

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** September 5, 2014

Thru: Bridget C. Bohac, Chief Clerk
Richard A. Hyde, P.E., Executive Director

From: L'Oreal W. Stepney, P.E., Deputy Director
Office of Water

Subject: Consideration of a Petition for Rulemaking

Docket No.: 2014-1114-PET

Project No.: 2014-033-PET-NR

Who Submitted the Petition:

On August 1, 2014, the Texas Commission on Environmental Quality (TCEQ) received a petition for rulemaking from Aqua Texas, Inc. (petitioner).

What the Petitioner Requests:

The petitioner recommended amendments to four sections of 30 Texas Administrative Code (TAC) Chapter 290. The first subsection recommended for amendment was §290.44(c), relating to the number of connections and minimum water line sizes for new construction and existing water lines. The petitioner recommends requiring water line sizes to be based solely on the number of customers served without regard to the length of the pipe, elevation changes or the type of pipe. The second subsection recommended for amendment was §290.45(f), relating to the minimum requirements for the wholesaler and the purchaser in a purchased water contract. The petitioner recommends changing the obligations of each party of the contract. The third subsection recommended for amendment was §290.46(f) to allow the use of other methods to obtain operational data other than an actual physical visit of the public water system (PWS) by the operator. The fourth and last subsection recommended for amendment was §290.110(c)(4), relating to the frequency for monitoring disinfectant residuals in the distribution system. The recommended change would reduce the monitoring frequency of systems with fewer than 250 connections, and would allow PWSs with more than 250 connections to base the frequency on a TCEQ-approved remote monitoring plan.

The petitioner also entreated the TCEQ to incorporate its recommended changes within Rule Project No. 2013-046-290-OW, *§2.96 of HB 1600, §§1, 4, 95, and 96 of SB 567, Federal Revisions, and Staff-Initiated Rule Efficiencies*. The executive director's staff refers to that rulemaking as the proposed "desalination" rulemaking; other revisions are being included in that proposed rulemaking, however the desalination rule recommendations are being proposed to assist PWSs during the ongoing drought.

Specifically, the petitioner requests the following changes. New language has been underlined and deleted language is shown in ~~strikeout~~.

Re: Docket No. 2014-1114-PET

Minimum Waterline Sizes

§290.44(c) The minimum waterline sizes are for domestic flows only and do not consider fire flows. Larger pipe sizes shall be used when the licensed professional engineer deems it necessary. ~~It should be noted that the required sizes are based strictly on the number of customers to be served and not on the distances between connections or differences in elevation or the type of pipe.~~ No new waterline less than two inches in diameter will be allowed to be installed in a public water system distribution system. These minimum line sizes do not apply to individual customer service lines.

§290.44(c)(1) New Construction or Significant Replacement - The required sizes for new water systems are based strictly on the number of customers to be served and not on the distances between connections or differences in elevation or the type of pipe.

§290.44(c)(2) Existing Public Water Systems - Water lines in existing public water systems must comply with the requirements above ("above" refers to existing Figure: 30 TAC §290.44(c)) unless the water system meets the following requirements:

(A) the water lines were installed prior to September 1, 2009,

(B) the water system is able to provide a minimum pressure of 35 psi at all points within the distribution network under normal operating conditions,

(C) if the system is intended to provide fire fighting capability, it must also be able to maintain a minimum pressure of 20 psi under combined fire and drinking water flow conditions.

Minimum Water System Capacity Requirements

§290.45(f)(2) The contract shall authorize the purchase of enough water to meet the monthly or annual needs of the purchaser when combined with any production capacity of the purchaser or other available sources of potable water, if any.

§290.45(f)(4) The maximum authorized daily purchase rate specified in the contract, or a uniform purchase rate in the absence of a specified daily purchase rate, plus the actual production capacity of the system must be at least 0.6 gpm per connection. If the purchaser cannot negotiate a contract which specifies the maximum authorized daily purchase rate, compliance will be determined based on the capacity of the wholesale provider to provide 0.6 gpm per connection for all of its retail customers plus its direct pressure purchased water customers.

§290.45(f)(5) For systems which purchase water under direct pressure, the maximum hourly purchase authorized by the contract plus the actual service pump capacity of the system must be at least 2.0 gpm per connection or provide at least 1,000 gpm and be able to meet peak hourly demands, whichever is less. If the purchaser cannot negotiate a contract which specifies the maximum hourly

Re: Docket No. 2014-1114-PET

purchase rate, compliance will be determined based on the ability of the wholesale provider to provide 2.0 gpm per connection or at least 1,000 gpm with the largest pump out of service for all of its retail customers plus its direct pressure purchased water customers.

