Texas Commission on Environmental Quality
Cross-Connection Control Subcommittee
March 3, 2017
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.*

Meeting Summary

Commencement

The meeting commenced on time at 9:00 am. During the general announcements by Mr. Al Fuentes, TCEQ Cross-Connection Control Program, the following topics were briefly covered:

- In an outreach effort to raise awareness of the state requirements for cross-connection control and backflow prevention, the TCEQ mailed 7,602 letters to community public water systems. This letter referred to a questionnaire (available at: https://www.tceq.texas.gov/drinkingwater/trot/cc_control.html) which helped water systems assess the status of their cross-connection control programs and the need for assistance from TCEQ.
- Staff from the TCEQ Cross-Connection Control Program have been requested to provide two presentations at the upcoming American Backflow Prevention Association Conference being held in San Antonio on April 3 – 5.
- The changes to both the Backflow Prevention Assembly Test & Maintenance Report (BPAT) and the Customer Service Inspection Certificate (CSI) have been made and the forms are under management review. Once reviewed, the updated forms will be posted to the TCEQ website.
- The Cross-Connection Control Program continues to participate in the Texas Optimization Program (TOP) in the Level 2 Assessments (L2A) generated as a result of compliance activities with the EPA's Revised Total Coliform Rule (RTCR).

Comment was requested on the meeting summary from the previous meeting. No comment was received and a motion to adopt was made. After a second motion, the vote was unanimous for adoption. The adopted meeting summary will be posted to the webpage in the near future.

The newest member of the TCEQ Cross-Connection Control Program, Mr. Shannon Frazier, was asked to provide a brief description of his background. Mr. Frazier has been a member of the Technical Review and Oversight Team in which he worked on evaluating exception requests as well as reviewing Contact Time Studies for public water systems. As a current member of the Response and Capacity Development Team, Mr. Frazier is involved in conducting performance evaluations of surface water treatment plants, conducting Level 2 Assessments, and a key member of the TCEQ Cross-Connection Control Program.

Due to time constraints, Ms. Linda Saladino, Manager Occupational Licensing, asked to provide her update early. Ms. Saladino stated that the application for a license must be approved before the applicant can register to take an exam. Once an applicant receives an approval letter, it is good for one year from the date of issue or four test attempts, whichever comes first. She went on to introduce Mr. Deric Patton as the new Team Leader in the Occupational Licensing section. Ms. Saladino provided the following test result statistics and stated that generally, passing rates for the BPAT written exam were trending upward. The CSI exam was recently updated to reflect the current lead ban requirements and may account for the passing rates being slightly less than historical rates.

License Type/Level	Tests Administered	Tests Passed	Percent Passed
BACKFLOW PREVENTION ASSEMBLY TESTER	114	66	57.9
CUSTOMER SERVICE INSPECTOR	103	40	38.8

Current Licenses as of March 1, 2017;

- Backflow Prevention Assembly Tester: 6,108
- Customer Service Inspector: 1,974

Role of the CCC Subcommittee Mr. Al Fuentes

It was observed by Mr. Al Fuentes and other TCEQ Central Office Staff that the expectations of the members of the subcommittee were off-track and not in line with the proper function of this group. In order to get back on course, Mr. Al Fuentes provided some background on the TCEQ Cross-Connection Control Subcommittee and how it relates to the TCEQ Cross-Connection Control Program. Mr. Fuentes discussed the following points with the subcommittee:

- The purpose of the subcommittee is to provide a line of communication between the regulated community, i.e. public water system personnel, testers, inspectors, training providers, industry experts, TCEQ staff, and the TCEQ Cross-Connection Control Program. The subcommittee meeting provides a venue for a constructive exchange of information in which members can voice any challenges they are facing in backflow prevention and formulate a possible solution based on the discussion had.
- The meeting is also an opportunity for program staff to receive recommendations from the members, based on their knowledge and experience, on critical issues the program may be facing. The benefits of this exchange of information has proven invaluable to both the regulated community and the TCEQ Cross-Connection Control Program.
- The meeting is among professionals in a professional setting and is not an opportunity for members to voice any conflicts between themselves that would be detrimental to the spirit of the subcommittee.
- The subcommittee is a part of a regulatory agency which administers the rules for water systems. The subcommittee cannot petition to change TCEQ rules nor take a position which is in conflict with TCEQ rules. It cannot appear or be perceived that the subcommittee is lobbying against TCEQ rules.
- If individuals who participate in the subcommittee would like to prepare a petition for rule change, that is at their discretion, provided that the petition is clearly represented to originate from those individuals.

Mr. Byron Hardin, Hardin & Associates and founding member of the subcommittee, provided a historical aspect of the subcommittee:

- The subcommittee was originally created as a “work group” and part of the parent Drinking Water Advisory Work Group (DWAWG).
- In the past, this subcommittee was dissolved due to the disregard for the purpose of the subcommittee and the ambitious misuse of its influence. This left the TCEQ Cross-Connection Control Program without the valuable benefit of the guidance from the subcommittee members.
- The subcommittee is a very important and distinct path to backflow prevention.
- The TCEQ Cross-Connection Control Program is sometimes called upon to provide presentations or update the parent DWAWG.

