

Texas Commission on Environmental Quality

Cross-Connection Control Subcommittee

Wednesday, December 5, 2012

Building F, Room 3202A

Time: 9:00 – 3:00

Meeting Summary

Announcements & Introductions

The meeting dates for 2013 are, Wednesdays – 3/6, 6/5, 9/4, and 12/4.

The meeting summary from the previous meeting was voted on and adopted and will be available on the TCEQ Website.

Installation Requirements for Reduced Pressure Principle Backflow Prevention Assemblies (RPs)

Mr. Al Fuentes, TCEQ Cross-Connection Control Program, led the discussion on recommendations for installation of RPs. It should be noted that TCEQ regulations do not directly address the installation of backflow prevention assemblies. However, the Backflow Assembly Test & Maintenance Report does ask if the assembly was installed per manufacturer's recommendations. Of concern was the installation of RPs below ground. The primary point the subcommittee made was: **An RP must be installed so that there is no risk of it becoming partially or completely submerged.**

The following recommendations were also provided:

1. **The RP must not be installed underground.** Experience has shown that, even when installed in a vault with a proper drain vent, the vent routinely becomes clogged (debris, animals, dirt, etc) which allows for water to collect in the vault and submerge the RP. An exception could be made for those RPs installed in vaults below ground where, due to the grading of the land such as on a hill, the drain in the vault is not below ground and precautions have been taken to prevent clogging of the drain.
2. **The RP must be installed per manufacturer's recommendations.** Due to the RP being manufactured to perform under specific conditions (vertical or horizontal installation, temperatures, pressures) varying from the manufacturer's installation recommendations could compromise the performance of the RP.
3. **The RP must not be installed above a height of 5 feet.** If the RP is installed above a height of 5 ft. then provisions must be made so that the tester and or

maintenance person may service the RP safely as specified in the Uniform Plumbing Code: *§603.3.4 Access and clearance shall be provided for the required testing, maintenance, and repair. Access and clearance shall require a minimum of one (1) foot (305 mm) between the lowest portion of the assembly and grade, floor, or platform. Installations elevated exceeding five (5) feet (1,524 mm) above the floor or grade shall be provided with a permanent platform capable of supporting a tester or maintenance person.*

- 4. Always check with the local jurisdiction (plumbing code, ordinances) for additional installation requirements.**
- 5. Always observe all required clearances for testing and repair.**
- 6. Make necessary accommodations for water flow from the relief valve.**

Focused Inspection Checklist

Al Fuentes

Mr. Al Fuentes presented the first draft of the Focused Inspection Checklist for use by the regional field investigators when evaluating Cross-Connection Control Programs. The committee had several recommended changes. The next step will be to incorporate those changes and present it to the Field Operations Division.

Test Gauges Used on Backflow Prevention Assemblies (BPAs) Installed on Recycled/Reclaimed Water Lines and Potable Water Lines

Fred Baird

Mr. Fred Baird led the discussion on the hazard of using the same gauge on assemblies installed on potable water supply lines and recycled/reclaimed water supply lines. The issue being the increased risk of cross contamination, i.e. introducing a pathogen(s) into the potable water supply from residual water in the gauge after testing an assembly on a recycled/reclaimed water line.

Recently, a Backflow Prevention Assembly Tester (BPAT), who the day before had tested an assembly on a recycled water line, tested 17 assemblies within a hospital. This action cost the testing company approximately \$30,000 in fines which threatened the survivability of the company. In this situation, involvement from the Tx. Health and Human Services Dept. was necessary.

It is strongly recommended that:

- Testers who intend to test assemblies on both potable water lines and recycled/reclaimed water lines have two gauges. Each gauge must be dedicated for each type of water exposure.
- The gauge used on the non-potable water line should be clearly marked (color coded) for use on non-potable water line assemblies only. This is supported in U.S.C.'s Manual for Cross-Connection Control 10th Edition, page 104, "The

backflow prevention assemblies installed in the recycled water systems must not be field tested with the same test equipment used to field test the assemblies on the potable system.”

- Require training providers to instruct testers to not use the same gauge on both potable and non-potable water line assemblies.

Backflow Prevention Assembly Testers (BPATs) and Insurance

General Discussion

Recently, questions have arisen regarding possible insurance requirements for BPATs. At this time, the TCEQ does not require BPATs to have insurance however local jurisdictions will often have their own requirements for insurance. It is the recommendation of the subcommittee that BPATs acquire a minimum liability insurance. Consideration is being given to include this topic in the BPAT Code of Ethics which is currently being developed.

Comment on draft of Irrigation General Information (GI) Document

Fred Baird

Mr. Fred Baird presented the latest draft of the General Information brochure addressing irrigation systems, the hazards associated with them, the need for backflow prevention, and the need for testing of backflow preventers on irrigation systems. This document was created by the following members of the TCEQ Cross-Connection Control Subcommittee: Mr. Fred Baird, Mr. Bill Hamrick, Mr. Byron Hardin, Mr. Danny Lytle, Mr. Mike Aldrup, Mr. Roy Dillard, Mr. Jerry Lewis, and Mr. Bob Moore. Many comments and recommendations were provided to Mr. Baird including the need to submit this document to the TCEQ Irrigation Advisory Council (IAC). At this point, the recommended changes will be made to the document and the expectation is to submit it to the IAC at their February meeting.

Brief Update on Presentation at SA-ABPA chapter

Kenny Dykes

Mr. Kenneth Dykes, TCEQ Cross-Connection Control Program, discussed the need to educate water operators and managers on the basis for TCEQ rules. During the discussion Mr. Dykes proposed conducting training presentations on topics such as pertinent TCEQ Regulatory Guidance Documents as well as understanding and application of TCEQ rules in Cross-Connection Control Programs. Coordination with the Texas Water Utilities Association as well as members of the Committee in the vicinity of the training location would be of benefit in implementing this program.

Mr. Dykes then gave a brief overview of his presentation on Preparing and Implementing a Backflow-Incident Emergency-Response Plan to the San Antonio American Backflow Prevention Association Chapter meeting this past November. The presentation was received with many positive responses.

This topic will be further discussed at the next meeting.

Review of The Code of Ethics (draft) for BPATs

Byron Hardin

Mr. Byron Hardin, Hardin & Associates, presented two different drafts, Example #1 and Example #2, of the Code of Ethics for TCEQ Licensed BPATs. During the discussion that followed, it was the general consensus of the subcommittee to further develop Example #1 of the Code of Ethics. The members of the subcommittee made several recommendations for changes. Left to do is to incorporate the changes, submit it to the Drinking Water Advisory Work Group for comment, and get comment on it from the Occupational Licensing Section (Mr. Russ Gardner). Some considerations for use of the Code of Ethics are to include it in the new test for BPATs which TCEQ is currently working on and provide it to training providers for dissemination.

Chemical dispensing Units Appropriate protection

Byron Hardin

Mr. Byron Hardin also led the discussion on chemical dispensing units. These units are a way to quickly dispense cleaning chemicals in measured amounts to cleaning containers such as mop buckets and spray bottles. Usually, they are attached to the potable water faucet for the mop sink forming a direct cross-connection. The increased popularity of these units has necessitated the need to address backflow concerns. Due to time constraints, this subject was left for further discussion at the next Cross-Connection Control Subcommittee meeting.