Operating Records and Reports

§290.46(f) Water systems must maintain a record of water works operation and maintenance activities and submit periodic operating reports. The executive director may allow public water systems that serve 250 or more connections to use data obtained from electronic, video or other remote monitoring equipment to satisfy some of these requirements in lieu of on-site visits by operators if public health will not be endangered. Systems that serve 250 or more connections using electronic or remote monitoring must perform at least two on-site visits each week that are at least three days apart.

Monitoring Requirements

§290.110(c)(4)(A) Public water systems that use groundwater or purchased water sources only and serve fewer than 250 connections and fewer than 750 people daily, must monitor the disinfectant residual at representative locations in the distribution system at least weekly but no less frequently than once every nine seven days.

§290.110(c)(4)(B) Public water systems that serve at least 250 connections or at least 750 people daily, and use only groundwater or purchased water sources must monitor the disinfectant residual at representative locations in the distribution system at least once per day unless authorized to monitor less frequently as part of approved remote monitoring under §290.46(f) in which case the monitoring frequency shall be specified in the remote monitoring authorization once per day.

Recommended Action and Justification:

The executive director recommends denial of the petition. The proposed desalination rulemaking, *Rule Project No. 2013-046-290-OW*, is moving forward after the executive director's staff has worked extensively with interested stakeholders. That rulemaking's proposed changes were preceded by public meetings in the summer of 2012 and a TCEQ guidance document on desalination. The proposed desalination rulemaking has been prepared after two stakeholder meetings during May and June 2014. The petitioner was present during the May 2014, stakeholder meeting. Any delays to the desalination rulemaking will adversely impact drought-stricken PWSs wanting to explore brackish water as an available water source, thus delaying the provision of relief to the PWSs' customers.

The executive director also recommends that the petitioner's request be denied for the reasons outlined by subsection as follows:

- the recommended revision to §290.44(c) is unnecessary and would not add clarity to the rule, and

Re: Docket No. 2014-1114-PET

- the recommended revisions to §§290.45(f), 290.46(f), and 290.110(c)(4), are unnecessary.

Minimum Waterline Sizes:

The petitioner's recommended amendments to §290.44(c) would base water line sizes solely on the number of connections served and would explicitly prohibit consideration of common engineering concerns such as elevation changes, distances between customer connections, and the type of pipe. The recommended amendment would also arbitrarily establish a date for exempting existing facilities from a rule that was adopted following best practices on December 13, 1975.

The petitioner indicates that the existing rule is flawed because it does not account for length of pipe or elevation changes. The executive director disagrees. As written, the existing rule states that distribution line design involves more than the minimum line size criteria in the rule and may require engineering design to account for pipe length and elevation.

The petitioner recommended stating that the criteria for new construction will be based on the number of customer connections only; thereby removing any reference to engineering design for new waterlines. This recommended rule change may cause some PWSs and engineers to rely only on the minimum line size criteria, which will circumvent engineering design to account for pipe material, length, and elevation.

The recommended rule change will also lead to confusion, rather than add clarity. If the minimum line size criterion is the sole basis for water line decisions, public health could be adversely impacted for sites or projects that require engineering design.

The petitioner further recommended exempting lines from the minimum waterline size criteria if the lines were constructed prior to September 1, 2009. The September 1, 2009, date appears to be arbitrarily selected with no specific justification as to why it is appropriate. The minimum line size criteria has been applied since 1975 and was based upon best practices. Exempting facilities constructed prior to a particular date is unfair to those PWSs that have followed the rule and have constructed facilities according to minimum line sizes and, if applicable, appropriate engineering design.

If a PWS is unable to comply with the provisions of existing §290.44(c), it can apply for a case-by-case exception. The exception process in existing §290.39(l) allows a PWS to demonstrate that it can meet the minimum pressure requirements while continuing to utilize the existing waterlines that may not meet the minimum size criteria that was first established in 1975.

Re: Docket No. 2014-1114-PET

Minimum Water System Capacity Requirements

The executive director recommends that the request to amend §290.45(f) be denied because it is unnecessary. The existing rule already addresses calculation of production capacity requirements for compliance calculations. Existing §290.45(f)(6) provides that "***The purchaser is responsible for meeting all production requirements. If additional capacity to meet increased demands cannot be attained from the wholesaler through a new or amended contract, additional capacity must be obtained from water purchase contracts with other entities, new wells, or surface water treatment facilities. However, if the water purchase contract prohibits the purchaser from securing water from sources other than the wholesaler, the wholesaler is responsible for meeting all production requirements.***" (emphasis added) The petitioner's recommended rule change is redundant because any compliance calculations for production capacity would include all water sources currently available to the PWS.

The petitioner's recommended changes to §290.45(f)(4) and (5) seeks to allow the purchaser to rely on the provider's system capacity to meet the purchaser's capacity requirements. The petitioner's recommended rule changes would make the wholesaler responsible for production requirements. This recommended revision would be a significant departure from current practice and should be explored through a thorough stakeholder process before any rulemaking is initiated.

