

Texas Commission on Environmental Quality
Cross-Connection Control Subcommittee

December 6, 2017

Building F, Room 3202

Time: 9:00 – 3:30

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.*

Meeting Summary

Commencement

Shannon Frazier

The meeting commenced on time at 9:00 am. General announcements were made regarding the building facilities and the working lunch. Mr. Shannon Frazier, TCEQ Cross-Connection Control Program, provided a brief update regarding the canceling of the September 7, 2017 subcommittee meeting, due to the impact of Hurricane Harvey. Following the update, a motion was passed to adopt the meeting summary from the June 1, 2017 meeting with no comments or changes requested. The motion was seconded and the vote to adopt was unanimous.

Updated Forms

Chirag Patel

Mr. Chirag Patel, TCEQ Cross-Connection Control Program, provided an update on the recently revised TCEQ Form-20699: *Customer Service Inspection Certificate (CSI)*, and TCEQ Form-20700: *Backflow Prevention Assembly Test and Maintenance Report (BPAT)*. The new forms are approved for use and available for download on the TCEQ Cross Connection Control website at the following link: <https://www.tceq.texas.gov/drinkingwater/cross-connection#guidance>.

Due to the change in the federally required lead levels in the plumbing of a water system, those public water systems (PWS's) who have received TCEQ approval to use an alternate CSI form, must re-apply for approval if the current form being used does not have the correct lead requirements of $\leq 0.25\%$ lead for the plumbing and $\leq 0.2\%$ for the solder. TCEQ approved alternate forms, both BPAT and CSI, which contain the correct lead requirements, have not been changed, and have an official TCEQ approval letter remain valid and do not need to re-apply for approval. Program staff will be providing outreach to the TCEQ regional offices and the Texas State Board of Plumbing Examiners (TSBPE) informing them of the updates to the forms.

During the general discussion on this topic subcommittee members made the following comments:

- Comment was made on the need for guidance for backflow prevention assembly testers (BPATs) regarding the use of the University of Southern California's testing procedures. A BPAT is trained on these procedures and his license is based on them. However, due to a lack of regulatory support, it is challenging to enforce the use of these procedures in the field. Subcommittee members (training providers) stated that they regularly have students who want to demonstrate an "alternative" way to test backflow prevention assemblies.
- Comment was made on future revisions of the T&M form. They should include the following
 - a check box for "Used current USC procedures".
 - a section for Non-testable devices and Air-Gaps.
 - Type I and II DCVAs on fire suppression systems and how to record results of testing them

Falsifying Reports and Criminal Investigations

Dan McReynolds

Mr. Dan McReynolds, Manager of the TCEQ Environmental Crimes Unit (ECU), formerly Special Investigations Unit, gave a presentation and led a discussion describing the history of the program and giving examples of how it affects the regulated backflow community. The ECU has been a part of the agency for over twenty years, and covers all TCEQ

program areas throughout the state with a staff of 9 investigators. Due to the program's workload and available resources, investigations are "risk-based," and the criminal activities that pose the greatest risk to the public health are the priority.

Mr. McReynolds presented to the subcommittee a case where an unlicensed individual was performing backflow prevention assembly testing, collecting payment, and not submitting appropriate paperwork to the customer, or the water systems. In this case, the individual was required to surrender his occupational licenses as part of a plea agreement.

Mr. McReynolds summarized the "Investigators Notebook" checklist, which is used by ECU staff and outlines the components and organization used for each case. Also described were the methodology used, and duration of time it takes to build and adjudicate each case.

If an individual meets all the "Elements of the Offense," which are those specific in the code of criminal procedures or statute that you are using, then an offense can be charged. This indicates that there is enough evidence to show that an individual committed the crime. The general sequence of events it to conduct the investigation, issue a Notice of Enforcement (NOE), and go to an administrative hearing. There are 3 main categories that are routinely used to prosecute individuals:

- Deceptive Trade Practices
 - Example: misrepresenting a license, performing work with an expired license.
- Theft of service
 - Example: charging for a test, collecting a fee, but not submitting the T&M Report, or not performing the test at all.
- Security & Execution of a Document.
 - Example: falsifying the information on T&M Report and CSI forms. Mr. McReynolds established that the T&M Report and CSI forms are required by rule, are utilized by PWSs, and are therefore government records. This makes it much more critical that they be filled out correctly and accurately.
 - When an individual is falsifying a record, city and county law enforcement can prosecute.

