

# Texas Commission on Environmental Quality

## Cross-Connection Control Subcommittee

### September 2, 2015

#### Meeting Summary

##### Commencement

Mr. Simon Arends

Mr. Simon Arends, TCEQ Cross-Connection Control Program, began the meeting with introductions of those present.

A request was made for any comments on the previous meeting's summary. The subcommittee had no comments. A motion was made to adopt the meeting summary as is. No objections were raised and a second motion was made. The vote to adopt was unanimous the final summary will be posted to the TCEQ webpage.

##### Backflow Prevention Assemblies Practices Presentation

Mr. Randy Holland

Mr. Holland, Safe-T-Cover, first reviewed the major design differences between typical backflow prevention assemblies (BPAs) found in the open market and pointed out that Reduced Pressure Principle Backflow Prevention Assemblies (RP) are largely accepted as the best assembly available to protect from backflow, but can still be compromised with small debris fouling.

Mr. Holland highlighted examples of hazards and issues that may arise in different installations of BPAs:

1. Vaults: Confined space can be an issue and can be in conflict with the requirements from the Occupational Safety and Health Administration (OSHA).
2. Mechanical Rooms: Mechanical rooms tend to have accessibility and flooding issues where drains may not be sized to handle the volume of water released from an RP. An undersized drain could also allow flooding from other sources which could submerge the RP and create a cross-connection through the relief valve.
3. Above Ground Enclosures: On their own, these types of enclosures are susceptible to many hazards such as freezing, durability, drain capacity, accessibility, and security. For that reason, ASSE has established a quality and safety standard known as ASSE-1060 that addresses these vulnerabilities in a meaningful way and provides guidance to building authorities on an appropriate level of quality and instead, simply require that this standard be met. Mr. Holland highlighted several major cities in the United States with vastly different policies regarding the regulation of above ground enclosures.

Public Water Systems can help their Cross-Connection Control Programs by providing detailed installation requirements, establish tap location guidelines, and move enclosures to less visible areas. An incorrect installation can lead to flooding and associated expenses and financial risks. Before installations occur, risk assessments should be compared with safety precautions to better determine the correct BPA. Regardless of location, hazard, visual impact, and local policies, Mr. Holland concluded that RP's are the closest thing we have to a fail-safe BPA option.

##### Code of Ethics

Mr. Fred Baird

Mr. Baird, BacFlo Unlimited, led the discussion on revising the Code of Ethics developed by this subcommittee in March of 2013 for backflow prevention assembly testers (BPATs). A final draft will be reviewed, but it remains to be decided how to best put this important document to use. Some suggestions included providing it to training providers, provide as a handout when a Backflow Prevention Assembly Tester (BPAT) renews his license, or add to standardized manuals. The Code of Ethics may be better received if it was officially endorsed by the TCEQ. This discussion will again be taken up at the next Subcommittee Meeting.

Mr. Bosch, TCEQ Cross-Connection Control Program, led the discussion on the relocation of the Backflow Prevention Assembly Test and Maintenance Report (T&M Form) and the Customer Service Inspection (CSI) Certificate from the appendices of the regulations to official TCEQ forms. The purpose for this move was to facilitate the updating of the forms without a formal rule change. The forms now have some basic instructions and can be filled out electronically. Mr. Bosch received input from the Subcommittee to make some slight adjustments. In upcoming meetings, input will be requested for changes/updates to the forms.

Conflicts of InterestMr. Simon Arends

Mr. Simon Arends led the discussion on Conflicts of interest encountered in Cross-Connection Control Programs. At issue are individuals who hold different licenses and can do different scopes of work at a site. For example, a licensed plumber can also hold a Customer Service Inspection license and he would then sign the Customer Service Inspection Certificate about his own work. This could also occur if a licensed irrigator, who can install a backflow prevention assembly on an irrigation system, also held a Backflow Prevention Assembly Tester License. He would then test the BPA he had just installed on the irrigation system. It was the general view of the subcommittee that, in order to prevent any malpractice, inspectors/testers/installers must not determine the final compliance of their own work.

Compliance and Investigator TrainingMr. Al Fuentes

Mr. Fuentes provided an update on this year's annual TCEQ investigator training. He and Mr. Byron Hardin, Hardin & Associates, provided a detailed presentation on how an investigator might evaluate a Cross-Connection Control Program at a public water system. The investigators also had the opportunity for a hands-on experience in testing backflow prevention assemblies. The presentations and the hands-on testing experience were received enthusiastically. The investigators had many questions on the challenges they face determining compliance with TCEQ's Cross-Connection Control and Backflow Prevention regulations.

Mr. Kenneth Dykes, TCEQ Texas Optimization Program (TOP), explained to the subcommittee the work that TOP was doing in developing a directed assistance module to help public water systems develop their Cross-Connection Control Programs. This directed assistance module will also be available to TCEQ regional investigators.

Bac-Flo Unlimited BPAT CourseMr. Simon Arends

TCEQ Cross-Connection Control Program staff, Mr. Richard Bosch and Mr. Simon Arends, successfully completed the 40 hour course on testing backflow prevention assemblies put on by Bac-Flo Unlimited. This training included hands-on testing of backflow prevention assemblies as well as literature study. The instructors, Mr. Fred Baird and Mr. Troy Baird are active members of the TCEQ Cross-Connection Control Subcommittee.

Backflow Demonstration WagonMr. Simon Arends

Mr. Arends led the discussion on the idea of a transportable wagon that is plumbed with a small water tank and several backflow prevention assemblies. This wagon would demonstrate how, when and why backflow occurs in distribution systems. The purpose of this would be to provide a visual demonstration of backflow and could be used in further training of regional TCEQ investigators. The Subcommittee recommended incorporating diagrams and designs in the wagon to further show how backflow occurs. This idea will be further developed and an update will be provided to the Subcommittee in the near future.