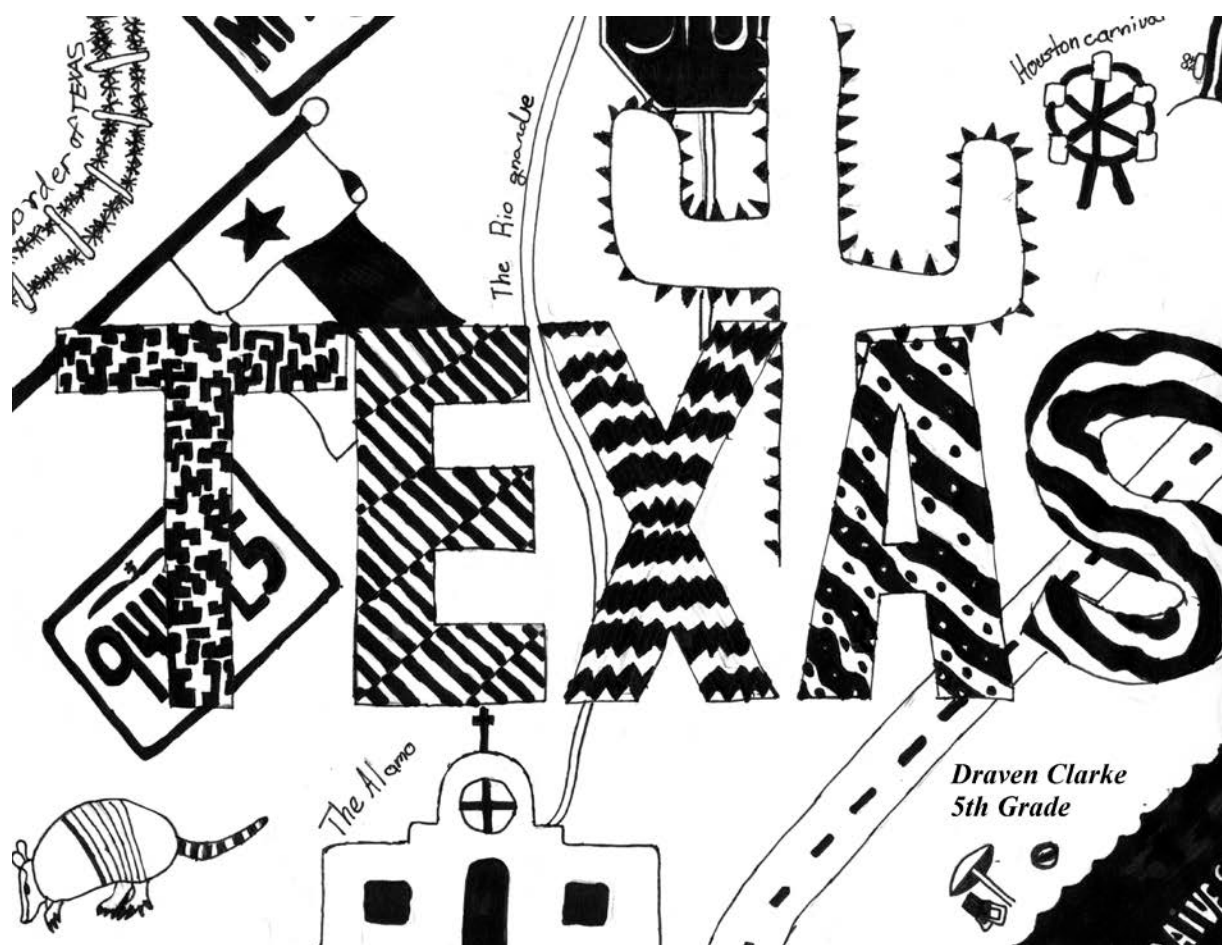


TEXAS REGISTER

Volume 40 Number 30

July 24, 2015

Pages 4753 - 4858



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***Texas Register*, (ISSN 0362-4781, USPS 12-0090)**, is published weekly (52 times per year) for \$259.00 (\$382.00 for first class mail delivery) by Matthew Bender & Co., Inc., 3 Lear Jet Lane Suite 104, P O Box 1710, Latham, NY 12110.

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The *Texas Register* is published under the Government Code, Title 10, Chapter 2002. Periodicals Postage Paid at Albany, N.Y. and at additional mailing offices.

POSTMASTER: Send address changes to the *Texas Register*, 136 Carlin Rd., Conklin, N.Y. 13748-1531.

TEXAS REGISTER

a section of the
Office of the Secretary of State
P.O. Box 12887
Austin, TX 78711
(512) 463-5561
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THE ATTORNEY GENERAL

The *Texas Register* publishes summaries of the following:
Requests for Opinions, Opinions, Open Records Decisions.

An index to the full text of these documents is available from
the Attorney General's Internet site <http://www.oag.state.tx.us>.

Telephone: 512-936-1730. For information about pending requests for opinions, telephone 512-463-2110.

An Attorney General Opinion is a written interpretation of existing law. The Attorney General writes opinions as part of his responsibility to act as legal counsel for the State of Texas. Opinions are written only at the request of certain state officials. The Texas Government Code indicates to whom the Attorney General may provide a legal opinion. He may not write legal opinions for private individuals or for any officials other than those specified by statute. (Listing of authorized requestors: <http://www.oag.state.tx.us/opinopen/opinhome.shtml>.)

Opinions

Opinion No. KP-0026

The Honorable Eddie Lucio, Jr.

Chair, Committee on Intergovernmental Relations

Texas State Senate

Post Office Box 12068

Austin, Texas 78711-2068

Re: Question relating to the Galveston City Charter and a tax increment reinvestment zone governed by chapter 311 of the Tax Code (RQ-0004-KP)

S U M M A R Y

The question whether the City of Galveston's Charter applies to a board of a tax increment reinvestment zone created by the City under chapter 311 of the Tax Code is outside the purview of an attorney general opinion.

As a general matter, however, a charter provision allowing only city residents to serve on a tax increment reinvestment zone board is inconsistent with Tax Code subsection 311.009(e) and is likely void. Similarly, a charter provision limiting the number of terms a tax increment reinvestment zone board member may serve where subsection 311.009(c) would permit the board member to serve an unlimited number of terms likely renders such a charter provision void.

Opinion No. KP-0027

The Honorable Susan Hawk

Dallas County District Attorney

Civil Section

411 Elm Street, 5th Floor

Dallas, Texas 75202

Re: Whether section 157.901 of the Local Government Code requires a county to provide representation to a county judge involved in a disciplinary proceeding before the State Commission on Judicial Conduct (RQ-0005-KP)

S U M M A R Y

Because a court is unlikely to conclude that the term "sued" in subsection 157.901(a) of the Local Government Code encompasses a disciplinary proceeding of the Commission on Judicial Conduct, subsection 157.901(a) likely does not require a county to defend a judge in a proceeding before the Commission.

Opinion No. KP-0028

The Honorable Bob Wortham

Jefferson County Criminal District Attorney

1085 Pearl Street, 3rd floor

Beaumont, Texas 77701

Re: Whether a Type C municipality may levy an ad valorem property tax (RQ-0006-KP)

S U M M A R Y

Section 302.001 of the Tax Code and section 51.051 of the Local Government Code expressly authorize a Type C general-law municipality to levy an ad valorem tax on property within its city limits.

For further information, please access the website at www.texasattorneygeneral.gov or call the Opinion Committee at (512) 463-2110.