Landscape Irrigation Program Update

Michael Beatty

Mr. Michael Beatty, Work Leader, Field Support Team Special Programs, gave a brief update on the TCEQ Landscape Irrigation Program (LIP). The following topics were covered:

- The 2009 Landscape Irrigation Rule (30 TAC Chapter 344.24) requires local municipalities to adopt Landscape Irrigation ordinances, requiring compliance with the landscape irrigation rules and having provisions for enforcement. Currently, LIP staff is reaching out to local jurisdictions to have them update outdated ordinances, as well as providing assistance to achieve compliance, and taking enforcement actions on individuals performing illegal irrigation work.
- The Take Care of Texas Program is working on 2 videos covering irrigation system start-up and winterizing an irrigation system.
- The next meeting of the Irrigators Advisory Council will be held on Feb 8, 2018. For more information please go to: https://www.tceq.texas.gov/drinkingwater/irrigation/irr_advisory.html

Rule Petitions: Docket No's. 2017-1199-PET, 2017-1198-PET

Melissa Keller

Ms. Melissa Keller, TCEQ Program Support Section, provided an update on the rule petitions, Rule Project No's. 2017-041-PET-NR and 2017-042-PET-NR, filed by the Irrigators Advisory Council (IAC). The primary objectives of these rule petitions are to classify all irrigation systems as health hazards and eliminate the use of double-check valve assemblies. The Landscape Irrigation Program (LIP) will facilitate 9 stakeholder meetings at different locations throughout the state to receive comments from the public and the regulated community. TCEQ staff attending the meetings will collect and organize the comments provided. TCEQ Cross-Connection Control Program staff will provide a presentation designed to educate the unregulated community on the basics of backflow prevention and cross-connection control. Detailed information on the stakeholder meetings and the rule petitions may be found at:

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

It is important to note that these rule petitions seek to change the rules in Chapter 344 which only govern irrigation systems and **not** the Chapter 290 rules which govern public water systems.

Due to time constraints, Ms. Keller requested to go ahead and provide the update for **Regional Activities and Trainings** scheduled for 1:30 on this agenda. She provided the following information:

- The advanced investigator training is tentatively scheduled for the 1st week of June 2018 in Tyler, TX.

- The training is going to be focused on field practices and Revised Total Coliform Rule (RTCR) implementation.
- The Investigators Training Manual has not been updated since 2008 and is in the process of being revised.
- The Enforcement Initiation Criteria (EIC), the document used by regional investigators to categorize violations for Enforcement, has been revised and is available on-line.

Backflow Prevention on Typical Household Plumbing

Richard Bosch

Mr. Richard Bosch, TCEQ Cross-Connection Control Program (CCCP), gave a presentation titled *Backflow Prevention: Residential*, to discuss with Subcommittee members the types of potential hazards that may be found at a residence. The purpose was to initiate a discussion regarding the diversity of potential hazards at a residence, challenges associated with residential hazards, and to discuss Subcommittee member’s experience regarding residential hazards. The presentation covered the following topics:

- Types of permanently installed hazards from water filtration systems to extendable showerheads.
- Use of Air-Gaps and built-in backflow prevention.
- Types of temporarily attached hazards such as end-of-hose attachments, pressure washers with chemical injection, and the “Cat Genie.”
- Due to Hurricane Harvey, which struck the entire Houston region, residential RV Connections were discussed. The hazard being the connections between black and grey water tanks to the potable water supply.

Licensing Update

Linda Saladino

Ms. Linda Saladino, Manager Occupational Licensing, provided an update on the practical (hands on) testing for the Backflow Prevention Assembly Tester license. Due to the complexity of the test and procedures, training providers are using a simpler form than the official TCEQ Test & Maintenance Report to record the results of the Practical Exam when testing for the license. Also mentioned, the Customer Service Inspection (CSI) exam has been expanded from 30 to 40 questions. Ms. Saladino provided the following information:

- The Proctor Qualification Form, to be kept on file by Occupational Licensing, has been finished and the Occupational Licensing Program is looking for training opportunities for prospective proctors. Also, options for on-line proctor training are being explored.
- When individuals apply for a license or seek to renew their existing license, they must pass a criminal history review. Staff in Occupational Licensing participated in a recent meeting with the Texas Department of Licensing and Registration (TDLR) and the Texas State Board of Plumbing Examiners (TSBPE) regarding criminal history reviews and how these licensing agencies are implementing the statute, including the requirements to review and consider violent and sexual offenses, any conviction in the last five years, and any offense related to the license. Property offenses are also currently included in the criminal history reviews since the licensee will have access to property as part of performing the licensed duties.
- The Occupational Licensing section works with the TCEQ Environmental Crimes program on license revocation;
 - Revocation process is a long (approximately 2 years) process.
 - Denying an application (new or renewal) based on a disqualifying event or pattern of criminal offenses can be a better option than to begin the process to revoke a license.
 - Occupational Licensing monitors for habitual or egregious actions on the part of a licensee by working with the agency (local authorities) and during the criminal history reviews.
- CSI & BPAT Application/Exam Numbers:

