

Texas Commission on Environmental Quality
Cross-Connection Control Subcommittee
June 4, 2008
Building F, Room 2210
9:00a m – 3:00 pm

Welcome and Introductions

Announcements

- Next meeting of the subcommittee will be held on September 3, 2008

Adoption of minutes from meeting held March 5, 2008

Rainwater Harvesting Rule Update: Cindy Haynie, TCEQ Public Drinking Water Section

Revisions are being made to Title 30 of the Texas Administrative Code (30 TAC), Chapter 290, based on legislation passed during the last legislative session. These changes address the use of rainwater harvesting systems for non-potable indoor use. The statute went into effect in October 2007. The revisions to Chapter 290 will go before the TCEQ Commissioners on September 24, 2008. Discussion on this topic included a recommendation that rainwater harvesting systems be treated as an auxiliary water source. One subcommittee member asked whether the revisions to the regulations would include installation criteria for rainwater harvesting systems.

Update on Color-Coding of Water Lines: Bruce Rathburn, San Antonio Water System (SAWS)

Other state regulatory agencies do not designate color-coding criteria. Currently, responsibility for setting color-coding standards falls on the local authority. Color-coding standards for the length of pipe from the meter to the building are not addressed in plumbing codes or elsewhere. The lack of guidance on this issue has led to confusion among public water systems with respect to the best way to ensure consistent color-coding is implemented.

One option for establishing color-coding criteria is for a national organization to address this issue. In order to ensure consistency, addressing on a national level would be best. Bruce Pearson, SAWS, has submitted a color-coding scheme for adoption to the Water Reuse Foundation.

Establishing color-coding criteria for water lines is a pro-active and excellent means to prevent cross-connections.

Backflow Prevention at RV Parks: Art Smith, City of Rockport

Daniel Dick, a Cross-Connection Control Subcommittee member, has provided information on cross-connection control at various RV Parks in several states. Water providers should be knowledgeable about the potential hazards that retrofits to the septic systems of RVs can pose to a public drinking water system. It is possible for RV owners to install a blackwater tank flushing system. This system can result in a direct connection between the potable water system and the RV blackwater tank. Based on TCEQ regulations, it is unclear what type of backflow prevention should be required and is feasible for use at RV Parks. One option is for water system staff to meet with RV Park staff to educate them on this topic. The Recreational Vehicle Industry Association (RVIA) will be contacted regarding this issue.

Information on cross-connection control at RV Parks will be included in the revision to RG-206: A Public Water System Guide to Customer Service Inspections.

Irrigation Systems with Multiple Water Sources

General discussion which included: Proper protection of groundwater sources must be addressed: backflow prevention should be required at well-heads. The Texas Department of Licensing and Registration has oversight over well drillers. This complicates the issue of wellhead protection. Protection of the public water system supply must also be addressed. The plumbing codes allow for connections to anything except for sewage, provided proper backflow prevention is in place. When suggesting changes to TCEQ regulations, it is important to keep a level of flexibility to allow different water systems to operate in the most efficient manner. New “Green Building” initiatives will bring many changes in the future; flexible regulations will allow water systems to adopt green building practices.

Biochemical Treatment of Firelines: Mark Redlitz, Texas State Fire Marshal’s Office

After checking with sprinkler inspectors, the practice of chemical injection to firelines to address microbiological contamination (MIC) is not very common. Chemical injection of firelines without proper backflow prevention is prohibited by TCEQ’s regulations for cross-connection control and backflow prevention. TCEQ staff will prepare a letter to the State Fire Marshall’s Office to recommend discussion of this topic at the newly formed Sprinkler Advisory Council. This council can consider the best way to ensure oversight and regulation of this issue.

Revision of RG 345: Backflow Protection on Water-Based Fire Protection Systems: Mark Redlitz, Texas State Fire Marshal’s Office

This regulatory guidance document (RG) is currently under revision. Discussion included questions and comments regarding proposed changes to the document.

The document, with changes, will be prepared in a draft form by TCEQ Publications and provided to subcommittee members for final review.

New RG: Establishing and Managing an Effective Cross-Connection Control Program:
Joel Klumpp, TCEQ Public Drinking Water Section

General discussion of a new regulatory guidance document. Discussion topics included: whether a licensed plumbing inspector can perform a Customer Service Inspection outside his/her jurisdiction, recommendations to public water systems on coordination between the Building Inspection and Public Works departments, clarification on the extent of TCEQ's jurisdiction and TCEQ's expectation of the public water system's jurisdiction.