TRD-201502666

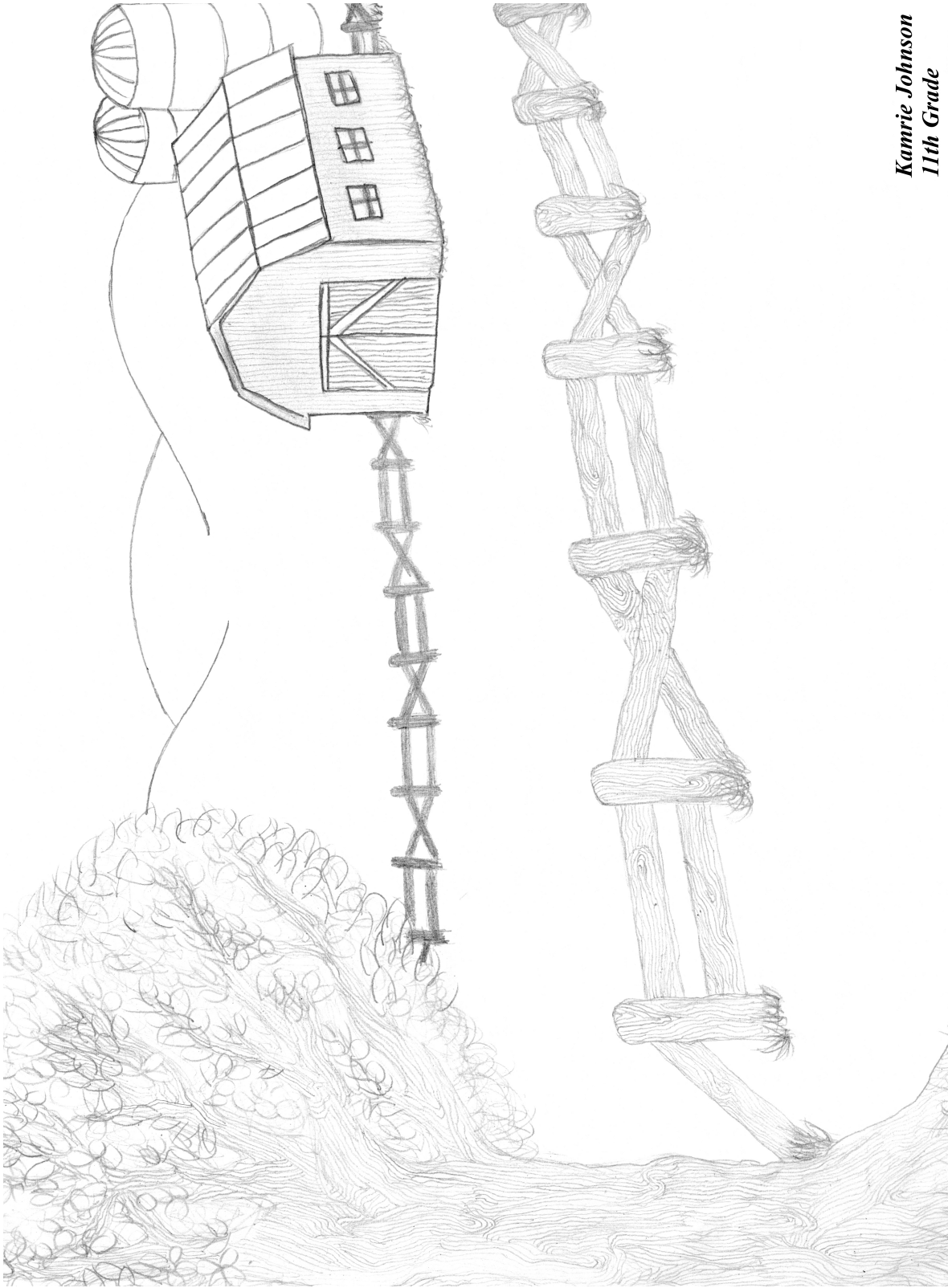
Amanda Crawford

General Counsel

Office of the Attorney General

Filed: July 14, 2015





Kamrie Johnson
11th Grade

PROPOSED RULES

Proposed rules include new rules, amendments to existing rules, and repeals of existing rules. A state agency shall give at least 30 days' notice of its intention to adopt a rule before it adopts the rule. A state agency shall give all interested persons a reasonable opportunity to submit data, views, or arguments, orally or in writing (Government Code, Chapter 2001).

Symbols in proposed rule text. Proposed new language is indicated by underlined text. ~~[Square brackets and strikethrough]~~ indicate existing rule text that is proposed for deletion. "(No change)" indicates that existing rule text at this level will not be amended.

TITLE 19. EDUCATION

PART 1. TEXAS HIGHER EDUCATION COORDINATING BOARD

CHAPTER 22. GRANT AND SCHOLARSHIP PROGRAMS

SUBCHAPTER M. TEXAS EDUCATIONAL OPPORTUNITY GRANT PROGRAM

19 TAC §22.262

The Texas Higher Education Coordinating Board (Coordinating Board) proposes amendments to Texas Administrative Code §22.262 concerning the allocation process for the Texas Educational Opportunity Grant (TEOG). These amendments were adopted on an emergency basis and are now being filed to allow for a 30-day comment period. The intent of the amendments is to incorporate into existing rule changes and provisions developed by the Negotiated Rule-Making Committees, one representing public community colleges and one representing public technical and state colleges. Language has been changed for the allocation methodology used to determine TEOG funding levels for each type of institution. The newly amended statute will affect students enrolling in public community, technical, and state colleges in the fall 2015 semester. The effective date for the emergency rule was July 6, 2015. Specifically, amendments to §22.262 remove the current, temporary "hold harmless" language and outline an allocation process based on enrollments weighted by average tuition and fees, as represented by the maximum TEOG award level. New, temporary "hold harmless" language is also implemented for the public community colleges. Section 22.262(d) is struck from the rule, as it is no longer required. Amendments to §22.262(g) align the rule with the General Appropriations Act, Texas Higher Education Coordinating Board Rider 22.

Dr. Charles W. Puls, Deputy Assistant Commissioner for Student Financial Aid Programs, has determined that for the first five years there will be no fiscal implications for state or local governments as a result of amending these sections.

Dr. Puls has also determined that for the first five years the amendments are in effect, the public benefits anticipated as a result of administering the sections will be to better serve the students attending institutions of higher education by improving the allocation of need-based grant funding to public community, technical, and state colleges. There is no effect on small businesses. There is no anticipated economic cost to persons who are required to comply with the section. There is no impact on local employment.

Comments on the proposed amendments may be submitted by mail to Charles W. Puls, Deputy Assistant Commissioner, Texas Higher Education Coordinating Board, P.O. Box 12788, Austin, Texas, 78711, or via e-mail at grantinfo@thehb.state.tx.us. Comments will be accepted for 30 days following publication of the proposal in the *Texas Register*.

The amendments are proposed under Texas Education Code, §61.229, which provides the Coordinating Board with the authority to adopt rules to implement the Texas Educational Opportunity Grant (TEOG) Program.

§22.262. Allocation and Reallocation of Funds

(a) Allocations for Fiscal Year 2015.

(1) Initial Year Funds. Available program funds for initial year awards will be allocated to each participating institution in proportion to each institution's share of the state's undergraduate financial aid population with significant amounts of financial need.

(2) Renewal Year Funds. Available program funds for continuation or renewal awards will be allocated in proportion to the number of prior year recipients reported for each institution, adjusted for the institution's student retention rate.

(b) Allocations for public junior colleges for Fiscal Year 2016 and Later ~~[and Fiscal Year 2017]~~. Allocations are to be determined on an annual basis as follows:

(1) The allocation base for each eligible institution will be the number of ~~[aggregate 9-month cost of attendance for]~~ students it reported in the most recent Financial Aid Database Report who met the following criteria:

(A) were classified as Texas residents,

(B) ~~were enrolled as undergraduates half-time, three-quarter time or full-time [were first-time entering undergraduates enrolled at least half-time],~~

(C) completed either the FAFSA or the TASFA, and

(D) have a 9-month Expected Family Contribution less than or equal to the Federal Pell Grant eligibility cap for the year reported in the Financial Aid Database Report.

(2) Each institution's percent of the available funds will equal its percent of the state-wide need as determined by multiplying each institution's enrollments by the respective award maximums [total cost of attendance] of students who meet the criteria in subsection (b)(1) of this section, ~~[, except that:]~~

~~[(A) if statewide funding equals or exceeds the amount allocated for FY 2015, no institution will receive less than 95 percent of its allocation for FY2015; and]~~

~~[(B) if statewide funding is less than the amount available for FY 2015, each institution will receive an amount equal to its FY~~

2015 allocation, multiplied by a factor equal to the new year's statewide total appropriation divided by the FY2015 statewide appropriation.]

(3) No institution's annual allocation will be reduced by more than 15 percent of the prior year's annual allocation not including any reallocations that occurred in that prior year. This provision will apply to FY2016 and FY2017 allocations after which it will expire.

(c) Allocations for public technical colleges and public state colleges for Fiscal Year 2016 and Later. Allocations are to be determined on an annual basis as follows:

(1) The allocation base for each eligible institution will be the number of students it reported in the most recent Financial Aid Database Report who met the following criteria:

(A) were classified as Texas residents,

(B) were enrolled as undergraduates half-time, three-quarter time or full-time,

(C) completed either the FAFSA or the TASFA, and

(D) have a 9-month Expected Family Contribution less than or equal to the Federal Pell Grant eligibility cap for the year reported in the Financial Aid Database Report.

(2) Each institution's percent of the available funds will equal its percent of the state-wide need as determined by multiplying each institution's enrollments by the respective award maximums of students who meet the criteria in subsection (b)(1) of this section.

(d) [(e)] Verification of Data for Fiscal Year 2016 and Later. Allocation calculations will be shared with all participating institutions for comment and verification prior to final posting and the institutions will be given 10 working days, beginning the day of the notice's distribution and excluding State holidays, to confirm that the allocation report accurately reflects the data they submitted or to advise Board staff of any inaccuracies.

[(d) Allocations for Fiscal Years 2018 and later will be made based on rules developed through the use of Negotiated rulemaking in accordance with Texas Government Code Chapter 2008 and 19 TAC, Part 1, Chapter 1, §1.14, as well as Senate Bill 215, 83rd Texas Legislature, Regular Session (2013).]

(e) Reallocations. Institutions will have until the close of business on February 20 or the first working day thereafter if it falls on a weekend or a holiday to encumber the program funds that have been allocated to them. On that date, institutions lose claim to any unencumbered funds, and the unencumbered funds are available to the Board for reallocation to other institutions. For the institutions that request additional funds, reallocations for amounts up to the amount requested per institution will be calculated on the same basis as was used for the allocation for the relevant fiscal year. If necessary for ensuring the full use of funds, subsequent reallocations may be scheduled until all funds are awarded and disbursed.

(f) Disbursement of Funds to Institutions. As requested by institutions throughout the fall and spring terms, the Board shall forward to each participating institution a portion of its allocation of funds for immediate release to students or immediate application to student accounts at the institution.

