### What is a cross-connection?

A cross-connection occurs whenever a potable water line is directly or indirectly connected to a non-potable piece of equipment or piping. Examples of non-potable equipment include fire protection, lawn irrigation, cooling systems as well as high pressure boilers. A cross-connection may occur within the process equipment such as chemical mixing tanks, plating tanks, irrigation systems, and heat exchangers.



### How can a cross-connection occur?

Non-potable water or chemicals used in a system or equipment can end up in the drinking water pipeline as a result of "backpressure" or "backsiphonage." Backpressure occurs when the pressure in the equipment or system (e.g., air-conditioning system, boiler, etc.) is greater than the pressure in the drinking water line. Backsiphonage occurs when the pressure in the drinking water line drops (due to occurrences such as main breaks, fires, heavy demand, etc.) and contaminants are sucked out of the system and into the drinking water supply.





Approved backflow prevention devices installed at water main connections to a high-rise building.



141 N. Glendale Avenue, Level 4 Glendale CA 91206-4496 Contact: Ray Notario, (818) 548-3962 www.glendalewaterandpower.com CITY OF GLENDALE

GLENDALE WATER & POWER

# CROSS-CONNECTION CONTROL PROGRAM



# To Protect the Public Water Supply System



141 N. Glendale Avenue, Level 4 Glendale CA 91206-4496

### Why should people be concerned about cross-connection?

An unprotected or inadequately protected cross-connection could contaminate the public drinking water supply, not only inside the user's premises, but their neighboring homes and businesses.

Have these incidents ever happened? Not in Glendale, but there are examples throughout the nation documenting backflow occurrences that justify inspection of facilities and requiring the installation of a backflow prevention device. By having a backflow prevention program, GWP is safeguarding the public health.

## What are the regulations governing cross-connections?

California Regulations (Title 17 of the California Administrative Code, Sections 7583 through 7605) requires that all public water supply systems have a cross-connection control program to protect the public potable water supply from contamination.

Regulations require installation of backflow prevention device at all premises where actual or potential cross-connections exist. The type of device depends on the degree of hazard associated with the particular cross-connection. Devices installed are as follows:

- reduced pressure principle backflow preventers (RPs)
- double check valve assemblies (DCVAs)
- air gap separations (AGs)
- atmospheric (AVBs)
- pressure vacuum breakers (PVBs)

State regulations also require a yearly testing of these devices to ensure that they are continuing to work properly. Testing must be done by an independent certified backflow prevention device tester hired by the owner.

Glendale *Water & Power* and the Los Angeles County Department of Public Health are responsible for ensuring that Glendale customers are meeting all the requirements.





Updating information in the computer data base and customer follow-ups for non-tested devices are important parts of the program.

### What is my responsibility as a facility owner?

You must have your facility periodically inspected by the Glendale Water Department to determine if a cross connection exists. You can expedite the process by having your facility initially surveyed by a licensed plumbing contractor. Each actual or potential cross-connection must be eliminated or properly protected by an approved backflow prevention device assembly. All work done on the internal plumbing system must be performed by a licensed plumber and under permit of the City of Glendale Building and Safety Department. Any changes to your plumbing must be approved by the City's plumbing inspector and the water department as necessary.

GWP mails test forms annually for each backflow prevention device to customers and must be tested by a certified tester. The form must be mailed back on or before the deadline as indicated. Devices that failed must be repaired and retested for compliance.

As a business owner you must protect the public water system and the health of your employees, customers and neighbors by preventing a cross-connection on your premises pursuant to California Regulations and the Glendale Municipal Code. The failure on the part of the facility owner to install, test, and maintain approved device's may lead to termination of water service.