

Texas Commission on Environmental Quality Cross-Connection Control Subcommittee

March 7, 2019

Building F, Room 2210

Time: 9:00 – 3:00

Note: This draft meeting summary is posted for review and comment by meeting attendees. It will be available for comment at the next meeting of the TCEQ Cross-Connection Control Subcommittee at which time it will be voted on for adoption.

Draft Meeting Summary

Commencement

Mr. Shannon Frazier

The meeting commenced on time with the general announcements and introductions by meeting participants.

Comment was requested on the previous meeting summary which was provided with the meeting invitation. A clarification was made that the comment “spill resistant double-check valves should not be used to provide backflow protection from irrigation systems” should have referred to pressure vacuum breakers not double-check valves. The motion was then made to adopt the meeting summary. A second to the motion was heard and the vote to adopt was unanimous.

The next meeting of this Subcommittee will be held on June 6, 2019.

Update from Program Support & Environmental Assistance Division

Ms. Melissa Keller

Ms. Melissa Keller, TCEQ Office of Compliance and Enforcement, provided an update on an agency structural reorganization. Program Support and Small Business are now both part of the Environmental Assistance Division, in the Office of Compliance and Enforcement. Kristi Mills-Jurach was named the new Director for this division, and Melissa Keller is the special assistant to the director.

Update from Landscape Irrigation

Mr. Al Fuentes

Mr. Al Fuentes, TCEQ Office of Compliance and Enforcement, provided an update on the Landscape Irrigation Program (LIP). The program continues to deal with a backlog of complaints. The LIP has also been working with Water Conservation Advisory Council, who are interested in creating a guidance document for the enforcement of irrigation license standards.

Cross-Connections at OSSFs

Mr. Al Fuentes

Clarification was provided on the backflow prevention assembly requirements for irrigation systems at properties with OSSFs. There are still many irrigators who are unfamiliar with the rule that has been in place since 2009. An irrigation system on a property with OSSF requires an RPZ. The use of an improper assembly is a category “A” violation, resulting in enforcement. A CSI cannot overrule the need for an RPZ in this situation. There is no minimum distance between the irrigation system and OSSF that would negate the requirement for an RPZ.

Mr. Al Fuentes also provided an update on the IAC rule petition. The recommendation that testing of backflow prevention assemblies on non-health hazard irrigation systems will be required at least triennially was not making progress. Statistics were being sought on the health impacts of backflow prevention assembly failures on non-health hazard irrigation systems and on the failure rates of these assemblies. Finding data quantifying illnesses caused by backflow from non-health hazard irrigation systems has been difficult.

Other recommendations look likely to go into rule.

The latest information on the changes in the LIP rules can be found at:

<https://www.tceq.texas.gov/drinkingwater/irrigation/landscape-irrigation-regulation-stakeholder-process>

Mr. Charlie Middleton, TCEQ Cross-Connection Control Program, provided an update on this program. Cross-Connection Control Program surveys have continued at public water systems that have been identified by TCEQ regional investigators as benefitting from this form of technical assistance. Before the end of FY19 surveys will be conducted in the Abilene, Dallas/Fort Worth, San Antonio, San Angelo, and Houston regions. There was clarification that CSIs and BPAT testers must enter their own data. It is not acceptable for testers to provide passwords and logins to office staff to allow them to enter testers' data away from the test site.

Ms. Linda Saladino, Occupational Licensing (OL), provided an update from the OL section. The following comparison was provided for BPAT and CSI applications and pass rates between FY17 and FY18:

BPAT – 651 total (new & renewal) less applications received in FY18 compared to FY17 which is a 23.82% decrease

CSI - 279 total (new & renewal) less applications received in FY18 compared to FY17 which is a 26.9% decrease

BPAT Pass Rates – Pass rate is down 4.9% from FY18 compared to FY17 but take into consideration 344 more exams were given which is an increase of 63.24%

CSI Pass Rates – Pass rate is down 5.02% from FY18 compared to FY17 but take into consideration 110 more exams were given which is an increase of 28.13%

OL also shared the results of its BPAT exam analysis. It was determined that more training is needed in the following areas:

- AVB-related questions.
- Tester reports-electronic filing-rules regarding who must receive and maintain copies of T & M reports.

- Licensed BPATs are authorized to test and repair BPAs, and not install. There is no “general supervision”. BPAT must not allow someone to use their license as only they can test, repair, and report T & M form results.
- Understand the difference between internal protection versus containment at the meter.
- Troubleshooting and testing questions—be sure to use the reference page with schematics of the BPAs included.

OL has had some push back on the two year experience requirement for BPAT and CSI licenses and future discussion on the BPAT and CSI experience requirement is needed:

- Hands-on (not shadowing/training/observing)
- Importance for experience in the approved areas in rule.
- Application process-training completed prior to applying to TCEQ (how to “vet” experience prior?)
- Process to consider other experience as approved by E.D.

Recycled Water Facilities

Mr. Fred Baird

A discussion was led by Mr. Fred Baird regarding the backflow prevention requirements for recycled water facilities. It was agreed that no interconnection is allowed between “black water” (type 2 reclaimed water) and potable water. Type 1 reclaimed water requires an RPZ at the domestic water line. Frequently, water recycling facilities have a backflow prevention assembly on the recycled water line, but none on the domestic water line. Concerns were expressed that some water purveyors believe physical separation between reclaimed water and potable water to be adequate.