(g) Authority to Transfer Funds. Institutions participating in a combination of the Texas Educational Opportunity Grant and Texas College Work-Study Programs, in accordance with instructions from the Board, may transfer in a given fiscal year up to the lesser of 10 percent or \$20,000 between these programs. This threshold is applied to the program from which the funds are being transferred.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on July 7, 2015.

TRD-201502603

Bill Franz

General Counsel

Texas Higher Education Coordinating Board

Earliest possible date of adoption: August 23, 2015

For further information, please call: (512) 427-6114



ADOPTED RULES

Adopted rules include new rules, amendments to existing rules, and repeals of existing rules. A rule adopted by a state agency takes effect 20 days after the date on which it is filed with the Secretary of State unless a later date is required by statute or specified in the rule (Government Code, §2001.036). If a rule is adopted without change to the text of the proposed rule, then the *Texas Register* does not republish the rule text here. If a rule is adopted with change to the text of the proposed rule, then the final rule text is included here. The final rule text will appear in the Texas Administrative Code on the effective date.

TITLE 19. EDUCATION

PART 2. TEXAS EDUCATION AGENCY

CHAPTER 97. PLANNING AND ACCOUNTABILITY

SUBCHAPTER AA. ACCOUNTABILITY AND PERFORMANCE MONITORING

19 TAC §97.1005

The Texas Education Agency (TEA) adopts an amendment to §97.1005, concerning accountability and performance monitoring. The amendment is adopted without changes to the proposed text as published in the May 22, 2015 issue of the *Texas Register* (40 TexReg 2724) and will not be republished. The section describes the purpose of the Performance-Based Monitoring Analysis System (PBMAS) and manner in which school districts and charter school performance is reported. The section also adopts the most recently published PBMAS Manual. The amendment adopts the PBMAS 2015 Manual. Earlier versions of the manual will remain in effect with respect to the school years for which they were developed.

House Bill 3459, 78th Texas Legislature, 2003, added the Texas Education Code (TEC), §7.027, limiting and redirecting monitoring done by the TEA to that required to ensure school district and charter school compliance with federal law and regulations; financial accountability, including compliance with grant requirements; and data integrity for purposes of the Public Education Information Management System and accountability under TEC, Chapter 39. Legislation passed in 2005 renumbered TEC, §7.027, to TEC, §7.028. To meet this monitoring requirement, the agency developed the PBMAS, which is used in conjunction with other evaluation systems, to monitor performance and program effectiveness of special programs in school districts and charter schools.

Agency legal counsel has determined that the commissioner of education should take formal rulemaking action to place into the *Texas Administrative Code* procedures related to the PBMAS. Given the statewide application of the PBMAS and the existence of sufficient statutory authority for the commissioner of education to formally adopt rules in this area, the PBMAS procedures described in each annual PBMAS Manual have been adopted since the first PBMAS Manual was developed in 2004-2005. The PBMAS evolves from year to year, and the intent is to annually update 19 TAC §97.1005 to refer to the most recently published PBMAS Manual.

The adopted amendment to 19 TAC §97.1005 updates the current rule by adopting the PBMAS 2015 Manual, which describes

the specific criteria and calculations that will be used to assign 2015 PBMAS performance levels.

The 2015 PBMAS includes several key changes from the 2014 system. The ongoing transition to the State of Texas Assessments of Academic Readiness (STAAR®) is reflected in the 2015 PBMAS with the revision of STAAR indicators to include STAAR A and STAAR Alternate 2 results. To address the inclusion of these two assessments, new performance level provisions related to certain indicators have been incorporated. Additionally, since new performance standards for Grades 3-8 mathematics will not be determined prior to finalizing the 2015 PBMAS, passing standards equivalent to the previous mathematics test were used.

New cut-points have been implemented for the graduation rate indicators in all four program areas, and performance level assignments were added for all STAAR end-of-course U.S. History indicators. Changes to the cut-points for the Texas English Language Proficiency Assessment System (TELPAS) Reading Beginning Proficiency Level Rate indicator have been implemented.

Three indicators were deleted: the Special Education STAAR Participation Rate, the Special Education STAAR Modified Participation Rate, and the Special Education Placements in Instructional Settings 40/41 (Ages 3-5) Rate. Performance levels were assigned for the first time to the Regular Early Childhood Program Rate (Ages 3-5). In addition, the 2015 PBMAS marks the beginning of a transition to a new performance level structure for the three discipline indicators in the special education program area. This new performance level structure will eventually replace the current percentage point difference with the rate of disproportionality. Changes to the PBMAS indicators for 2015 are marked in the manual as "New!" for easy reference.

The adopted amendment establishes in rule the PBMAS procedures for assigning the 2015 PBMAS performance levels. Applicable procedures will be adopted each year as annual versions of the PBMAS Manual are published.

The adopted amendment has no locally maintained paperwork requirements.

The public comment period on the proposal began May 22, 2015, and ended June 22, 2015. Following is a summary of public comments received and corresponding agency responses regarding the proposed amendment to 19 TAC Chapter 97, Planning and Accountability, Subchapter AA, Accountability and Performance Monitoring, §97.1005, Performance-Based Monitoring Analysis System.

Comment: The Texas Council of Administrators of Special Education (TCASE) offered general recommendations for streamlining the overall systems of special education compliance, monitoring, and accountability.

Agency Response: This comment is outside the scope of the proposed rule action. However, the agency notes that the status of those recommendations is included in *A Report on the Texas Education Agency's Efforts in Implementing the Provisions of Rider 70*, available at http://tea.texas.gov/Reports_and_Data/Legislative_Reports/Legislative_Reports/.

Comment: TCASE recommended initiating a workgroup to address concerns routinely expressed by directors about the Preschool Program for Students with Disabilities (PPCD) codes used in Performance-Based Monitoring Analysis System (PB-MAS) indicator calculations.

Agency Response: The agency disagrees. The PBMAS indicator that includes PPCD location codes as part of its calculation (Special Education Indicator #5: Regular Early Childhood Program Rate, Ages 3-5) is calculated in accordance with federal requirements.

The amendment is adopted under the Texas Education Code (TEC), §7.028(a), as that section existed before amendment by House Bill (HB) 1842, 84th Texas Legislature, Regular Session, 2015, which authorizes the agency to monitor as necessary to ensure school district and charter school compliance with state and federal law and regulations; TEC, §29.001(5), which authorizes the agency to effectively monitor all local educational agencies (LEAs) to ensure that rules relating to the delivery of services to children with disabilities are applied in a consistent and uniform manner, to ensure that LEAs are complying with those rules, and to ensure that specific reports filed by LEAs are accurate and complete; TEC, §29.010(a), which authorizes the agency to adopt and implement a comprehensive system for monitoring LEA compliance with federal and state laws relating to special education, including ongoing analysis of LEA special education data; TEC, §29.062, as that section existed before amendment by HB 2804, 84th Texas Legislature, Regular Session, 2015, which authorizes the agency to monitor the effectiveness of LEA programs concerning students with limited English proficiency; TEC, §39.051 and §39.052, as that section existed before amendment by HB 2804, 84th Texas Legislature, Regular Session, 2015, which authorize the commissioner to determine criteria for accreditation statuses and to determine the accreditation status of each school district and open-enrollment charter school; TEC, §39.054(b-1), which authorizes the agency to consider the effectiveness of district programs for special populations, including career and technical education programs, when determining accreditation statuses; TEC, §§39.056, as that section existed before amendment by HB 1842 and HB 2804, 84th Texas Legislature, Regular Session, 2015, 39.057, as that section existed before amendment by Senate Bill 1296, 84th Texas Legislature, Regular Session, 2015, and 39.058, as that section existed before amendment by HB 1842, 84th Texas Legislature, Regular Session, 2015, which authorize the commissioner to adopt procedures relating to on-site and special accreditation investigations; and TEC, §39.102, as that section existed before amendment by HB 1842 and HB 2804, 84th Texas Legislature, Regular Session, 2015, and §39.104, which authorize the commissioner to implement procedures to impose interventions and sanctions for districts and open-enrollment charter schools.

The amendment implements the TEC, §§7.028, as that section existed before amendment by House Bill (HB) 1842, 84th Texas Legislature, Regular Session, 2015; 29.001(5); 29.010(a); 29.062, as that section existed before amendment by HB 2804, 84th Texas Legislature, Regular Session, 2015; 39.051; 39.052, as that section existed before amendment by HB 2804, 84th

Texas Legislature, Regular Session, 2015; 39.054(b-1); 39.056, as that section existed before amendment by HB 1842 and HB 2804, 84th Texas Legislature, Regular Session, 2015; 39.057, as that section existed before amendment by Senate Bill 1296, 84th Texas Legislature, Regular Session, 2015; 39.058, as that section existed before amendment by HB 1842, 84th Texas Legislature, Regular Session, 2015; 39.102, as that section existed before amendment by HB 1842 and HB 2804, 84th Texas Legislature, Regular Session, 2015; and 39.104.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 9, 2015.

