backpressure:



Problem

The chemically treated boiler water could backflow through an open or defective valve into the building's plumbing system due to the boiler system pressure being higher (80 lbs.) than the supply pressure (60 lbs.)

Solution

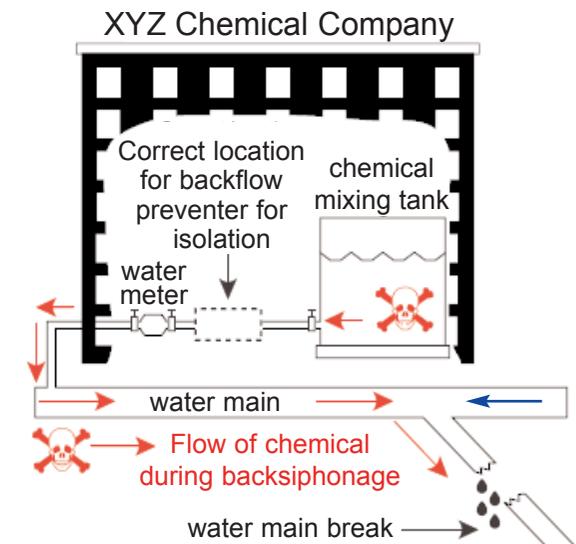
Installation of a backflow preventer on the water line at the point where it connects to the boiler. This type of installation is referred to as "isolation."

BACKSIPHONAGE

What is backsiphonage?

The reverse flow of used, contaminated or polluted water from a plumbing fixture or device into the public drinking water due to reduced pressure. This can be caused by nearby fire fighting, water main breaks or repairs.

Example of backsiphonage:



Problem

If the public water supply pressure is reduced, the chemicals in the mixing tank can be siphoned back through the water feed line, into the customer's building and the public water main.

Solution

Installation of a backflow preventer on the water service line immediately after the water meter is required. This prevents contaminated water from entering the drinking water supply through backflow. This type of installation is referred to as "containment."