# **Frequently Asked Questions**

#### What is backflow?

When water flows backward through the water supply system, it is called backsiphonage or backpressure. Although it is hard to imagine, this can, and does, happen. When that water is accidentally mixed with hazardous chemicals or other contaminants, it becomes dangerous!

#### How can this happen?

Imagine you are preparing to wash your car. You begin by pouring soap into a bucket. You throw the end of the garden hose into the bucket and turn on the faucet. As the bucket fills, there is suddenly a loss in water pressure, and the water begins to flow backwards, "siphoning" the soap and chemicals out of the bucket and into the water supply.

Or, maybe, in your home, you have a boiler system (hot water heat). The water remains in that system year after year. It becomes stagnant. Particles build up in it. Again, there is a loss in water pressure and this boiler water is pulled into your house water system. When the pressure comes back up, you go to the faucet to get a nice, cool, clear glass of water. Instead you get a drink of blackened boiler water. Not only will it taste bad; it could make you very sick.

# Why would the water system lose pressure?

The water system can lose pressure, or have a low pressure, for a number of reasons. Some examples are high water usage like watering lawns or fighting fires. Other examples are water main breaks or even physical characteristics such as buildings located long distances from the water plant or at higher elevations.

### What are other examples of hazards to the water system?

As mentioned above, garden hoses and boilers are good examples of hazards to the water system. So are:

Pop carbonators, automatic lawn sprinkler systems, fire sprinkler systems (stagnant water again), automatic dishwashers with chemical injectors, automatic soap dispensers, tanks and vats of chemicals or water, mop sinks, water cooled equipment, industrial process equipment, garbage disposals with water connections, hose attachments for sink faucets (just like the bucket of soapy water), hair salon sinks, cooling towers, and fish ponds, just to name a few. There are many more!

## If I need to install a backflow device, whom should I call?

Some backflow devices, like a hose attached vacuum breaker can be bought at plumbing supply stores and can be easily fitted onto a faucet. Other devices like an RPZ or DCVA (see "Backflow devices, assemblies and methods") are not so easily installed. There are two qualifications to install these devices. FIRST- a licensed plumber must install the device and they must obtain a plumbing permit from the lowa City Building Department. SECOND- a State Certified Tester must test the device. Some people have both of these qualifications. Other will have one or the other. Make sure to determine what qualifications a person has before you hire them.

#### How can I help to prevent contamination to the water system?

At home, make sure your outdoor faucets say "anti-siphon" or have some form of backflow protection such as a "hose attached vacuum breaker" device. Do not use unapproved products that connect your faucets to your sewer system. If you have a boiler, check to see if it has a backflow device. Contact the City Backflow Coordinator to conduct a survey of your property if you are not sure. The City is currently in the process of surveying all commercial properties to determine if any hazards exist. If you already have a

backflow device, make sure to have it tested annually. To maintain compliance with City, State and National codes, the City keeps track of all installations and testing of backflow devices.

# What if I don't comply with the backflow requirements?

Hazardous conditions to the water system must be remedied as quickly as possible. Failure to do this may result in a loss of water use or fines. The City would like to avoid this if at all possible. Our goal is to work with you to attain compliance with the regulations, whether it involves the installation or the annual testing of the device. If you have questions, please call the Backflow Coordinator at 743-6310.