TRD-201502628

Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

Effective date: July 29, 2015

Proposal publication date: May 22, 2015

For further information, please call: (512) 475-1497



TITLE 22. EXAMINING BOARDS

PART 26. TEXAS BOARD OF LICENSURE FOR PROFESSIONAL MEDICAL PHYSICISTS

CHAPTER 601. MEDICAL PHYSICISTS

22 TAC §601.21, §601.24

The Texas Board of Licensure for Professional Medical Physicists (board), adopts amendments to §601.21, concerning medical physics specialties and scope of practice, and to §601.24, concerning the licensing of military service members, military veterans, and military spouses. Section 601.21 is adopted with changes to the proposed text as published in the February 6, 2015 issue of the *Texas Register* (40 TexReg 515). The amendment to §601.24 is adopted without changes, and therefore, this section will not be republished.

BACKGROUND AND PURPOSE

The amendments to §601.21 recognize and set basic parameters on the use of assistants by medical physicists licensed in the specialties of diagnostic radiological physics (DRP), medical nuclear physics (MNP), and medical health physics (MHP).

On September 10, 2014, the board conducted a public hearing to receive oral and written testimony regarding the duties and responsibilities of diagnostic licensed medical physicists (LMPs) with regard to the use of assistants, service engineers, or technicians (hereafter, assistants) to gather data for Equipment Performance Evaluations (EPE) on medical x-ray equipment excluding radiation therapy units. It should be noted that the Department of State Health Services (department) Radiation Control Program (RCP) rule, at 25 TAC §289.226(o)(6) states that "Radiation exposure rate (air kerma rate) or dose measurements for fluoroscopy and computed tomography (CT) radiation machines, as required by §289.227 of this title, shall be performed by a licensed medical physicist with a specialty in diagnostic medical physics." The RCP rules, at 25 TAC, Chapter 289, do not pro-

hibit the non-physicist from performing other EPE testing, such as kilovolt peak, half-value layer, beam width, radiation field versus image field congruence and image quality measurements. The board sought comments from diagnostic LMPs, registrants, facilities, service engineers, manufacturers, and other interested parties. The hearing was prompted by changes to the RCP rules, including provisions of 25 TAC §289.226, which regulate the performance of basic measurements for EPE calculations by service engineers when under the direction of an LMP. The amendments to the board rules are to recognize what is reasonable and practicable in the practice of medical physics and to ensure patient safety.

The board added parameters on the use of assistants in §601.21(c) into the scope of practice sections for three of the four medical physics specialty areas. The board is not making this change for the therapeutic radiological physics specialty, as this was not relevant to the need to maintain consistency with the RCP rules nor was it the subject of the public hearing. Among the comments received by the board from the public hearing was a recommendation from the American Association of Physicists in Medicine (AAPM) that any action taken by the board should exclude imaging systems used for radiation therapy simulation, planning, or image-guided treatment.

The amendments to §601.24 implement Senate Bill 162 and House Bill 2254 of the 83rd Legislature, Regular Session, 2013, which amended Occupations Code, Chapter 55, relating to the occupational licensing of spouses of members of the military, the eligibility requirements for certain occupational licenses issued to applicants with military experience, and apprenticeship requirements for occupational licenses issued to applicants with military experience.

SECTION-BY-SECTION SUMMARY

Section 601.21(c) is amended to recognize and set basic parameters on the use of assistants by medical physicists licensed in the specialties of DRP, MNP and MHP.

Section 601.24 adds new language and replaces old language in order to implement Senate Bill 162 and House Bill 2254 of the 83rd Legislature, Regular Session, 2013, which amended Occupations Code, Chapter 55, relating to the occupational licensing of spouses of members of the military, and the eligibility requirements for certain occupational licenses issued to applicants with military experience, and apprenticeship requirements for occupational licenses issued to applicants with military experience.

COMMENTS

The board has reviewed and prepared responses to the comments received regarding the proposed rules during the comment period. The commenters were three individuals; the Department of Imaging Physics at the University of Texas MD Anderson Cancer Center; and the AAPM. The commenters' suggested recommendations for change and the board's responses are presented in the summary of comments. The board welcomed input and review from the department's RCP in the development of §601.21, but the department's RCP did not provide comments on the proposal.

Comment: Concerning §601.21(c), a commenter suggested that the word "imaging" be removed immediately prior to the words "equipment and test instruments" in the three added subparagraphs where it occurs in §601.21(c)(1)(J) (DRP), §601.21(c)(3)(L) (MNP) and §601.21(c)(4)(F) (MHP). The commenter's rationale for this suggestion is that the greater

generality of not including the word "imaging" would accommodate the LMP's use of assistants in the performance monitoring of non-imaging equipment, including radiation shielding (DRP, MNP and MHP), dose calibrators (MNP and MHP), well counters (MNP and MHP), liquid scintillation counters (MNP and MHP), thyroid uptake probes (MNP), and sealed radioactive sources (MHP and MNP), to name a few situations that would be adversely affected by the retention of the word "imaging." The commenter added that the term "test equipment" is not broad enough to encompass these situations.

Response: The board agrees with the commenter and removed the word "imaging" from the new language.

Comment: Concerning §601.21(c), a commenter expressed general support for the proposed amendments, but suggested that the board provide some guidance on the ratio of assistants to LMPs, and suggested a ratio of 2 assistants to 1 LMP. The commenter expressed concern that remaining silent regarding the number of assistants that an LMP is permitted to supervise may create, or support, a dilution of critical expertise and a decrease in patient safety throughout the state. The commenter added that exceeding the 2:1 ratio could reasonably be expected to negatively impact the quality of the LMPs' work product, and that the 2:1 ratio is manageable and will not adversely affect patient safety, while providing a cost effective way to deliver medical physics services to the citizens of Texas.

Response: The board agrees that limitations on the number of assistants that LMPs supervise or utilize may require further consideration, and that this number may vary according to the specialty and numerous other variables. The board is taking issues related to the terms and conditions of the use of assistants under advisement for possible development of guidance, policy, or rule-making. The professional expertise and discretion of the LMP will continue to guide the conduct of medical physics in relation to the use of assistants in situations not specifically addressed by regulations. No change to the rule was made in response to this comment.

Comment: Concerning §601.21(c), a commenter expressed firm support of the proposed amendments.

Response: The board appreciates the support. No change to the rule was made in response to this comment.

Comment: Concerning §601.21(c), a commenter noted that the term "assistant" is not formally defined and that no minimum training is specified. The commenter stated that if the board's intent is to allow the LMP to provide whatever training the LMP deems "proper" then the rules should state this. The commenter suggests there should be minimum qualifications for the assistant, perhaps similar to the Radiation Safety Officer requirements in 25 TAC §289.226. The commenter stated that at least a formal definition of a "medical physicist assistant" should be added to 22 TAC §601.3 (Definitions).

Response: The board acknowledges that its rules do not directly regulate assistants. The professional expertise and discretion of the LMP will continue to guide the conduct of medical physics in relation to the use of assistants in situations not specifically addressed by regulations. The RCP has jurisdiction over the qualifications of registrants for radiation machine services, including the requirements imposed in 25 TAC §289.226(j). In addition, as stated in the preamble, persons assisting an LMP must also be in compliance with the RCP rule, at 25 TAC §289.226(o)(6), which states that "Radiation exposure rate (air kerma rate) or dose measurements for fluoroscopy and computed tomography

(CT) radiation machines, as required by §289.227 of this title, shall be performed by a licensed medical physicist with a specialty in diagnostic medical physics."

The board is taking issues related to the terms and conditions of the use of assistants under advisement for possible development of guidance, policy, or rulemaking. No change to the rule was made as a result of this comment.

Comment: Concerning §601.21(c), a commenter noted that the proposed language implies that any and all test data collected for performance monitoring may be collected by the assistant. However, some data measurements are specifically required in the regulations to be performed by an LMP, the language being generally similar to 25 TAC §289.227(n)(3): "Measurements of the radiation output of the CT system, using the computed tomography dose index (CTDI) as recommended by the American Association of Physicists in Medicine (AAPM) and the International Council on Radiation Protection (ICRP), shall be performed by a licensed medical physicist."

The commenter asked if there is a different standard for those items that say "shall be performed by an LMP." The commenter asked if that means personally performed by the LMP or performed under the personal supervision of the LMP, or whether "performed by an assistant under the general supervision of the LMP" is equivalent to "performed by an LMP." The commenter requested that §601.21 clarify the board's intent.

Response: The board agrees that rules of the board and the RCP may not address all situations, but the board's rules may not be interpreted to encourage or authorize activities that are not in compliance with the relevant RCP rules applicable to the performance of the work of the physicist or the assistant. In consultation with the RCP, the board is taking issues related to the terms and conditions of the use of assistants under advisement for possible development of guidance, policy, or rulemaking. The professional expertise and discretion of the LMP will continue to guide the conduct of medical physics in relation to the use of assistants in situations not specifically addressed by regulations. No change was made to the rule as a result of this comment.

Comment: A commenter noted the seemingly significant difference between a temporary medical physicist (TMP) license holder and an assistant: TMPs have an educational requirement identical to an LMP and operate under an approved supervision plan that provides for personal, direct, and general supervision by an LMP; are expected to be in training to become an LMP; and operate essentially as an LMP, but under the supervision of an LMP, gaining experience to pass their board exams and function independently. The commenter expressed concern that assistants and TMPs will get lumped into the assistants group and will be treated as such, and if so, it will be difficult for TMPs to practice the independent judgment they will need when they become LMPs. The commenter made additional remarks requesting clarification of the scope of activities of TMPs and LMPs.