Directed Assistance Module No. 12 — Mr. Al Fuentes

How to Develop and Manage an Effective Cross-Connection Control Program, A presentation at the City of Brenham

The Texas Optimization Program, as part of the TCEQ Response and Capacity Development Team, has developed a Directed Assistance Module (DAM) No. 12 titled, How to Develop and Manage an Effective Cross-Connection Control Program. This DAM was debuted at the City of Brenham who graciously hosted this training. The DAM is one of many that were developed as **free** training to public water systems to assist them in all aspects of drinking water production.

This training had participation from several key City staff as well as several investigators from the TCEQ Houston Regional Office, Region 12.

The DAM covered many critical aspects of a water system's Cross-Connection Control Program including the authority needed for a program, customer service inspections, backflow prevention assemblies, case studies, and the regulations.

This being the first time this DAM was presented, the evaluation from the participants was very important. Overall, the DAM was very well received and the following recommendations were made:

- More detailed explanation of the hydraulics of backflow;
- Reorder some of the sections for better flow; and
- Use terms better understood with someone not as familiar with the topic.

Guide to Backflow Events — Mr. Richard Bosch

Recommendations on responding to a backflow event.

Mr. Richard Bosch, TCEQ Cross-Connection Control Program, led the discussion on the first draft of a form and checklist to assist TCEQ staff in responding to a backflow event. The subcommittee commented favorably on the form and the information in it. During the discussion, the subcommittee recommended that training based on the form and checklist be provided to the regional offices and to provide a similar form electronically for a water system to use. One of the points Mr. Bosch wanted to make was to eliminate the confusion that sometimes occurs when a call on a backflow event comes in and there are several people responding to it. The goal of the form, when it is finalized, was for the first person to receive the backflow event call to be the primary point of contact and have the form available to make sure all the pertinent information was obtained.

Legislative Update — Mr. Shannon Frazier

Mr. Frazier provided a brief update on the following House Bills (HB) introduced as of the meeting date during this year's legislative session:

HB 1927 – Relating to an alert system for notification of the release of toxic chemicals by a manufacturing plant. This bill will require an alerting system to notify persons within the area of the chemical release.

HB 0173 – Relating to the licensing and regulation of certain rainwater harvesting; providing administrative penalties; authorizing fees; requiring an occupational license. This bill is primarily aimed at creating a license and requirements for obtaining the license to install or maintain a rainwater harvesting system.

HB 484 – Relating to training required to qualify for or renew a license issued by the Texas Commission on Environmental Quality. This bill requires that training for a license be located within 100 miles of the individual's place of employment or the commission reimburse the individual for travel and lodging expenses if not.

Working Lunch — General Discussion

During the working lunch, the subcommittee was asked if there were any topics for discussion at the next subcommittee meeting. The members asked for the following topics:

- Legislative update;
- Update on the revisions to regulatory guidance documents 476 and 477;
- Update on the American Backflow Prevention Association Conference;

Mr. Al Fuentes led the discussion on point-of-use devices and temporary connections which can pose a contamination hazard to the potable water supply. This includes devices such as filters, softeners, ionizers, that can be attached to the potable water supply line in a private residence. This also includes temporary connection of water using equipment such as pressure washers, pet cleaners, carpet cleaners, and portable medical equipment. It was determined that local jurisdictions are best suited to regulate these types of connections since they occur at the local level. It would not be feasible for a state regulatory agency, which governs public water systems, to regulate individual temporary or point of use connections.

The question was raised if, during a Customer Service Inspection (CSI), a lead test should be conducted if the CSI is on an older home that was constructed before the lead ban. During the general discussion, two differing points of view emerged:

- During a CSI, a lead test should always be conducted regardless of the age of the home or site. This is due to the importance of the public water system knowing which sites have lead in the plumbing. This will allow the public water system to take any necessary precautions to prevent the lead from leaching into the water.
- If a CSI is conducted at a home/site which was constructed before the lead ban was enforced (prior to 1988) then a lead test is not necessary because the public water system's required lead/copper sampling will detect if lead is getting in the water.

A consensus could not be reached and this topic will be visited at a later date after consulting the CSI requirements and the possible effects to the public health.