In 2003, when existing §290.45(f) was adopted, §290.45(f)(6) was added to clearly make the purchaser responsible for meeting production requirements. The TCEQ revised §290.45(f)(6) in response to a comment as published in the January 24, 2003, issue of the *Texas Register* (28 TexReg 697). The petitioner's recommended amendments to §290.45(f)(4) and (5) would shift that responsibility to the provider and does not address existing §290.45(f)(6), though it appears that the recommended revisions are for those instances when the purchaser cannot negotiate a contract specifying the required information.

The executive director's staff acknowledges that existing §290.45(f) has been discussed during many Drinking Water Advisory Work Group meetings. If the commission decides at some time in the future to initiate a rulemaking to amend §290.45(f), the executive director's staff recommends that a stakeholder meeting be held with all stakeholders, including PWSs that are purchasers, PWSs that are buyers, and PWS customers. The petitioner's recommendation could be useful when presenting this concept to other interested stakeholders holding a diversity of viewpoints on wholesale contracts to ensure meaningful public participation in the TCEQ's decision-making processes if the commission elects to undertake a future rulemaking on this issue.

Operating Records and Reports

Re: Docket No. 2014-1114-PET

The executive director recommends that the request to amend §290.46(f) be denied because it is unnecessary. The petitioner asserts that existing §290.46(f) requires that an operator physically visit a water plant site to record the operating parameters listed. Instead, existing §290.46(f) specifies: what records and reports must be maintained; which reports and records must be submitted to the TCEQ; and the time frame for which the records and reports must be maintained.

Existing §290.46(e) specifies what operations must be performed by a licensed operator; however, existing §290.46(f) does not preclude PWSs from using remote monitoring technologies to obtain data necessary to compile the records and reports.

As existing §290.46(e) and (f) do not prohibit the use of remote monitoring technologies, the petitioner's recommended rule change is unnecessary.

Monitoring Requirements

The executive director recommends that the request to amend §290.110(c) be denied because it is unnecessary as there is no contradiction in the TCEQ's rules as cited by the petitioner. The petitioner recommended that §290.110(c)(4)(A) be modified to make this subparagraph consistent with the requirements of §290.46(f)(3)(A)(i). The petition indicated that the timing of samples, every seven days, in existing §290.110(c)(4)(A) contradicts the weekly requirement in existing §290.46(f)(3)(A)(i)(III) and (ii)(III). The executive director disagrees that the two sections are contradictory.

The rules are not contradictory because §290.110(c)(4)(A) requires the PWS to sample every seven days, while §290.46(f)(3) requires the PWS to keep chemical and volume records for two years. In addition, §290.110(c)(4) directs the timing for monitoring disinfection in the distribution system and §290.46(f)(3)(A)(i)(III) and (ii)(III) directs the record keeping for chemicals used and the volume, both of which are found at the water treatment plant, not in the distribution system.

The executive director's staff does not interpret existing §290.110(c)(4) to require an operator to physically visit the water treatment plant; instead §290.110(c)(4) requires the operator to monitor the disinfectant residual in the distribution system.

Because the requirements of existing §290.46(f) concern record keeping of treatment plant based activities and the requirements of existing §290.110(c)(4) relate to the monitoring frequency for distribution samples, the executive director's staff does not agree that these requirements are in conflict.

The petitioner also recommended amending §290.110(c)(4)(B) to coincide with the recommended rule change to existing §290.46(f). Existing §290.110(c)(4) states that for certain types of PWSs, the disinfectant residual in the distribution system

Re: Docket No. 2014-1114-PET

must be monitored; the existing rule does not specify that the sample must be "collected." Monitoring can be performed by any bench top or on-line analytical method approved by the TCEQ under existing §290.119. The daily monitoring requirement in the distribution system can be accomplished with remote sensing; therefore, the petitioner's recommended rule change is unnecessary.

Applicable Law:

- Texas Government Code, §2001.021, which establishes the procedures by which an interested person may petition a state agency for the adoption of a rule
- 30 TAC §20.15, which provides such procedures specific to the commission
- Texas Health and Safety Code, §341.031, which grants the TCEQ authority to adopt and enforce rules governing drinking water standards
- Texas Water Code (TWC), §5.103, which sets forth the TCEQ's general rulemaking authority
- TWC, §5.105, which allows the TCEQ to establish and approve general policy by rule

Agency contacts:

Brian Dickey, Rule Project Manager, (512) 239-0963, Water Supply Division
Ruth Takeda, Staff Attorney, (512) 239-6635
Kris Hogan, Texas Register Coordinator, (512) 239-6812

Attachment

Petition

cc: Chief Clerk, 2 copies
Executive Director's Office
Marshall Coover
Tucker Royall
Pattie Burnett
Office of General Counsel
Brian Dickey
Kris Hogan