Response: The board acknowledges that the roles and activities of the assistant and the TMP may often overlap. The adopted rule does not prohibit assistants or TMPs from performing any activities for which they are qualified and authorized. The choice of assignment or delegation of duties by the LMP is not regulated other than by the responsibility to comply with board and department rules. The board has taken under advisement the issue of possibly clarifying further the roles and responsibilities of LMPs, TMPs, and assistants, in consultation with the RCP. The adopted rule is a step toward defining some basic parameters on the use

of assistants by LMPs and the board agrees that additional clarification may be necessary and welcomed by its licensees and their assistants. No change was made to the rule as a result of this comment.

Comment: Concerning §601.21(c), a commenter stated that the proposed rule does not define what is a "properly trained individual" and it therefore seems left to the LMP to determine this, which allows for significant variability across the practice of medical physics.

Response: The RCP rules do require some assistants to have training. The board believes that the LMP should be entrusted to use his/her judgment when assigning tasks to an assistant, since it is the LMP who has the responsibility for the final work product. The board does not wish to substitute its judgment for that of the LMP. Finally, the board does not have the direct authority to impose a minimum education and training requirement on assistants. No change to the rule was made in response to this comment.

Comment: Concerning §601.21(c), a commenter stated that there are no minimum education requirements specified for the assistant. The commenter believes that the rule should define the minimum education requirements for an assistant. The commenter stated that in accordance with AAPM Professional Policy, PP-29, the AAPM defined minimum education requirements as a Bachelor's or higher college degree from an accredited college or university and/or certification as a radiologic technologist or radiation therapist, and practical clinical medical physics knowledge acquired through specific training and technical experience in a program supervised by a qualified medical physicist.

Response: The board disagrees because the rules cannot impose education and training requirements on assistants because the board does not have jurisdiction over assistants. The rules can only require LMPs to use assistants who have training and are qualified for a specific task performed under the supervision of a LMP. But, as stated previously, the board hesitates to substitute its judgment for that of the LMP. No change to the rule was made in response to this comment.

Comment: Concerning §601.21(c), a commenter noted that there is no stated limit to the number of assistants that an individual LMP may supervise. The commenter stated that this appears to be inconsistent with the requirement that an LMP shall supervise no more than two temporary license holders, unless approved by the board. The commenter stated that whether or not two individuals working as an assistant is the correct number, the board should define how many assistants may be supervised by a LMP and the level of supervision necessary. The commenter stated that the AAPM is currently working on a Medical Physics Practice Guideline that will address this issue. The commenter added that without defining this ratio, the potential exists for a facility to hire large number of assistants per LMP to reduce cost and increase revenue, which in turn, could decrease quality and adversely impact the profession of medical physics by lessening the importance of licensure.

Response: At this time, the board declines to place a limit on the number of assistants supervised by an LMP. The number could vary depending on many factors, such as the employment setting, the assistant's training and experience, the specific tasks (how complex), the available resources, etc. The board does limit the number of TMPs that an LMP can supervise, for reasons explained in the board's "Guidance for the Supervision of

Temporary Licensees" which states: "The role of the supervisor is akin to that of the master in an apprenticeship. The supervisor is teaching the TMP, i.e., the apprentice, the profession of medical physics. This teaching requires regular, high quality interactions between the supervisor and the TMP during which medical physics is practiced by the TMP under the guidance of the supervisor. As the TMP grows in professional maturity, it is appropriate for the supervisor to allow the TMP greater responsibility and autonomy, with the understanding that the supervisor will still countersign all work of the TMP and will take full professional responsibility for it as if it were the supervisor's own work." By contrast, an assistant is not a physicist in training, but is someone who performs specific tasks, which may include obtaining test data for performance monitoring in compliance with §601.21(c), when under the supervision of a DRP, MNP, or MHP. No change to the rule was made in response to this comment.

Comment: Concerning §601.21(c), a commenter stated that it is unclear from reading the proposed rule if the use of assistants will be allowed in all imaging modalities, e.g., CT, MRI, fluoroscopy, radiography, and interventional fluoroscopy. The commenter stated that this should be clarified, as well as whether or not dose measurement must be made by an LMP.

Response: The preamble states that assistants must follow the RCP rules regarding the scope of their work. No change to the rule was made in response to this comment.

LEGAL CERTIFICATION

The Department of State Health Services General Counsel, Lisa Hernandez, certifies that the rules, as adopted, have been reviewed by legal counsel and found to be a valid exercise of the agencies' legal authority.

STATUTORY AUTHORITY

The amendments are authorized by the Occupations Code, §602.151, which authorizes the board to adopt rules, with the approval of the Executive Commissioner, necessary for the performance of its duties to regulate the practice of medical physics. The amendments are also authorized by the Occupations Code, Chapter 55, Licensing of Military Service Members, Military Veterans, and Military Spouses, which requires the board to amend its licensing rule provisions.

§601.21. *Medical Physics Specialties and Scope of Practice.*

(a) Content. Recognizing that assessing the degree of radiation safety is a complex task of balancing radiation risk with optimizing the benefit of the procedure to the patient, rules are provided that identify certain specific activities or tests as the practice of medical physics. The purpose of the Act and the rules is to ensure the radiation safety of the citizens of Texas by restricting the practice of medical physics to qualified medical physicists.

(b) Role of the service engineers. Service engineers, when installing or maintaining medical equipment, conduct tests or perform activities that are similar or identical to tests or activities identified in these rules. Such tests and activities do not constitute the practice of medical physics provided that:

(1) neither the service engineer nor his employer represents that the outcome of the test or activity or the intent of performing the test or activity ensures the radiation safety of the use of the medical equipment for either the user, the patient, or a member of the public; and

(2) neither the service engineer nor his employer concludes that the medical equipment is radiologically safe, effective or suitable

for use on humans based on the tests or activities performed by the service engineer; and

(3) neither the service engineer nor his employer certifies that the medical equipment is radiologically safe and consequently compliant with any state or federal regulation for the control of radiation; and

(4) the test or activity performed by the service engineer is required to install, maintain or repair the medical equipment.

(c) Scope of practice.

(1) The diagnostic radiological physics specialty services include, but are not limited to, the following:

(A) providing evidence that imaging equipment continues to meet applicable rules and regulations of radiation safety and performance standards required by accrediting and regulatory agencies;

(B) acceptance testing or monitoring of diagnostic imaging equipment;

(C) evaluating policies and procedures pertaining to radiation and its safe and appropriate application in imaging procedures;

(D) providing consultation in development and management of the quality control program;

(E) measurement and characterization of radiation from diagnostic equipment;

(F) specification of instrumentation to be used in the practice of diagnostic radiological physics;

(G) providing consultation on patient or personnel radiation dose (effective dose equivalent, fetal dose calculations, specific organ dose determination, etc.) and the associated risk;

(H) protective shielding design and evaluation of a diagnostic imaging facility;

(I) conducting performance evaluations of medical radiologic and fluoroscopic imaging systems which include the following physical tests and assessments:

(i) kilovolts peak (kVp) and timer accuracy;

(ii) exposure reproducibility and linearity;

(iii) exposure geometry, e.g. source to image distance (SID) and collimation;

(iv) entrance skin exposure and exposure rate;

(v) beam quality;

(vi) image quality; and

(J) use of assistants by the licensed medical physicist in accordance with the following: the medical physicist may be assisted by other properly trained individuals in obtaining test data for performance monitoring. These individuals must be properly trained and approved by the medical physicist in the techniques of performing the tests, the function and limitations of the equipment and test instruments, the reasons for the tests, and the importance of the test results. The tests will be performed by or under the general supervision of the medical physicist, who is responsible for and must review, interpret, and approve all data and provide a signed report.

(2) The therapeutic radiological physics specialty services include, but are not limited to, the following:

(A) development of specifications for radiotherapy treatment and simulation equipment;

(B) development of procedures for testing and evaluating performance levels of radiotherapy treatment and simulation equipment;

(C) acceptance testing of radiotherapy treatment and simulation equipment;

(D) calibration and characterization of radiation beams from therapeutic equipment including radiation quantity, quality, and distribution characteristics, and assessment of the mechanical and geometric optics for proper placement of the beam;

(E) providing documentation that radiotherapy treatment and simulation equipment meet accreditation and regulatory compliance requirements;

(F) calibration and/or verification of the physical and radiological characteristics of brachytherapy sources;

(G) specification of the physics instrumentation used in the measurement and performance testing of therapeutic equipment;

(H) acceptance testing, management, and supervision of computer systems used for treatment planning and calculation of treatment times or monitor units. This includes measurement and input of dosimetry data base and verification of output for external beam radiotherapy and brachytherapy;

(I) implementation and management of dosimetric and beam delivery aspects of external beam and brachytherapy irradiation. External beam delivery aspects include treatment aids, beam modifiers, and geometrical arrangements. Special procedures are included for both external beam (e.g. radiosurgery, total body irradiation, total skin irradiation, intraoperative therapy) and brachytherapy (e.g. high dose rate, pulsed dose rate and radiolabeled microspheres);

(J) provision of consultation to the physician in assuring accurate delivery of prescribed radiation dosage to a specific human patient, and the associated risk;

(K) development and management of quality control program for a radiation treatment facility that includes applicable facility accreditation requirements, and the review of policies and procedures pertaining to therapeutic radiation and its safe and appropriate use;

(L) development and/or evaluation of a radiation safety program in a therapeutic radiation facility including written procedures for the protection of patients, workers, and the public; and

(M) protective shielding design and radiation safety surveys in a radiotherapy facility.

