

Texas Commission on Environmental Quality

Cross-Connection Control Subcommittee

March 7, 2012

Meeting Summary:

Welcome/Introductions/Announcements

Tentative meeting dates for 2012 are: 6/6, 9/4, 12/4.

Regulatory Guidance for Irrigation Systems

Due to the continued questions which arise concerning testing requirements for backflow preventers on irrigation systems, a Regulatory Guidance (RG) document addressing this will be developed. At this point, this RG will be modeled after RG-345 which addresses backflow prevention on water-based fire protection systems. Irrigation systems will be Classified I, II, or III depending on the type of system, source water, and degree of hazard. Some of the points raised by the subcommittee which should be addressed in the RG are:

- What are the responsibilities of the irrigator?
- The installation of the backflow prevention assembly (BPA) must meet the manufacturer's recommendations.
- Should point out that "containment" or "premises isolation" does not include the irrigation system.
- Should include supporting information from the American Water Works Association (AWWA), American Backflow Prevention Association (ABPA), American Society of Sanitary Engineering (ASSE), and other national organizations.
- Should include information stating that plumbing codes often require more frequent testing.
- Should address how rural areas should enforce these requirements.
- Should address agricultural irrigation

Volunteers were requested to comment on the RG before it is finalized. The following volunteered for this task: Mr. Fred Baird, Mr. Mike Aldrup, Mr. Roy Dillard, Mr. Bob Moore.

Do it Yourself Bidet: Unapproved plumbing fixtures

Ms. Lisa Hill and Mr. Steve Davis, Texas State Board of Plumbing Examiners (TSBPE), provided information on unapproved plumbing fixtures. At issue were the Do-it-yourself

Bidets that are being sold and ball-cocks for toilets that are not equipped with anti-siphon backflow prevention. Ms. Hill stated that they were currently talking to the manufacturer of the unapproved ball cocks to have them made with built-in backflow prevention. The following points were made by Ms. Hill and Mr. Davis during the general discussion:

- The TSBPE and the local plumbing inspector should be alerted whenever unapproved plumbing fixtures are encountered on the market.
- A manufacturer is not required to receive TSBPE approval before selling plumbing fixtures in Texas.
- Compliance departments in retail chains normally review their products for compliance with state regulations.
- The TSBPE currently has 9 investigators in the field which are located around the larger municipalities. They investigate complaints (currently over 1,000) and review job-site compliance, among other duties. They have administrative authority to levy fines for violations cited.
- Ms. Hill and Mr. Davis also provided copies of the letter and notice that TSBPE sends to retailers to inform them of the requirements of the Plumbing License Law and Board Rules that affect the sale of plumbing products.

Freeze Protection for backflow preventers

Mr. Bob Moore brought up the subject of freeze protection on backflow preventers due to an especially cold winter in the recent past freezing many backflow preventers and making them non-functional. Some options for freeze protection were:

- Installing a valve downstream of the backflow preventer to empty the backflow preventer of water when not in use during the winter.
- Using a Heat trace or strap.
- Given enough room, using an insulating blanket or foam product to wrap the backflow preventer.
- Installing a valve that opens or closes depending on the ambient temperature allowing water to flow through the backflow preventer to keep it from freezing. This option posed some water loss concerns.

Drought & Cross-Connection Control

A general discussion was had on the challenges posed by the current drought conditions in relation to backflow prevention and cross-connection control. The drying ground is causing more leaks as it pulls away from pipes. Some irrigation systems are struggling to keep-up with the drought showing green grass only around the spray heads. Another hazard is “stand-by” wells which do not meet quality standards and are cross-connected to the potable water supply.

Over Enthusiastic Cross-Conn Programs

The subject of over enthusiastic Cross-Connection Control Programs was discussed. At issue are those ambitious programs that require backflow preventers regardless of the documentation of the existence of a hazard. For example, a public water supplier could require, through its Cross-Connection Control Program, Reduced Pressure Backflow Prevention Assemblies (RP) on all Commercial/Industrial facilities. In addition, they have more stringent testing requirements than those required by TCEQ regulations. The risk posed is the potential backlash from the public complaining about the program and how the local authorities could disable a cross-connection control program.

Conflict of Interest BPAT Testing

Occasionally Backflow Prevention Assembly Testers (BPAT) are employed by a public water supplier and also test backflow prevention assemblies for a fee on their own. A conflict of interest exists where the BPAT could require that a backflow prevention assembly be installed and then he could offer to test it, in effect generating business for himself. Some points that were made during the general discussion were:

- A problem like this is usually identified by complaints from customers.
- BPAT ethics is addressed during the training and testing to acquire the BPAT License.
- Some public water suppliers do not allow their employees to test backflow preventers within their jurisdiction.
- Ultimately, it comes down to the integrity of the individual.

Sewer Gas Emission Control Device

Some general information was presented on a new device which forms a cross-connection and poses a contamination hazard. It is a sewer gas emission control device which consists of a tank into which sewer gas is hard plumbed. A connection is also made to the potable water distribution system which consists of misters which discharge a mist to remove the odor.

Update on testing for BPAT License

Mr. Joseph Hildenbrand, TCEQ Occupational Licensing, presented an update on the TCEQ proctoring the written portion of the BPAT exam. The highlights of the procedure to developing the exam include:

1. Develop a project workgroup made of current training providers, members of national organizations dealing with backflow prevention, the TCEQ, the Fire Marshall's office, and other subject matter experts.
2. Hold a series of 3 meetings in which:
 - a. During the 1st meeting- review the 2004 BPAT job task analysis,

determine which categories should be included on the exam, determine the number of questions, and determine the amount of time given for the exam.

- b. During the 2nd meeting- use question formatting guidelines to review exam questions. Revise, rewrite, remove, questions as needed.
 - c. During the 3rd meeting- create curriculum document and SOP for hands-on test.
3. Deliver the finalized written exam, Best Practices Guide for hands-on testing, new curriculum document, and asses training courses for compliance with new curriculum.

Some points the subcommittee brought up were:

A general group should be made consisting of a broad range of individuals to produce the general shape of the exam, curriculum, etc.

Then, choose a more specific group to revise the information produced.

Utilize psychometric analysis (analyze the test to measure validity and reliability).

Individuals must first pass the hands on before taking the written test.