

# CPW Cross-Connection Control Department

## Degree of Hazard Assessment

### For New Construction Projects

1. It is recommended that the fire service and commercial backflow prevention assemblies be installed in the fire-riser/mechanical room. This will allow for maximum longevity, protect against vandalism & freezing weather.
2. If the fire service utilizes glycol, foamite or any antifreeze solutions, an approved Reduced Pressure Principle (RP) backflow prevention assembly is required by code. If water only, an approved Double Check Valve Assembly (DCVA) is required.
3. The commercial backflow prevention assembly requirement is dependent on the type of "equipment" being used by potable water. If any of the following equipment is tied into the water system, an RP is required:
  - a. Chillers
  - b. Boilers
  - c. Cooling towers
  - d. Solar heating panels
  - e. Single-wall heat exchangers
  - f. Any related equipment using any chemical or additive which may be harmful to the public health
  - g. Commercial Accounts with more than one (1) Tenant (multiple tenants) sharing a single water meter
4. All backflow prevention assemblies must be University of Southern California (USC) approved. If in doubt whether a particular assembly is approved, please call before ordering or installing the assembly. Assemblies larger than two-inch (2") are required to be installed **ABOVE GROUND**. Assemblies two-inch (2") and smaller may be installed below ground in an appropriate-sized enclosure with adequate clearance on all sides of the assembly. See the illustration in CPW's Manual. CPW encourages freeze-protection for all assemblies. There are several ways to protect against freezing: insulated enclosures, freeze-protection valves and flexible, padded wraps.

5. Very few assemblies have USC approval for a VERTICAL orientation. Please verify the approval before installing any assembly vertically.
6. All lawn irrigation sprinkler systems are required to have an approved backflow prevention assembly. If the irrigation system utilizes a booster pump, has the ability to induce or aspirate fertilizer, herbicides or pesticides, an approved RP is required. If the system is water only without pumps or induction/aspiration, an approved Pressure Vacuum Breaker (PVB) is required. The PVB must be installed so that the canopy (top cover) is at least twelve inches (12") above the highest pop-up irrigation head. If an RP is used, its RELIEF VALVE VENT must be at least twelve inches (12") above the finished grade.
7. If you do not have a copy of **CPW's CROSS-CONNECTION CONTROL PROGRAM MANUAL ON BACKFLOW PREVENTION**, please contact an Associate in the Cross-Connection Control Department at 727-6862, 727-6980, 727-7105 or 727-6981. This Manual provides detailed, illustrated installation guidelines, a listing of approved assemblies, and CPW's requirement for backflow prevention.
8. CPW's backflow prevention requirements are determined by an actual or potential **DEGREE OF HAZARD**. A Questionnaire is mailed to the customer when they apply for water. If the returned Questionnaire is incomplete or vague on how water will be used, a CPW Compliance Inspector will call or visit the customer to ascertain the degree of hazard. When the required backflow prevention assembly has been installed correctly and inspected by CPW, the water service will be activated.

Please feel free to contact one of the department Associates: Randy Hunt, Cross-Connection Compliance Inspector; Don Sondles, Cross-Connection Compliance Inspector; or Dale Strong, Cross-Connection Manager. Our Department Secretary is Margaret Porter and her telephone number is 727-6862.

**\*Until CPW can accurately assess the actual or potential Degree of Hazard, water service will not be completed.**