(3) The medical nuclear physics specialty services include, but are not limited to, the following:

(A) development of procedures for continuing evaluations of performance levels of radionuclide imaging devices and ancillary equipment;

(B) providing evidence that radionuclide imaging equipment continues to meet applicable rules and regulations of performance and radiation safety required by accrediting and regulatory agencies;

(C) acceptance testing of radionuclide imaging equipment;

(D) development and/or evaluation of a radiation safety program in a nuclear medicine facility;

(E) determination of radiation shielding necessary to protect workers, patients, and the public in a nuclear medicine facility;

(F) development of specifications for radionuclide imaging instrumentation or equipment;

(G) development and monitoring of a quality control program for radionuclide imaging equipment, computers and other patient related radiation detectors such as uptake probes, well counters and dose calibrators;

(H) providing consultation on patient or personnel radiation dose (effective dose equivalent, fetal dose calculations, specific organ dose determination, etc.) and the associated risk;

(I) evaluating policies and procedures pertaining to the safe and appropriate application of radionuclides;

(J) specification of instrumentation used in the practice of medical nuclear physics;

(K) verification of calculated radiation absorbed doses from unsealed radioactive sources and radiolabeled microspheres and the provision of consultation to the physician in assuring accurate delivery of prescribed radiation dosage to a specific human patient and the associated risk in therapeutic nuclear medicine procedures; and

(L) use of assistants by the licensed medical physicist in accordance with the following: the medical physicist may be assisted by other properly trained individuals in obtaining test data for performance monitoring. These individuals must be properly trained and approved by the medical physicist in the techniques of performing the tests, the function and limitations of the equipment and test instruments, the reasons for the tests, and the importance of the test results. The tests will be performed by or under the general supervision of the medical physicist, who is responsible for and must review, interpret, and approve all data and provide a signed report.

(4) The medical health physics specialty services include, but are not limited to, the following:

(A) planning and design of radiation shielding needed to protect workers, patients, and the general public from radiation produced incident to the diagnosis or treatment of humans. This includes calculation of required shielding thickness, selection of shielding material and specification of source-shield geometry;

(B) assessment and evaluation of installed shielding, installed shielding apparatus or portable shielding designed to protect workers, patients, and the general public from radiation produced incident to the diagnosis or treatment of humans. Such evaluation specifically includes determination of whether the shielding is adequate to ensure compliance with state or federal regulatory requirements for limiting the effective dose equivalent and organ dose equivalent of medical radiation workers and members of the public. This includes the selection of appropriate radiation measurement instrumentation to conduct such evaluation as well as the methodology to be employed;

(C) providing consultation, by which determination of the presence and extent of any radiological hazard, in any controlled, restricted, uncontrolled or unrestricted area, resulting from the use of ionizing radiation or radioactivity in the treatment or diagnosis of disease in humans, is made. This includes the design, conduct, and evaluation of results of radiation surveys of health care facilities and the immediate environs intended to determine whether occupancy by medical radiation workers, patients, and members of the public is compliant with state and federal regulations for the control of ionizing radiations. A survey includes the directing of physical measurements of radiation levels and radioactivity, the interpretation of those measurements, and the provision of any conclusions or recommendations intended to limit or prevent exposure of workers, members of the public, and patients;

(D) performing dose and associated risk assessment in which an effective dose equivalent, committed effective dose equivalent, organ dose equivalent, or committed organ dose equivalent is determined by measurement or calculation or both, to any worker, member of the public, fetus or patient who received exposure to ionizing radiation or radioactivity from radiation sources used to treat or diagnose disease in humans. This does not include either the prospective or retrospective determination of absorbed doses to patients undergoing radiation therapy;

(E) consultation which consists of the evaluation or assessment of the radiation safety aspects of policies or procedures which pertain to the safe and appropriate use of radiation or radioactivity, administered to human research volunteers or used to treat or diagnose conditions in humans, when such evaluation or assessment provides conclusions or recommendations regarding dose equivalent assessment, the overall radiation safety afforded to individuals resulting from activities conducted in compliance with the evaluated policies or procedures, or the compliance of any or all provisions of the policies or procedures with either state or federal regulatory requirements for the control of radiation; and

(F) use of assistants by the licensed medical physicist in accordance with the following: the medical physicist may be assisted by other properly trained individuals in obtaining test data for performance monitoring. These individuals must be properly trained and approved by the medical physicist in the techniques of performing the tests, the function and limitations of the equipment and test instruments, the reasons for the tests, and the importance of the test results. The tests will be performed by or under the general supervision of the medical physicist, who is responsible for and must review, interpret, and approve all data and provide a signed report.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502656

Charles W. Beasley, Ph.D.

Chair

Texas Board of Licensure for Professional Medical Physicists

Effective date: August 2, 2015

Proposal publication date: February 6, 2015

For further information, please call: (512) 776-6972



TITLE 30. ENVIRONMENTAL QUALITY

PART 1. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 101. GENERAL AIR QUALITY RULES

SUBCHAPTER F. EMISSIONS EVENTS AND SCHEDULED MAINTENANCE, STARTUP, AND SHUTDOWN ACTIVITIES

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts the amendments to §101.201 and §101.211 *without changes* to the proposed text as pub-

lished in the February 20, 2015, issue of the *Texas Register* (40 TexReg 777).

Background and Summary of the Factual Basis for the Adopted Rules

The commission adopts the amendments to §101.201 and §101.211 to remove parts of §101.201(h) and §101.211(f) that require certain small emitting sources in select areas to report emissions event (EE) and maintenance, startup, and shutdown (MSS) activities and emissions annually to the TCEQ.

Parts of §101.201(h) and §101.211(f) apply to sources not otherwise required to report an annual emissions inventory per §101.10, Emissions Inventory Requirements, and require these sources to annually report EE or MSS activities and emissions. The reporting required by parts of these subsections applies to sources experiencing at least one EE or MSS activity and that are located in nonattainment areas, maintenance areas, early action compact areas, Nueces County, or San Patricio County. Sources are required to report the number of EE and MSS activities and the amount of reportable and non-reportable emissions by mixture or compound.

Total statewide volatile organic compound emissions from EE and MSS collected under this requirement from all sites is less than 150 tons in any year but is usually less than 50 tons. Total nitrogen oxides emissions collected statewide from EE and MSS is also less than 150 tons but is usually less than 50 tons. Because of the quantities of emissions reported and the availability of reportable EE and MSS information through State of Texas Environmental Electronic Reporting System, the data are of limited use in any current air quality planning activities.

Collection of annual EE and MSS data from sources that are not required to submit an annual emissions inventory per §101.10 as required by the existing parts of §101.201(h) and §101.211(f), are not specifically required under federal or state statutes. Other requirements in TCEQ rules to collect EE and MSS activities data of reportable quantities within 24 hours and total annual emissions and activities as part of the annual emissions inventory from sources that are required to submit an annual emissions inventory would remain unchanged.

Section by Section Discussion

§101.201, Emissions Event Reporting and Recordkeeping Requirements

The commission adopts amended §101.201(h) to remove the annual reporting requirement for certain sources not subject to the emissions reporting requirements of §101.10 experiencing at least one EE and that are located in nonattainment areas, maintenance areas, early action compact areas, Nueces County, or San Patricio County. Owners or operators of sources subject to the reporting requirements of §101.10 will continue to be required to annually report in their emissions inventory the total number of and emissions from reportable and non-reportable EEs.

§101.211, Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements

The commission adopts amended §101.211(f) to remove annual reporting requirements for certain sources not subject to the emissions reporting requirements of §101.10 that experience at least one MSS activity and that are located in nonattainment areas, maintenance areas, early action compact areas, Nueces County, or San Patricio County. Owners or operators of sources

subject to the reporting requirements of §101.10 will continue to be required to annually report in their emissions inventory the total number of and emissions from reportable and non-reportable MSS activities.

Final Regulatory Impact Analysis Determination

The commission reviewed the rulemaking action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the action is not subject to Texas Government Code, §2001.0225 because it does not meet the definition of a "major environmental rule" as defined in that statute. A "major environmental rule" is a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The adopted amendments to §101.201 and §101.211 are not specifically intended to protect the environment or reduce risks to human health from environmental exposure to air pollutants. Rather, they will remove reporting requirements for data that are not statistically significant and have not been used in any current air quality planning activities.

Texas Government Code, §2001.0225 only applies to a major environmental rule, the result of which is to: exceed a standard set by federal law, unless the rule is specifically required by state law; exceed an express requirement of state law, unless the rule is specifically required by federal law; exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or adopt a rule solely under the general powers of the agency instead of under a specific state law. This rulemaking action does not meet any of these four applicability requirements of a "major environmental rule." Specifically, the adopted amendments to §101.201 and §101.211 were developed to remove unnecessary reporting. Finally, this rulemaking was not developed solely under the general powers of the commission but is authorized by specific sections of the Texas Health and Safety Code and Texas Water Code that are cited in the Statutory Authority section of this preamble. Therefore, this rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b).

