



## HELP PROTECT YOUR DRINKING WATER

### **CROSS CONNECTION CONTROL & BACKFLOW PREVENTION**

#### **WHAT IS A CROSS CONNECTION?**

A cross connection is a point in a plumbing system where the potable water supply is connected to a non-potable source. Briefly, a cross connection exists whenever the drinking water system is or could be connected to any non-potable source (plumbing fixture, equipment used in any plumbing system). Pollutants or contaminants can enter the safe drinking water system through uncontrolled cross connection when backflow occurs.

Backflow is the unwanted flow of non-potable substance back into the consumer's plumbing system and/or public water system. There are two types of backflows: **Backsiphonage** and **Backpressure**. **Backsiphonage** is caused by a negative pressure in the supply line to a facility or plumbing fixture. Back siphonage may occur during water main breaks, when repairs or maintenance are done, when shutting off the water supply, when the fire department is using a fire hydrant, etc. **Backpressure** can occur when the potable water supply is connected to another system operated at a higher pressure or could create pressure. Principal causes are booster pumps, pressure vessels, and elevated plumbing, etc.

#### **EXAMPLES OF COMMON CROSS CONNECTIONS:**

Hose Bibs	Irrigation Sprinkler Systems	Solar Heating Systems	Laboratory & Aspirator Equipment
Swimming Pools	Auxiliary Water Systems	Chemical/Processing tanks	Water Recirculating Systems
Boilers	Fire Suppression Systems	Photo Developing Equipment	Ect..

#### **HOW DO WE PROTECT OUR SYSTEM?**

In general, the installation of plumbing in compliance with the plumbing code will provide adequate protection for your plumbing system from contamination. However, the installation of a backflow prevention assembly on the water service may be required. A backflow prevention assembly, which is a mechanical device designed to prevent backflow through cross connections, will normally be required when special plumbing increases the hazard level. However, for these devices to protect as designed, they must meet stringent installation requirements, be tested annually by a state certified tester, and repaired as necessary.

To help determine if a backflow prevention assembly is required the water system may survey your plumbing system to determine potential/actual cross-connection.

#### **WHAT ELSE CAN BE DONE TO PROTECT OUR WATER SUPPLY?**

##### **DO:**

- Complete the required Cross Connection Control Survey Questionnaire provided.
- Keep the end of your hoses clear of all possible contaminants.
- If not already equipped with an integral (built-in) vacuum breaker, buy & install hose bib type vacuum breakers on all threaded faucets (these devices DO NOT require testing).
- Have all backflow prevention assemblies tested annually.
- Contact us with any questions you may have about plumbing or equipment.

##### **DO NOT:**

- Submerge hoses in buckets, pools, tubs, sinks, or ponds.
- Use spray attachments without a backflow prevention device.
- Directly connect waste drain pipes from water softeners or other treatment systems to the sewer system. All drains should be air gapped.
- Use a hose to unplug blocked toilets, sewers, etc.

#### **FOR MORE INFORMATION ABOUT CROSS CONNECTIONS & BACKFLOW PREVENTION, CONTACT OUR OFFICE OR VISIT THE EPA WEBSITE AT**

<http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm>

**WE ARE COMMITTED TO PROVIDING QUALITY, COST EFFECTIVE SERVICE IN THE PRODUCTION, TREATMENT, TESTING AND DELIVERY OF SAFE DRINKING WATER TO ALL RESIDENTIAL, COMMERCIAL & INDUSTRIAL USERS.**

# CROSS CONNECTION CONTROL QUESTIONNAIRE

## **RESIDENTIAL (SINGLE FAMILY HOMES)**

Does your Residence have the following? **CIRCLE ALL THAT APPLY**

- Farm/Animal Troughs
- Greenhouse
- Sewage/Gray Water System
- Swimming Pool/Spa
- Water Treatment (softener)
- Fish or Decorative Ponds
- Irrigation System
- Solar Heating System

## **COMMERCIAL / INDUSTRIAL BUILDINGS**

Does your business have the following? **CIRCLE ALL THAT APPLY**

- |                   |                         |                          |
|-------------------|-------------------------|--------------------------|
| Cooling System    | Irrigation System       | Auxiliary Water Systems  |
| Laboratories      | Fire Protection Systems | Fish or Decorative Ponds |
| Swimming Pool/Spa | Water Towers/Storage    |                          |

What type of Business do you have? **CIRCLE ALL THAT APPLY**

- |                   |             |                   |                     |                      |
|-------------------|-------------|-------------------|---------------------|----------------------|
| Paper Plant       | Storage     | Automotive Repair | Barber Shop/Salon   | Bar/Lounge           |
| Animal Grooming   | Car Wash    | School/College    | Apartments/Condo    | Photo Processing     |
| Chemical Facility | Dairy Plant | Hospital/Clinic   | Nursing Home        | Dry Cleaners/Laundry |
| Brewery           | Motel/Hotel | Morgue/Mortuary   | Plating/Metal Plant |                      |

Other: \_\_\_\_\_

If yes, what kind of Backflow Preventor Assembly do you have? **CIRCLE ALL THAT APPLY**

- |                            |                         |                                     |
|----------------------------|-------------------------|-------------------------------------|
| Atmospheric Vacuum Breaker | Pressure Vacuum Breaker | Reduced Pressure Principle Assembly |
|----------------------------|-------------------------|-------------------------------------|

**Location of your Backflow Preventor Assembly:** \_\_\_\_\_

**Name or Company:** \_\_\_\_\_

**Address:** \_\_\_\_\_

Street

City

State

Zip Code

**Email:** \_\_\_\_\_

**Cell Number:** (    ) - \_\_\_\_ - \_\_\_\_\_

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_