Chapter 290: Cross-Connection Control Regulations

General discussion of potential changes, corrections, or modifications to the existing regulations found in 30 TAC, Chapter 290. Discussion topics included: hazard classification of irrigation systems, testing requirements of backflow prevention assemblies for non-health hazards, testing requirements of backflow prevention assemblies installed on irrigation systems, a requirement for public water systems to report backflow incidents.

Three subcommittee members volunteered to meet before the next meeting to prepare recommendations for discussion topics on this issue. The individuals to work on this are: Byron Hardin (Brown and Caldwell), Bruce Rathburn (SAWS), and Bruce Pearson (SAWS).

Total Coliform Rule and Cross-Connection Control: Joel Klumpp, TCEQ Public Drinking Water Section

The Total Coliform Rule (TCR) requires water systems to collect bacteriological samples from the distribution system at representative locations. The number of samples required to be collected is based on the population served by the system.

Currently, the TCR is being evaluated by the EPA for revision. One option which is being considered is an incentive approach which would allow a water system to reduce the number of samples required to be collected. The intent to this approach is for a well-functioning system to qualify for the reduced sampling based on:

- A sanitary survey within the last 5 years with all deficiencies addressed;
- No monitoring violations for a specified period; and
- One additional element, **such as an effective cross-connection control program.**

General discussion regarding what measures should be used to evaluate whether a public water system has an "effective" cross-connection control program.

TCEQ Staff Guidance Document: Backflow Incident Protocol: Joel Klumpp, TCEQ
Public Drinking Water Section

General discussion of a draft document to provide a protocol to public water system staff in the event of a backflow incident. Discussion topics included: due to the variability of cross-connections and backflow incidents, it is difficult to provide a “one-size-fits-all” approach to dealing with backflow incidents; it may be possible to take TCEQ’s existing guidance material for Boil Water Notifications and include that information in a backflow incident protocol.

Three subcommittee members volunteered to meet before the next meeting to prepare recommendations for revisions to the existing draft protocol. The individuals to work on this are: Fred Baird (Bac-Flo Unlimited), Troy Baird (Bac-Flo Unlimited), and Tom Nguyen (City of Houston).

TCEQ Staff Guidance Document: Compliance with CSI Requirements: Joel Klumpp,
TCEQ Public Drinking Water Section

General discussion of a draft document to provide guidance to TCEQ regional investigators when a public water system is found to be deficient in the area of performing Customer Service Inspections. Subcommittee members recommended including additional information for residences with auxiliary water systems or high water usage.

Other Issues for Discussion

A suggestion was made that the TCEQ send a letter to all public water systems with additional information regarding the use of single or dual check valves at every service connection. Some public water systems currently use this procedure in the effort to provide backflow protection, however, because these devices are non-testable, the water system staff are unable to confirm that the devices are still working properly, and therefore this practice should be discouraged. Additionally, the use of a check valve at every service connection requires measures for protection from the potential hazards of thermal expansion to be put in place at every connection. Discussion on this topic will be continued once clarification regarding requirements for premises isolation or internal protection is reached.

Questions regarding Customer Service Inspections (CSI) were raised: when should a CSI be performed? What is included as a “material improvement, correction, or addition to the private water distribution facilities?” Additional information on these topics will be included in the revision of RG-206: A Public Water System Guide to Customer Service Inspections.

A question was raised whether 30 TAC §290.44(h)(1)(B) created a loophole for public water systems: does this portion of the regulations give the customer of a

public water system the right to refuse to install a backflow prevention assembly at the service connection? Discussion on this topic concluded that this portion of the regulations is important because it gives water system staff the discretion to allow an adequate internal cross-connection control program to be sufficient without requiring premises isolation. However, no loophole is created because water system staff have the authority to determine whether any internal cross-connection control program is adequate.

A question was raised whether TCEQ regulations specify the frequency for re-inspection in cases where a public water system relies on internal cross-connection control programs. TCEQ regulations do not require re-inspection nor do they offer guidance on this topic. One suggestion made at the meeting is to schedule re-inspections based on the potential or actual hazards present at a facility.