

CROSS-CONNECTION CONTROL PROGRAM

Testing of Fire Service Backflow Prevention Assemblies

Background

California Code of Regulations Title 17 (17CCR) requires that water suppliers shall protect the public water supply from contamination by implementation of a cross-connection control program. Fire protection systems that are supplied by the public water system require certain backflow protection to comply with 17CCR and California Plumbing Code.

17CCR further requires that:

- Backflow prevention assemblies shall be tested immediately after they are installed, relocated or repaired,
- Backflow prevention assemblies shall be tested annually or more frequently as determined by the health agency or water supplier.

Further, San Mateo County Backflow Prevention Ordinance requires that:

- All testable backflow prevention assemblies which have been installed to meet the requirements of 17CCR and the Backflow Protection Ordinance shall be tested when initially installed and at least once each year thereafter.

It has come to the attention of Environmental Health that many fire protection system backflow prevention assemblies may have been tested upon installation, but have not been tested annually as required by State regulation, as well as San Mateo County Backflow Prevention Ordinance.

Required Annual Testing and Installation of Fire Protection Backflow Preventers

In order to be in compliance with State regulation and County Ordinance:

Fire protection system backflow prevention assemblies within San Mateo County's Cross Connection Control Program must be tested annually by a County-certified tester. For a complete list of the water purveyors that are part of the San Mateo County Cross-Connection Control Program, please visit <http://smchealth.org/crossconnection>

- If an existing assembly is located in a vault, and has adequate physical clearance to test, Environmental Health considers the assembly "existing non-conforming" and approved for testing.



- If an existing assembly fails the field test, the assembly must be repaired or replaced with an appropriate, approved backflow prevention assembly installed to current code (not in a vault, even for those assemblies currently in vaults).
- If a new assembly must be installed, the assembly (and by-pass) must be approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California (USC) and be installed in an approved manner. For a complete list of USC-approved assemblies, please visit <http://usclist.com>.
- Assemblies must be installed in the orientation they are approved in and in an approved manner. Shut-off handles and test cocks must remain intact and not be removed. The one exception to this is if an assembly is installed on a residential fire system, the shut-off handles can be taken off and stowed nearby in an area that the resident is aware of. The test cocks should not be removed as this will void assembly approvals and will render the assembly untestable. **The handles must be made available for annual testing.**
- If an existing fire protection backflow preventer is not a testable assembly, the water purveyor, Environmental Health, local building department or fire protection district may require that a new appropriate assembly that meets current code be installed.

Replacement of any backflow preventer must be completed within a reasonable amount of time as determined by the water purveyor, Environmental Health, the local building department, and the fire protection district. Replacement of fire protection assemblies will likely require review and permits from the local building department with input from the fire protection district and the Cross-Connection Control Program.