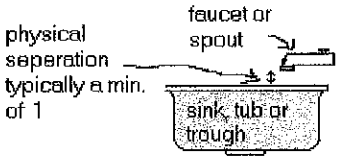
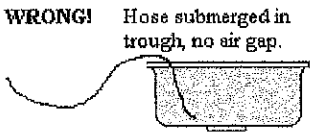
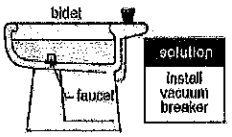
We want to thank you for participating in this water-use survey. The purpose of the study is to conduct a water use survey to determine if there are any unprotected cross-connections present in the household plumbing system. A cross-connection is a connection between the drinking water plumbing system and any other source, which may contribute to the degradation of the quality of the drinking water. We work hard to provide the safest water possible to your home. However, once this water enters your property, there are common problems that may arise due to improper changes in, or misuse of, your plumbing system. We would like to take this time to explain some of these common problems, to let you know what we are looking for and why.

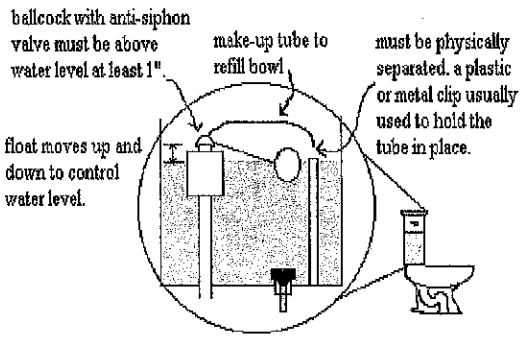




⇦ SINKS, TUBS, TANKS, TROUGHS

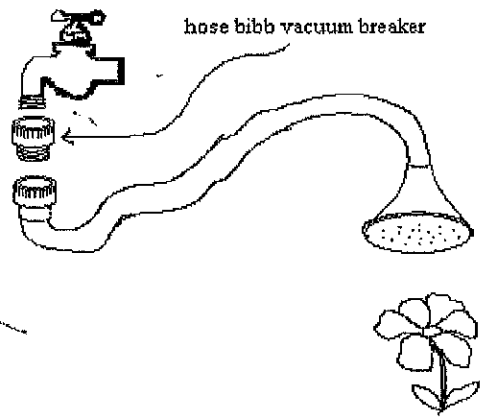
The faucets in your bathroom or kitchen must be located so that the end of the faucet is above the overflow level of the sink or tub. Fill lines to water troughs or tanks must also be physically separated or "air-gapped."
If there is no air-gap, then the contents of the sink, tub or tank may be sucked or "back siphoned" into the water line during a loss of water pressure.





⇦ Toilets

Toilets need water to flush the waste material into the sewer system. The water that flushes the toilet enters into the toilet tank from the small hose or pipe connected to the bottom of the toilet tank. It is essential that the float-valve (or anti-siphon ballcock) inside of the toilet tank is the correct type so that the contents of the toilet tank do not get back into the drinking water system in your house. As shown in the illustration, the anti-siphon ballcock and refill tube must be above the water level in the tank.

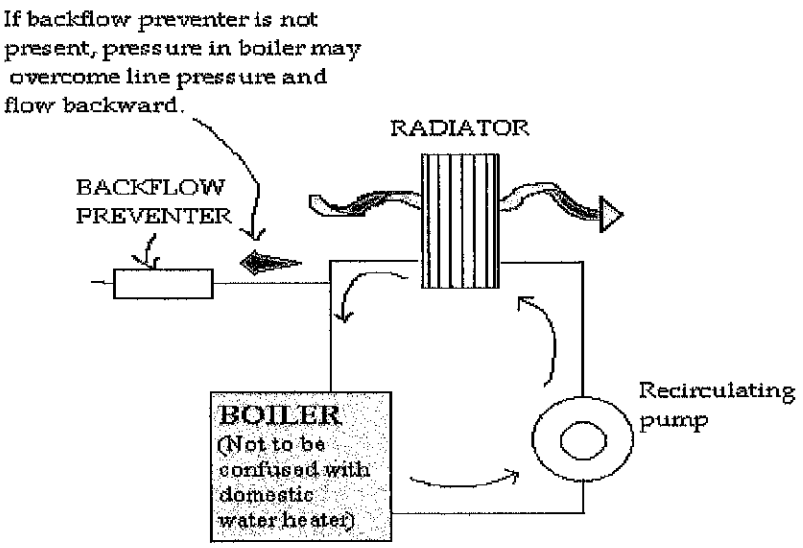


⇦ HOSE BIBBS

Hose bibs are part of our everyday life. They allow us to hook up a garden hose to water the plants, wash the car, clean out the gutters, fill the swimming pool, etc. However, every time you connect a garden hose to a hose bibb, you are extending the end of the water line. To make sure that no harmful materials are drawn back into the garden hose, we recommend a vacuum breaker be installed on each hose bibb. When the hose bibb is exposed to freezing conditions, make sure to use a self-draining, frost proof vacuum breaker.

