

### **MISSION STATEMENT**

Provide quality water that exceeds state standards, now and into the future, at a reasonable cost to the user, and protect the city's investment in the facility.

> The City of Molalla is dedicated to providing clean, safe drinking water by complying with State and Federal Regulations and educating their water users.

> Water is a renewable resource. You are using the same water which was used from the beginning of time. It rains, it snows, there is run-off, it evaporates, it rains, it snows... This is the way it has been and will always be.

Having clean, safe drinking water is a luxury that could slip away if together we are not diligent to preserve its quality. We appreciate your support in the implementation of our cross connection program.

Contact us at:: City of Molalla PO Box 248 Molalla, OR 97038 Phone: (503) 829-6855 Fax: (503) 829-3676 City of Molalla PO Box 248 Molalla, OR 97038

# Why is a Cross Connection Control Inspection or Survey Necessary?



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#### WHAT IS A CROSS CONNECTION?

A cross connection is a point in the plumbing system where the public potable water supply is connected or has the potential of being connected directly to a



source of non-potable substances. With the right hydraulic conditions, pollutants or contaminates can enter the public potable water system (called "backflow") through these unprotected connections.

Cross connections are installed each day because people are unaware of the problems they can create.

#### HOW CONTAMINATION OCCURS

Under pressure, water normally flows in one direction: from the public potable water system through plumbing to a sink tap or other plumbing fixture. Under certain



conditions, water can flow in the reverse direction. This is known as backflow. Backflow occurs when a backsiphonage or backpressure condition is created in a water line. Backsiphonage may occur due to a loss of pressure in the water distribution system during a high withdrawal of water for fire protection, a water main or plumbing system break, or a shutdown of a water main or plumbing system for repair. Backpressure may be created when a source of pressure, such as a pump, creates a pressure greater than that supplied within the distribution system. If a pump supplying water from a non-potable source such as a landscape pond was accidentally connected to the plumbing system, the water from the landscape pond could be pumped back into the potable water supply.

## WHERE ARE CROSS CONNECTIONS FOUND?

Cross connections are found in all plumbing systems. It is important to identify each existing and potential cross connection and evaluate them as to the type of backflow protection required to protect the drinking water supply.

Most cross connections will require the installation of an approved backflow assembly. Listed below are some examples of cross connections found by cross connection control specialists during a survey.

Hose bibbs without hose bibb vacuum breakers. Irrigation systems.

Auxiliary water supplies (i.e. wells, creek). Post mix beverage machines using carbon dioxide. Photo developing equipment. Chemical injectors. Boilers. Portable kidney dialysis machines. Medical equipment. Swimming pools. Solar systems. Fire sprinkler systems.

#### PROTECTION OF THE PUBLIC DISTRIBUTION SYSTEM

Plumbing that is installed in compliance with the plumbing code will afford adequate protection from contamination due to cross connections.



However, your public water system may be mandated by regulations or, as a condition of providing water service, may require the installation of a backflow prevention assembly at the service connection or meter to

provide added protection for the public water distribution system. A backflow prevention assembly will be required, if a property or premises has been determined to have an actual or potential cross connection, or where a cross connection control survey questionnaire cannot be completed.



In determining if a backflow prevention assembly is required, the water purveyor may send to each customer a "Cross Connection Control Survey Questionnaire" form and/or conduct an on-site survey.

Evaluation of the questionnaires and/or surveys will allow the water purveyor to assess the degree of hazard and then make an evaluation if an assembly should be installed, and if so, the type and location of an approved backflow prevention assembly that is required for the protection of our public water supply.