In a related subject, the issue of whether the CSI should encompass the entire home/site when the CSI is triggered by a material change to the plumbing (home addition, private well, new piece of commercial water using equipment, etc.). That is, if only one portion of the plumbing at a home/site was changed, should the CSI be concerned with the **entire** home/site? Differing points of view were expressed on this subject. The current recommendation from the TCEQ is:

> *It is important for the water system to have the knowledge of any actual or potential hazards imposed on the potable water supply. The need for an all-encompassing CSI for material changes to the plumbing of a home/site would have to be evaluated on a case-by-case basis. If a CSI had previously been conducted, then it may not be necessary for a CSI to encompass the entire home/site. If a CSI had never been conducted, then it would be prudent for the CSI to take into account the entire home/site. In either case, education of the customer on the hazards of cross-connections and the importance of backflow prevention is critical.*

Update from the TCEQ Landscape Irrigation Program — Ms. Melissa Keller

Ms. Melissa Keller, Work Leader, TCEQ Program Support Section, provided an update on the TCEQ Landscape Irrigation Program (LIP). The Irrigator's Advisory Council met on May 4, 2017 and discussed the current rule petition to all of Chapter 344 which would include the classification of all irrigation systems as health hazards. The minutes for this meeting are posted to the TCEQ webpage.

Ms. Keller addressed the issue of a Customer Service Inspection (CSI) being triggered when an irrigation system is installed. She read from an email sent by Ms. Jaya Zyman, Permitting and Registration Support (PRS) Division, Director, dated February 9, 2017 in which Ms. Zyman states that the status quo is to remain (exempting irrigation systems from CSIs) **until a joint rule effort** can take place to clarify the requirements in Chapter 290 and Chapter 344.

After Ms. Keller's update, Mr. John DeCell, VEPO, asked about three concerns he had with some language in the relatively new Regulatory Guidance Document No. 478 (RG-478):

1. Mr. DeCell asked for clarification on the language on page 6 of RG-478. This language speaks to the separation distance between the plumbing system of a private well and the plumbing system of the potable water supply. It was explained during the discussion that followed; if documented in a CSI, this separation distance will show that there is no cross-connection and backflow cannot occur. In effect, even if it **doesn't** meet the definition, the separation distance functions as an "air gap" and protects the potable water supply.
2. Mr. DeCell also asked for clarification of the language on pages 15 and 16 of RG-478 which addresses when a double check valve assembly is to be replaced on an irrigation system which is installed on a site that also has an On-site Sewage Facility (OSSF). The required backflow prevention is the installation of an RPZ. RG-478 says that when the double-check valve can no longer be repaired **in-line**, then it must be replaced with the required RPZ. Mr. DeCell pointed out that it should be replaced whenever the line is open to the atmosphere. So if the irrigation system underwent **any** repair that opened it to the atmosphere, then the double check valve would need to be replaced with an RPZ. After some discussion, it was recognized that the language in RG-478 was developed after receiving guidance from the LIP and if the language needed to be changed, then a formal recommendation from the LIP would be necessary. Mr. Fuentes recommended the LIP consider the fiscal impact of changing the language.
3. Mr. DeCell stated that there was a contradiction in the language in RG-478. At the top of page 16, there is language that states that irrigation systems with a double check valve assembly which were installed before 2009 on sites that also had an OSSF were Grandfathered and did not need the required RPZ until the double check valve could not be repaired in line. Mr. DeCell then compared this with the language near the bottom of page 1 which states that there is no grandfathering in cross-connection control and backflow prevention in the TCEQ regulations on backflow and siphonage. It was pointed out to Mr. DeCell that he had taken that statement out of context and that same paragraph goes on to say, "However, the landscape-irrigation regulations do contain some provisions for existing irrigation systems." This explained that there was no contradiction.

The University of Southern California — Mr. Al Fuentes

Cross-Connection Control Program Specialist Course

Mr. Fuentes briefly described the upcoming USC Specialist Course to be given here at the TCEQ campus. He described some of the course content and field activities. At this point, the majority of the participants are TCEQ investigators and Central Office Staff. More information on the course is available on the USC webpage at: http://fccchr.usc.edu//specialist.html

The Authority for a Cross-Connection Control Program — Mr. Al Fuentes

Mr. Fuentes led the discussion on the authority of a cross-connection control program. He described Plumbing Codes versus a Plumbing Ordinance and how important it is to have proper provisions for enforcement. He recommended using a series of letters when seeking enforcement of the backflow requirements. This provides documentation that the water system gave the customer time to correct the cross-connection and notification of the consequences for non-compliance. This must be handled on a case-by-case basis as some cross-connections do not allow the time for a series of letters and must be eliminated immediately or water service to the site must be terminated until the cross-connection is corrected. Mr. Fuentes also stressed that the authority of a cross-connection control program is not limited by city limits. As long as the public water system is providing potable water to a site, the potable water must be protected regardless of the location within or without the city limits.

Cat Genie Cross-Connection? — Mr. Byron Hardin

Mr. Byron Hardin provided a presentation on the Catgenie, a self-cleansing cat litter box. This product connects directly to the potable water supply. It uses the water to transport the wastes, liquefy the wastes, and drain them to the sanitary sewer via a household toilet or the drain line for a washing machine. It then uses the water to mix with a cleaning solution to cleanse the litter box media. This creates a direct cross-connection and poses a contamination hazard to the household potable water supply.