

Cross Connection Control Program

Overview

The City of Hudson water system delivers safe, high-quality drinking water every day. To continue to protect the public health and keep the water system safe from contaminants and pollutants we are required by the Wisconsin Department of Natural Resources, Wisconsin Department of Safety and Professional Services, and the City of Hudson Municipal Code to maintain a Cross Connection Control Program. The Hudson Water Utility has contracted with Hydro Designs, Inc. (HDI), of New Berlin, Wisconsin to manage our program. HDI is a firm that specializes in backflow prevention education and cross connection control inspections. Hydro Designs Inc. does not sell plumbing devices, installations or perform device testing. They currently manage program services for over 115 municipalities and water utilities in Michigan, Wisconsin, and Florida. HDI will perform the initial inspections of all commercial, industrial, and public authority facilities throughout the city to detect actual & potential cross connections, and make recommendations for the installation of backflow prevention devices or assemblies where necessary. This will help ensure that contaminated or polluted water cannot backflow into clean drinking water.

What Is a Cross Connection Control Program?

WI NR 810.15 Defines a CROSS-CONNECTION CONTROL PROGRAM as; The supplier of water for every municipal water system shall develop and implement a comprehensive cross connection control program for the elimination of all existing cross-connections and prevention of all future cross-connections. A record of the cross-connection control program shall be kept current and available for annual review by the department.

- **Public Education Program**— Visit the following web sites for more information and resources: Hydro Designs, Inc.: www.hydrodesignsinc.com
- **Notices to Owners** - Notify the building owner of a scheduled inspection date and any required corrective action.
- **Cross Connection Survey**—All residential, commercial, governmental, institutional, and industrial facilities plumbing systems which are connected to the public water supply will be inspected to determine if cross connections exist as required by the WI DNR Regulation NR810.15.
- **Installation of Protective Devices**—Backflow prevention devices or assemblies will need to be installed at the owners expense where known unprotected cross connections exist as required by Department of Safety and Professional Services Chapter Comm 382.41.
- **Annual testing**—All backflow prevention assemblies will be tested once a year by a State of Wisconsin certified tester of the owners choice.

What Is a Cross Connection?

A cross connection is a direct or potential connection between any part of the public water supply system and a source of contamination or pollution. The most common form of cross connection is a garden hose, which is easily connected to the public water supply system and can be used to apply a variety of potentially dangerous substances, including chemicals and fertilizer. Other common cross connections include dishwashers, toilets, pressure washers, boilers, pools, and lawn sprinkler systems.

How Does Contamination Occur?

Water normally flows in one direction, from the public water system through the customer's cold or hot water plumbing system to a faucet or other plumbing fixture. Under certain conditions, water can flow in the reverse direction. This is known as **backflow**, and it occurs when backsiphonage or backpressure is created in a water line.

Backsiphonage may occur when there is a drop in the supply pressure of the water distribution system. This can be caused by a water line break, water main repair, during a rapid withdrawal of water from a fire hydrant or other situation that creates a vacuum, which may pull or siphon contaminants or pollutants into the drinking water supply.

Backpressure may be created when a source of pressure, such as a pump, boiler, or other use creates a pressure greater than that supplied from the water distribution system; this may force water to reverse direction.

What is a Cross Connection Survey?

The cross connection survey is the first step in our program. Wisconsin Department of Natural Resources Regulations (NR 810.15) recommends that all residential, industrial, commercial, and institutional facilities be surveyed for cross connections regularly. A survey is a walk-through of the water-system piping in a building or property, starting at the water meter and ending at the last free-flowing tap. At the end of the survey HDI will produce a report describing any violations or discrepancies found, as well as a time frame for compliance. The first round of inspections will include city-owned buildings, public school facilities, hospitals/medical facilities, car washes, industrial/manufacturing facilities, and mortuaries. Inspection notices will be mailed to water customers approximately two weeks before the scheduled inspection date. A representative should be available during the inspection to answer questions and provide access.

Questions?

Cross connection control program questions can be directed to The Hudson Water Utility at 715-386-4760, or Hydro Designs, Inc. at (800) 315-4305