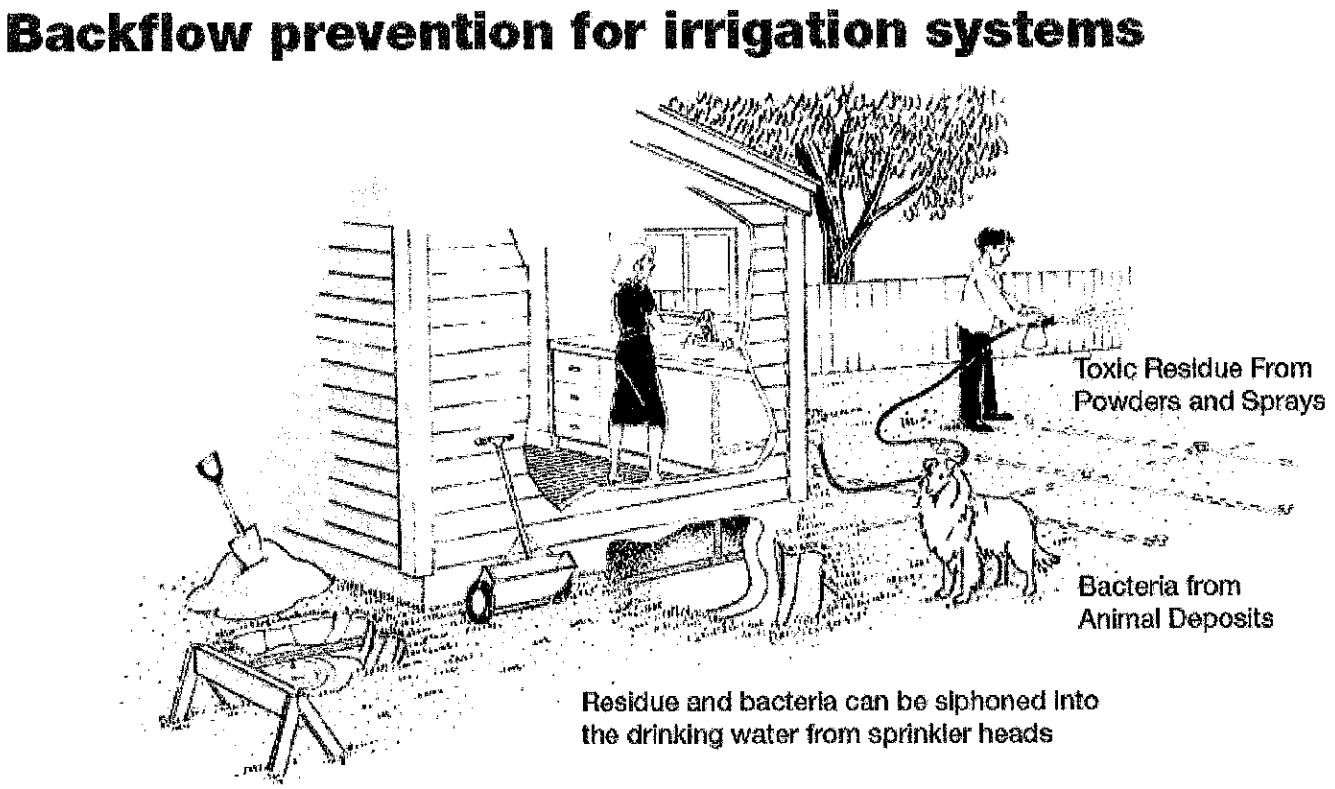
BOILERS ⇨

Due to the pressure that may build up inside of a boiler, the pressure of the boiler water may exceed that of the water feeding the boiler. The boiler water (which may be chemically treated with poisonous anti-corrosion compounds, etc.) may be pushed, or *back pressured*, into the make-up water line. This chemically contaminated water may be forced back into your home's potable water system, unless there is an appropriate backflow preventer that is designed for backpressure.



IRRIGATION SYSTEMS

All in ground sprinkler systems must have a backflow preventer. With a sprinkler system the heads of the lines are at ground level. If there is water pooled at one of the heads and a subsequent low pressure event occurs, all kinds of nastiness can be siphoned back into your water line.



For more information on the seriousness of backflow you can find information on The EPA website at the following location;

http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000262T.txt