Quality Control: Protecting Data Integrity

Mr. Shannon Frazier

Mr. Shannon Frazier, TCEQ Cross-Connection Control Program staff, provided a presentation on the importance of data integrity of Customer Service Inspection (CSI) Certificates and Backflow Prevention Assembly Tester (BPAT) Test & Maintenance forms. In the case of completing and submitting BPAT test reports to water purveyors, including but not limited to online test report data entry; it is the licensed BPAT and CSI testers who are required to enter data for the tests they conducted. An office administrator, or any unlicensed staff member may not enter test results on their behalf. Another licensed tester may not enter test results for a test they did not conduct. This has become a growing issue for water purveyor staff, primarily because it is begin discovered that not all of the information from a test is being entered into the database, specifically the important comments of the tester.

Another issue facing water purveyors and testers, is that some online BPAT and CSI data storage platforms do not allow the licensed BPAT or CSI to enter the first test they submit to that platform. It has been explained in complaint calls that it has been explained that the first submission is part of the registration process. This is not an acceptable practice and does not meet TCEQ regulation requirements. As it is spelled out in each TCEQ alternate form/electronic submittal approval letter; all tests must be entered by the testers who performed those tests. A handout was given to each of the attendees of the subcommittee meeting which outlined the specific approval language regarding data entry requirements.

Working Lunch Discussion

During the working lunch the responsibilities of customers and public water systems were discussed. Water purveyors felt that a system of three letters before shutting of water to properties was not effective. Relatively few customers read the warning letters and some purveyors have settled on sending fewer warning letters out (shutting water off after a second letter).

It was recommended that purveyors, which often experience high staff turnover, keep up to date SOPs in order to keep their cross-connection control programs running effectively.

A purveyor had experienced a BPAT turning in a test report with a remark that an assembly “might” have been on a fireline. In this situation the tester is responsible for what is happening downstream of the assembly and should be able to identify hazards.

The testing of insulated assemblies was also discussed, with agreement that assembly identification numbers must be viewed and recorded during a test.

Aftermarket Installation - Treatments and Devices

Mr. Byron Hardin

Mr. Byron Hardin, Hardin & Associates, gave a presentation on aftermarket installations. Talking points included engineered air gaps needing approval from a recognized entity, with air gaps being measured to the overflow rim.

Backflow prevention at pharmaceutical facilities is regulated by the Food and Drug Administration Title 21 Part 211.48.

Backflow

The following items were discussed during the working lunch:

- Standard gauges (used to test field test gauges) kits were discussed, specifically whether the same standard gauge can be used on potable and non-potable gauges and whether the same requirement applies to standard gauges that use air and standard gauges that use water. The labelling requirements for non-potable gauges were also discussed. The consensus was that using a standard gauge to test the accuracy of the differential pressure gauges that testers use on both potable and non-potable gauges is acceptable and does not pose a significant contamination hazard.
- It was recommended that gauges should also be tested before being placed into service (even if they are brand new). Most are placed into service for a year before they are tested if they are sold with a certificate stating that they had been tested before being sold. Several participants noted that when tested, new gauges are frequently found to be inaccurate, even if they have a certificate to verify that they have been tested.

- It was noted that homeowners are repairing their own backflow prevention assemblies, and that while it is not advised, they are entitled to do so. However, the assembly must still be tested by a licensed tester.
- Information from water purveyors was requested by TCEQ cross-connection control staff to help determine whether systems are struggling to meet the requirement to test every backflow assembly requiring a test annually, as per TAC Title 30 §290.44(h)(4). Some larger systems may be vulnerable to a violation if they cannot demonstrate that 100% of the backflow prevention assemblies installed on health hazards are tested annually. Tracking these and making sure none are missed can be very difficult. In addition, there may not be enough licensed testers available to test them all annually. This topic will be further discussed.

Fireline Testing Requirements: Underground vs. Riser Rooms

Mr. Buddy Heuberger

Mr. Buddy Heuberger, Hardin & Associates, provided an update to his previous presentation on testing backflow prevention assemblies on fire suppression systems. This described who is entitled to install, maintain and service fire sprinkler systems in Texas, and who is entitled to test backflow prevention assemblies on firelines:

- Obtaining a responsible managing employee (RME) license from the Texas Department of Insurance State Fire Marshal's Office (TDI SFMO) does not allow that person to install, maintain, or service fire sprinkler systems in Texas. Companies engaged in fire sprinkler installation, service and maintenance must have a registration certificate issued by the TDI SFMO and employ at least one individual with the appropriate RME license.
- A Sprinkler Certificate of Registration (SCR) does not give a company authority to test a backflow prevention assembly or service a fire sprinkler system. The SCR defines the **type** of fire sprinkler system that a company can install, service or maintain.
- TCEQ requires fireline backflow prevention assembly testers to be permanently employed by an approved fireline contractor. The TDI SFMO requires that any person performing maintenance on a fireline be employed by an approved fireline contractor.
- A BPAT does not have to have an RME to test a backflow assembly on a fireline but must be permanently employed by an approved fireline contractor. The **contractor** must have an SCR and at least one full time RME.

Testing Backflow Prevention Assemblies (BFPA's) during a Boil Water Notice Mr. Fred Baird

Mr. Fred Baird gave a presentation and lead the discussion on restricting the testing of BFPAs during a Boil Water Notice (BWN), where a water system has indicated that the water in its distribution system may be unsafe for consumption or may pose an acute health risk. There was general agreement that testing should be suspended until a boil water notice had been lifted, in an effort to prevent the contamination of gauges. Water that requires boiling prior to consumption would be treated the same way as non-potable water. Once a gauge has been used to test a BFPA on a non-potable water line it must never be used to test a BFPA on a potable water line. The possibility of the gauge containing pathogens received from non-potable water creates a risk of transferring

pathogens to potable water if the same gauge is used on a potable water line. Any gauges used to test a BFPA on a non-potable water line, or on a potable water line during a BWN must be painted purple and a purple decal must be added to the dial inside the lens cover with “NON-POTABLE USE ONLY” printed in white lettering.