License Type	Percent Passed	Total Number of Licenses
BPAT	44.4	5,897
CSI	47.1	1,997

Cross-Conn Program Update

Al Fuentes

Mr. Al Fuentes, TCEQ Cross-Connection Control Program Coordinator, provided an update on activities of the TCEQ Cross-Connection Control Program. Due to the cancellation of the previous subcommittee meeting, some of the updates involved activities performed earlier in the summer:

- Once again, program staff participated in the annual Investigator Training which was held in Georgetown, TX. This included a technical presentation on cross-connection control and backflow prevention as well as a field trip to the City of Roundrock to go over their program and review some backflow prevention assemblies in their distribution system.
- The University of Southern California (USC) Course, Cross-Connection Control Program Specialist, was held here at the TCEQ campus. It was attended by several regional investigators, Central Office Staff, and one person from the City of Austin. Evaluations of this course were very positive and greatly enhanced the knowledge of the students on backflow prevention and cross-connection control.
- The Directed Assistance Module (DAM) 12, Establishing and Managing an Effective Cross-Connection Control Program, was presented to New Braunfels Utilities as well as four surrounding water systems. DAM 12 was recently granted 8 Hrs. of CEU credit from the TCEQ. This free on-site course was very well received and beneficial to the attending water systems.
- Program staff provided a technical presentation at the Public Drinking Water Conference which was held this past August. Many questions were received and answered. Staff were also available in the technical assistance room to provide guidance on cross-connection control.
- Program staff met with representatives of the Pepsi Corporation to provide guidance on the backflow prevention requirements for carbonated beverage dispensers.
- Water systems have the option of developing alternate forms to record the results of the testing of a backflow prevention assembly or a customer service inspection. These alternate forms sometimes contain extra information that the water system wants to capture but is not on the official forms. If the water system has an official approval letter from TCEQ for that alternate form (including the extra information), then the form must be filled out in its entirety, including the extra information, for it to be valid.
- Program staff have been participating in Texas Optimization Program (TOP) activities assisting in Level II Assessments of water systems because of the implementation of the Revised Total Coliform Rule (RTCR). The RTCR considers a poor Cross-Connection Control Program a sanitary defect that must be corrected.

Backflow Prevention on Non-Health Hazards

Al Fuentes

Mr. Al Fuentes reviewed the need for backflow prevention on non-health hazards. The most common cross-connections to non-health hazards would be those in food processing. There is still a strong need to protect these cross-connections from backflow. As an example, it would not be acceptable to mix baby formula with water contaminated with coffee or take a shower with water contaminated with corn syrup. Due to this, Mr. Fuentes noted that a non-health hazard is still a hazard and requires backflow prevention. The only difference would be that the annual testing requirement would not apply, only the initial testing requirement. Mr. Fuentes pointed out that local jurisdictions still have the option of adopting local rules that are more stringent.

Backflow Prevention Assemblies Inundated During Hurricane Harvey

Al Fuentes

Program staff worked to develop a short guidance document for water systems that are dealing with backflow prevention assemblies that became inundated due to flooding. Some of the main points were:

For systems that did not lose pressure:

- Backflow prevention assemblies should be properly cleaned and tested to determine that they are still functioning according to manufacturer's specifications and TCEQ requirements.
- Air gaps that were submerged should be evaluated for possible modification or temporary non-use until the location is sanitized.

For systems that lost pressure:

- Backflow prevention assemblies that have been submerged would have a high probability of failure due to debris entering the assembly through the air inlet or the relief valve. It is highly recommended to have these assemblies properly cleaned/repared and tested as quickly as possible.
- Air gaps that were submerged should be evaluated for possible modification or temporary non-use until the location is sanitized and there is no longer a cross-connection.

Note: Residential and commercial private distribution facilities that have been submerged should properly flush from each point of use location to remove any possible contamination from the plumbing system prior to consuming the water once the boil water notice (BWN) has been lifted.

Note: At a minimum, testing and repair of backflow prevention assemblies should continue as per TCEQ regulations and the adopted Plumbing Code

Revisions to Two Regulatory Guidance Documents

Belinda Pattison/Bruce

Rathburn/Byron Hardin

Two key regulatory guidance documents, Regulatory Guidance Document No. 476 (RG-476), A *Public Water System Guide to Responding to a Backflow Incident* and Regulatory Guidance Document No. 477 (RG-477) *A Public Water System Guide to Preparing a Backflow Incident Emergency Preparedness Plan* were revised by a small workgroup composed of Ms. Belinda Pattison with Benbrook Water Authority, Mr. Bruce Rathburn with American Backflow H₂O, and Mr. Byron Hardin with Hardin & Associates. Cross-Connection Control Program Staff will review the revisions and create a final draft of the documents for final management approval and publishing.