The commission invited public comment on the draft regulatory impact analysis determination during the public comment period. The commission received no comments on the draft regulatory impact analysis determination.

Takings Impact Assessment

The commission evaluated the adopted rulemaking and performed an analysis of whether Texas Government Code, Chapter 2007, is applicable. The adopted amendments to §101.201 and §101.211 remove unnecessary reporting requirements. The discontinuation of this reporting will not burden private real property. The adopted amendments do not affect private property in a manner that restricts or limits an owner's right to the property that would otherwise exist in the absence of a governmental action. Consequently, this rulemaking action does not meet the definition of a taking under Texas Government Code, §2007.002(5). The adopted amendments do not directly prevent a nuisance or prevent an immediate threat to life or property. Therefore, this rulemaking action will not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

As required by 31 TAC §505.11(b)(2), relating to Actions and Rules Subject to the Coastal Management Program, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the Texas Coastal Management Program (CMP). The commission reviewed this action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Advisory Committee and determined that the action is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(1)). The adopted amendments would remove reporting requirements of certain emissions. The CMP policy applicable to this rulemaking action is the policy that commission rules protect and enhance air quality in the coastal areas. Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and policies.

The commission invited public comment regarding the consistency with the CMP during the public comment period. No comments were received regarding the consistency with the CMP.

Effect on Sites Subject to the Federal Operating Permits Program

Fewer than 70 sites subject to the Federal Operating Permits Program could be impacted by the adopted amendments to §101.201 and §101.211. These adopted amendments could reduce the annual reporting burden of emissions from EE and MSS activities from these sources that are not subject to the annual reporting requirements of §101.10.

Public Comment

The commission held a public hearing on March 17, 2015, in Austin. The comment period closed on March 23, 2015. The commission received no oral comments at the public hearing, and no written comments were received on this rulemaking.

DIVISION 1. EMISSIONS EVENTS

30 TAC §101.201

Statutory Authority

The amendment is adopted under Texas Water Code (TWC), §5.102, concerning General Powers, TWC, §5.103, concerning Rules, and TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amendment is also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state air; THSC, §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state air; THSC, §382.014, concerning Emissions Inventory, which authorizes the commission to require submittal of emissions data; THSC, §382.0215, concerning Assessment of Emissions Due to Emissions Events, which authorizes the commission to collect and assess unauthorized emissions data due to emissions events; THSC, §382.0216, concerning Regulation of Emissions

Events, which authorizes the commission to establish criteria for determining when emissions events are excessive and to require facilities to take action to reduce emissions from excessive emissions events; and THSC, §382.085, concerning Unauthorized Emissions Prohibited, which prohibits emissions of air contaminants except as authorized by commission by rule or order.

The adopted amendment implements TWC, §§5.102, 5.103, and 5.105; and THSC, §§382.002, 382.011, 382.012, 382.014, 382.0215, 382.0216, and 382.085.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 10, 2015.

TRD-201502633

Robert Martinez

Director, Environmental Law Division

Texas Commission on Environmental Quality

Effective date: July 30, 2015

Proposal publication date: February 20, 2015

For further information, please call: (512) 239-6087



DIVISION 2. MAINTENANCE, STARTUP, AND SHUTDOWN ACTIVITIES

30 TAC §101.211

Statutory Authority

The amendment is adopted under Texas Water Code (TWC), §5.102, concerning General Powers, TWC, §5.103, concerning Rules, and TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amendment is also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state air; THSC, §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state air; THSC, §382.014, concerning Emissions Inventory, which authorizes the commission to require submittal of emissions data; THSC, §382.0215, concerning Assessment of Emissions Due to Emissions Events, which authorizes the commission to collect and assess unauthorized emissions data due to emissions events; THSC, §382.0216, concerning Regulation of Emissions Events, which authorizes the commission to establish criteria for determining when emissions events are excessive and to require facilities to take action to reduce emissions from excessive emissions events; and THSC, §382.085, concerning Unauthorized Emissions Prohibited, which prohibits emissions of air contaminants except as authorized by commission by rule or order.

The adopted amendment implements TWC, §§5.102, 5.103, and 5.105; and THSC, §§382.002, 382.011, 382.012, 382.014, 382.0215, 382.0216, and 382.085.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 10, 2015.

TRD-201502635

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Effective date: July 30, 2015

Proposal publication date: February 20, 2015

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CHAPTER 290. PUBLIC DRINKING WATER

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts amendments to §§290.38, 290.39, 290.41 - 290.47, 290.110, 290.111 and 290.116.

Sections 290.38, 290.41, 290.45, 290.47, 290.111, and 290.116 are adopted *without changes* to the proposed text as published in the February 6, 2015, issue of the *Texas Register* (40 TexReg 518) and, therefore, will not be republished. Sections 290.39, 290.42 - 290.44, 290.46, and 290.110 are adopted *with changes* to the proposed text.

Background and Summary of the Factual Basis for the Adopted Rules

This rulemaking amends Chapter 290 for consistency with Texas Water Code (TWC), §12.013 and Chapter 13; for consistency with existing federal regulations and guidance; and, to provide clarification on existing state rules. The adopted rulemaking addresses: federal changes to the lead and *Escherichia Coli* (*E. coli*) thresholds; desalination; chloramination; plan review submittal process; enforceability of exceptions; and other drinking water matters.

State Statutes

The amendment to Chapter 290 is necessary to reflect changes to TWC, §12.013 and Chapter 13, made during the 83rd Texas Legislature, 2013, in §2.96 of House Bill (HB) 1600 and §§1, 4, 95, and 96 of Senate Bill (SB) 567, transferring the utilities and rates program to the Public Utility Commission of Texas (PUC), effective September 1, 2014. The majority of the rule changes required to implement HB 1600 and SB 567 will occur under Rule Project Number 2013-057-291-OW. This rulemaking, Rule Project Number 2013-046-290-OW, removes a requirement for the submission of Certificate of Public Convenience and Necessity (CCN) information in existing §290.39(j)(3) as the TCEQ no longer has jurisdiction over CCNs.

Federal Regulations

Reduction of Lead in Drinking Water Act -- The federal Reduction of Lead in Drinking Water Act reduced the allowed lead content of pipes, pipe fittings, and plumbing fittings and fixtures from 8.0% to 0.25%, effective January 4, 2014. The adopted amendments within Chapter 290 address this federal revision.

E. coli Threshold -- The United States Environmental Protection Agency's (EPA's) Long Term 2 Enhanced Surface Water Treat-

ment (LT2) rule required public water systems (PWSs) with surface water or groundwater under the direct influence of surface water sources to monitor for *Cryptosporidium*. The EPA gave primacy states the discretion to allow small PWSs, those with a population less than 10,000, to monitor for *E. coli* instead. Subsequent federal guidance established an *E. coli* trigger level of 100 *E. coli*/100 milliliters, no matter the source of water. The adopted amendments within Chapter 290 are consistent with this federal guidance.

Additional Staff Recommendations -- Staff-initiated rule changes adopted within Chapter 290 address: the process for TCEQ's approval of desalination technology; chloramine disinfection criteria; modification of the plan review submittal process; enforceability of exceptions; clarification for well construction review process; alternative appurtenances for overflow devices; water storage; water distribution crossings; the removal of three Appendices in existing §290.47; and, the related establishment of three agency forms.

Process for Approving Desalination Technology -- The adopted rule allows the use of desalination technologies for chemical removal without submitting an exception request, which is required when proposing the use of any technology that does not have design, operation, maintenance, monitoring, and reporting standards within Chapter 290. These technologies, which are not mentioned in the rules, are considered innovative/alternate treatment technologies and require site-specific review and approval as an exception to the rule.

The use of reverse osmosis membranes and other desalination technologies for water treatment has been in use for decades. Over 15,000 desalination plants were in use worldwide in 2002. Given this length of time in production and the widespread use of desalination, the commission adopts amendments with design, operation, maintenance, monitoring, and reporting standards for desalination based upon recommendations from the executive director's staff and input from the regulated community. Historically, desalination has been approved on a case-by-case basis through the executive director's exception process under existing §290.39(l) and §290.42(g). Desalination has become a common technology used by PWSs; therefore, the TCEQ's practices for approving these technologies have become well developed. By placing the specific requirements for desalination through reverse osmosis and nanofiltration within Chapter 290, a PWS can implement the technology without the added time of requesting and receiving an exception before submitting the plans and specifications for staffs' review if the treatment is not for pathogen control or desalination of seawater.

PWSs can use desalination to remove salts from water that is high in total dissolved solids, making the water more palatable, or to comply with the maximum contaminant level (MCL) for a regulated inorganic chemical like arsenic or fluoride. Under the on-going drought conditions, there has been increased interest in using desalination because of the degradation of potential source water quality. Desalination can be accomplished through reverse osmosis or nanofiltration technology.

