



This document provides information regarding backflow prevention and its importance to the city's potable water supply.

1. What is backflow?

Under normal conditions water flows from city water mains to water customers. Two conditions can cause backflow, backpressure and back-siphonage. Back-pressure occurs when city main pressure is less than the customer side. A boiler with no backflow protection would cause reverse flow. Back-siphonage can be a result of a water main break creating a vacuum and thus allowing contaminants to be sucked into the potable water supply.

2. What is a cross-connection?

An actual or potential physical connection between a potable water supply or any source or mechanism through which it is possible to introduce into any part of the drinking water any contaminant or pollutant. An example of a cross-connection would be a garden hose submerged in a chemical dispenser such as a pest-control mixing tank.

3. Why is backflow prevention necessary?

If your business or occupancy classification is listed in Chapter 37 of the Phoenix City Code, or not listed but presents a threat of a cross-connection, then you must provide backflow protection.

4. Is a permit required to install a backflow preventer?

A permit is required for all new installations.

5. How do I get a permit to install a backflow preventer?

Come to the Development Center at Phoenix City Hall, 200 W. Washington Street, 2<sup>nd</sup> Floor, Phoenix, AZ. You will need to provide specifications for the type of backflow you are installing which includes manufacturer, model, size and what it is serving, fire / domestic.

6. Which backflow assembly is right for me?

The degree of hazard will determine the level of protection needed. All assemblies shall be USC approved.

7. What are some of the approved backflow assemblies or methods?

- a. Air Gap – physical separation between potable supply and the overflow rim of a non - pressure receiving vessel.
- b. Atmospheric Vacuum Breaker – can be used for either low or high hazard (back-siphonage) only.
- c. Double Check Valve Backflow Preventer – can be used for low hazard (pollution) back-pressure and siphonage.
- d. Pressure Vacuum Breaker – can be used for low hazard and high hazard protection

(back-siphonage) only.

- e. Reduced Pressure Principle Backflow Preventer – offers the highest level of protection for (back-pressure and siphonage)

8. Where do I install the Secondary Backflow Preventer?

If you are installing a (secondary / site containment) that would protect the city main, it would have to be located as close as practicable to the point of service delivery (meter). This will insure that no unwarranted connection could be made between the meter and the inlet of the backflow assembly. The assembly owner may request that the backflow be located other than specified. This would have to be approved by the Administrative Authority.

9. Who will test the backflow assembly?

After the backflow assembly has been installed by a licensed contractor, the premise owner or responsible person shall have the backflow assembly tested by a Certified Backflow Assembly Tester. Send test report to: City of Phoenix / Backflow Prevention / 438 W. Adams, Phoenix Arizona 85003, or Email to [Backflow.Prevention@phoenix.gov](mailto:Backflow.Prevention@phoenix.gov).

10. How do I request an inspection?

You now have a permit and would like to call for an inspection. Please call 602-495-0800 before 8 pm for next day inspection, using the code "217" for inspection type. For questions regarding backflow devices, please call 602-534-2140.