

August 8, 2017



Richard A. Hyde, P.E.
Executive Director
Texas Commission on Environmental Quality
P.O. Box 13087
Austin Texas, 78711-3087

Re: Petition for Rulemaking; Title 30, Texas Administrative Code (TAC)
Chapter 344, Rules for Landscape Irrigation

Mr. Hyde,

The TCEQ Irrigator Advisory Council (IAC) is composed of nine members appointed by the Commission. Six of the members are Licensed Irrigators experienced in the field of irrigation. The remaining three members are representatives of the public, not having an interest in the irrigation industry. The purpose of the council is to give the commission the benefit of the members' collective business, environmental, and technical expertise and experience with respect to matters relating to landscape irrigation.

The IAC respectfully submits the enclosed petition for rulemaking seeking revisions to Title 30, Texas Administrative Code (TAC) Chapter 344, Rules for Landscape Irrigation, section 344.52 pertaining to backflow prevention installation. The recommended revisions serve to protect the public health.

Respectfully submitted for your consideration,

John DeCell, Chair
Irrigator Advisory Council

Petition for Adoption of Rules

The Irrigator Advisory Council (IAC) hereby petitions the Texas Commission on Environmental Quality (TCEQ) for adoption of rules to revise Title 30, Texas Administrative Code (TAC) Chapter 344, Rules for Landscape Irrigation, section §344.52 - Installation of Backflow Prevention Device.

Name of Petitioner

Irrigator Advisory Council
John DeCell, Chair
25740 Century Oaks Blvd
Hockley, Texas 77447

Purpose of the Proposed Rule Changes

The purpose of the proposed rule changes is to add steps to protect the health and safety of the citizens of the State of Texas and to bring consistency to the current TCEQ rules.

Language suggested for removal or change is struck through and appears in red. Proposed additions or changes are underlined and appear in blue.

Text of Current and Proposed Rules and Explanations

§344.52. Installation of Backflow Prevention ~~Device~~.

IAC Proposed Rule Change

Change the title to §344.52. Installation of Backflow Prevention Assemblies.

The reason for this recommendation: *This recommendation will change the references to a backflow prevention "device" to a backflow prevention "assembly". The TCEQ follows the University of Southern California's (USC) Manual of Cross-Connection Control Tenth Edition for testing procedures and standards. The USC manual and the Foundation for Cross-Connection Control and Hydraulic Research refer to a backflow as an assembly. Although a backflow is often referred to as a "device" within the industry, it is actually an "assembly" of components. In the TCEQ Chapter 290, Rules and Regulations for Public Water Systems, a backflow is referred to as an assembly. This change will allow the Chapter 344 rules to stay consistent in language with the Chapter 290 rules and the University of Southern California.*

Current Rule

- (b) If an irrigation system is connected to a potable water supply through a ~~double-check valve~~, pressure vacuum breaker, or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

IAC Proposed Rule Change

- (b) If an irrigation system is connected to a potable water supply through a pressure vacuum breaker, [a spill-resistant vacuum breaker](#), or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

The reason for this recommendation: *If irrigation is properly classified as a health hazard, the double check would no longer be an acceptable backflow prevention assembly for use as protection against an irrigation system. The purpose of this recommendation is to remove the double check valve, which is the only backflow prevention assembly not approved for use against a health hazard. In addition, this recommendation adds the spill-resistant vacuum breaker as an acceptable backflow prevention assembly for protection against an irrigation system. The spill-resistant vacuum breaker assembly is approved by the University of Southern California and is an approved assembly under the International Plumbing Code and Uniform Plumbing Codes for both health and non-health hazard protection. This will provide another option for the protection of the public water supply. Because the assembly is "spill-resistant", this will provide a good option for installing an assembly indoors in colder climates.*

IAC Proposed Rule Change

- (c) [an inline filter/strainer with a minimum of a 120-mesh screen or disc shall be installed per manufacturer's recommendations above grade on the inlet side of the backflow prevention assembly.](#)

The reason for this recommendation: *The University of Southern California has indicated that the cleaner the water is entering the backflow assembly, the less likely the assembly is to fail. Water meters are known to break apart with excess flow through the meter. The parts from the meter are often lodged in the backflow assembly rendering it useless. The addition of a filter/strainer will assist in capturing any debris allowing the backflow prevention assembly to operate as designed. Installing the filter/strainer above grade versus in a valve box in the ground will eliminate a potential cross-connection. The Irrigator Advisory Council voted in favor of requiring an inline filter/strainer on August 18, 2016.*

Current Rule

- (e) the irrigator shall ensure the backflow prevention **device** is tested prior to being placed in service and the test results provided to the local water purveyor and the irrigation system's owner or owner's representative within 10 business days of testing of the backflow prevention **device**.

IAC Proposed Rule Change

- (d) the irrigator shall ensure the backflow prevention **assembly** is tested prior to being placed in service and the test results provided to the local water purveyor and the irrigation system's owner or owner's representative within 10 business days of testing of the backflow prevention **assembly**.

The reason for this recommendation: *To change the designation to the letter (d) with the addition of the inline filter/strainer recommendation becoming the new letter (c).*

To change the reference to a backflow prevention "device" to a backflow prevention "assembly" to stay consistent with the Chapter 290 rules and the University of Southern California.

Statement of Statutory Authority

The Commission has authority to promulgate these rules under Texas Water Code §§ 5.013, 5.101-103, and 37.00-.015; Texas Occupations Code § 1903.053; and Texas Health and Safety Code §§ 341.033-034.

Injury or Inequity Resulting from Failure to Adopt the Proposed Rules

Failure to adopt the proposed amendments will continue to allow the citizens of the State of Texas to be exposed to water known and recognized as hazardous by the two plumbing codes approved by the State Plumbing Board, and virtually all other subject matter experts. Removing the double check valve as an approved backflow assembly for protection against irrigation, and adding a filter/strainer to further protect the assembly are the proper steps to begin correcting an error in the rules that has been in existence for far too long.