On May 9, 2014, and June 3, 2014, the executive director's staff met with a group of interested stakeholders including representatives of PWSs, government agencies, design engineers, membrane vendors, and other interested participants. The purpose of the stakeholder process was to solicit feedback for proposed rules that would allow the approval of desalination technology for chemical removal through reverse osmosis and nanofiltration without obtaining an exception. With the exclusion of treat-

ment for pathogen control and the treatment of seawater (both of which have unique challenges), the stakeholder process worked to develop a path for PWSs and their design engineers to use rule-based criteria to demonstrate that the desalination process would be effective, reliable and safe. With that goal, the executive director's staff presented a discussion outline that included plant design, engineering report, capacity requirements, operator licensing, operating records and reports, and instrument calibration. Among the stakeholders, there was a consensus that the modeling tools of the membrane vendor were sufficiently developed to allow these models as a basis for configuring a reverse osmosis or nanofiltration system. The TCEQ has an existing process for allowing these modeling tools for the design of brackish groundwater treatment systems, but not for the treatment of any primary contaminants. In an effort to allow the most flexibility to the design engineer, many of the stakeholders were resistant to design rules that prescribed defined trigger limits for maintenance/cleaning activities and for when (and how frequently) performance monitoring data was collected (such as conductivity). The preferred process was to allow the design engineer to present the engineering arguments that would support these decisions in an engineering report and then to validate some (or most) of these decisions in a second report after the plant is placed in service. Once a general agreement for the engineering submittal process was completed, the stakeholder discussion continued to address general criteria for plant operations, operator licensing, and capacity. The completed stakeholder process provided the executive director's staff with sufficient feedback to develop proposed rules for desalination through reverse osmosis or nanofiltration that meet the concerns of the regulated community while being protective of public health.

The design requirements adopted in this rulemaking related to desalination through reverse osmosis or nanofiltration include allowable pretreatment, post-treatment for removal of dissolved gases and re-mineralization, pipes and pipe galleries, conductivity or total dissolved solids monitoring, chemical containment, flow metering for dose calculation, sample taps for monitoring and dosing correctly, and technology-specific flux determination monitoring facilities. The adopted operational requirements relate to desalination through reverse osmosis or nanofiltration include: operator licensing; periodic maintenance cleaning; set points for when maintenance is required; and monitoring, reporting, and recordkeeping.

Chloramine Disinfection Criteria -- The adopted rule allows the use of chloramines in most cases without applying for and being granted an exception. PWSs use chloramines as a compliance option for MCLs for trihalomethanes and haloacetic acids and to ensure a long-lasting disinfectant residual. Design, operation, maintenance, and recordkeeping requirements have been added to the rule to no longer require that a PWS obtain an exception for any unit process. The design requirements related to chloramination include pump and tank sizing, chemical containment, flow metering for dose calculation, sample taps for monitoring and dosing correctly, and the ability to drain the tanks as needed. The operational requirements for chloramination include notification, monitoring, recordkeeping, maintenance, and the ability to respond to nitrification, which can occur when nitrifying bacteria uses free ammonia as a food source, causing the loss of residual disinfectant and the potential formation of undesirable nitrite and nitrate.

Modification of the Plan Review Submittal Process -- The amended rule provides a more efficient submittal process and

clarifies what constitutes a "significant change." Under the federal Safe Drinking Water Act's special primacy requirements (40 Code of Federal Regulations Chapter 142), the TCEQ is required to review all plans for PWSs, but the EPA grants primacy agencies flexibility regarding the design and operation requirements as long as those requirements are protective of public health. Existing §290.39 instructs PWSs to first notify the TCEQ of significant changes and then submit plans and specifications upon the TCEQ's request. The commission amends §290.39 by requiring PWSs to submit plans and specifications for significant changes to reduce confusion in the regulated community and to reduce staffs' processing time currently spent issuing requests for the submission of plans and specifications. The commission further amends §290.39 by simplifying the criteria for a change to be considered as "significant" under the rule.

Enforceability of Exceptions -- Under existing §290.39(l)(2), if a PWS does not meet the requirements of a granted exception, the exception can be revoked through a time-consuming and cumbersome process, in which a TCEQ field investigator who finds a PWS violating the exception's conditions must contact the agency's Central Office to request revocation of the exception, then wait for its revocation before issuing a violation. To streamline this process and ensure that PWSs follow the conditions established in the granted exception, the amended rule clarifies that failing to follow the conditions of a granted exception is a violation and allows the TCEQ's field investigators to directly issue violations for failure to follow an exception's conditions.

Clarification for Well Construction Review Process -- The amended rule clarifies PWS well construction conditions by including the requirements from the American Water Works Association (AWWA) standards into the rule so that PWSs will have to consult only one source for requirements on well design; specifically, cementing requirements and annular space requirements for PWS wells. The existing rule refers to AWWA standards but does not include them.

Alternative Appurtenances for Overflow Devices -- The amended rule allows the use of alternative appurtenances, which enables PWSs to use these designs without requesting an exception from the TCEQ, saving time for the PWS and TCEQ's staff.

Water Storage -- The amended rule allows PWSs more flexibility when designing water storage tanks because it clarifies that tanks of other materials approved by the AWWA are allowed.

Water Distribution Crossings -- The amended rule aligns the TCEQ's water and wastewater rules for water distribution pipe crossings and helps PWSs protect public health by ensuring pipe integrity when wastewater lines and water lines are near each other.

Appendices -- The amended rule removes three figures, or appendices, in existing §290.47. Based upon the revision of federal law regarding the lead content in pipes, fittings, and fixtures, the commission amends Figure: 30 TAC §290.47(b). During its amendment of Figure: 30 TAC §290.47(b), the commission revisited the other figures in existing §290.47 and adopts the removal of Figures: 30 TAC §290.47(c), (d), and (f).

Section by Section Discussion

The commission adopts administrative changes throughout the adopted rules to correct typographical and syntax errors; maintain alphanumeric order; update citations, cross-references, and terminology; and, conform with *Texas Register* requirements.

State Statutes -- The commission amends §290.39(j)(3) by removing the requirement to submit a CCN to the commission with changes or additions to a PWS since the commission no longer has jurisdiction over CCNs.

Federal Regulations

Reduction of Lead in Drinking Water Act -- The federal requirement for the lead content of pipes, pipe fittings, and plumbing fittings and fixtures was reduced from 8.0% to 0.25%, effective January 4, 2014, therefore the commission amends §§290.41(c)(3)(B), 290.44(b)(1), 290.46(i), and Figure: 30 TAC §290.47(b) by reducing the allowable lead content from 8.0% to 0.25% to be in compliance with the Reduction of Lead in Drinking Water Act. The commission also adopts §290.44(b)(3) and (3)(A) and (B) to incorporate the federal exemptions to be consistent with the federal Reduction of Lead in Drinking Water Act.

E. coli Threshold -- The commission amends §290.111(b)(3)(B)(i) to change the average acceptable *E. coli* level at a surface water plant located on a river from 50 to 100 *E. coli*/100 milliliters and also amends §290.111(b)(3)(B)(ii) to change the average acceptable *E. coli* level at a surface water plant located on a lake from 10 to 100 *E. coli*/100 milliliters. The EPA's LT2 rule required PWSs with surface water or groundwater under the direct influence of surface water sources to monitor for *Cryptosporidium*. The EPA gave states the discretion to allow small PWSs, those with a population less than 10,000, to monitor for *E. coli* instead. Subsequent federal guidance established that the appropriate *E. coli* trigger level is 100 *E. coli*/100 milliliters, no matter the source of water. The adopted changes to §290.111(b)(3)(B)(i) and (ii) align the TCEQ rule with EPA's guidance. The commission amends §290.111(b)(6) to identify which entity approves or accredits a laboratory for consistency with the existing Chapter 290 requirements and to reduce confusion in the regulated community. The commission also amends §290.111(b)(6)(B) to remove an outdated reference as the TCEQ no longer certifies laboratories.

Additional Staff Recommendations

Process for Approving Desalination Technology -- The adopted rule allows the use of desalination technologies without an exception request, which is required when approving the use of any technology that does not have design, maintenance, monitoring, and reporting standards within Chapter 290. Technologies that are not mentioned in the rule are considered as innovative/alternate treatment technologies and require specific review and approval as an exception to the rule. Desalination can be accomplished through reverse osmosis or nanofiltration technology. The commission amends §290.38 to allow the use of reverse osmosis and nanofiltration technologies for chemical removal without an exception, but to still require an exception for pathogen treatment. An exception which includes a pilot study, or data from an alternative site, is required by existing §290.42(g) for PWSs proposing the use of innovative/alternate treatment. Since January 2012, PWSs have been allowed to submit computer models instead of a pilot study or alternative site information for reverse osmosis or nanofiltration membrane systems. Also, the exception and plan review processes have been performed concurrently when plans and computer models have been submitted. The commission formalizes this process by removing reverse osmosis and nanofiltration membrane systems from the technologies that are considered innovative/alternate treatment (when proposed for treatment

other than pathogens); thus, an exception is no longer required if the reverse osmosis or nanofiltration treatment is used for any treatment other than pathogen removal. To facilitate these changes, the adopted rule introduces new terminology in the rule language or, in some cases, changes the meaning of existing definitions in the rule. To assure that the terminology referenced in the rule change (for PWSs using reverse osmosis or nanofiltration) is clearly understood by all users of the rule, new definitions are added and several existing definitions are amended in §290.38. The commission adopts §290.38(10), (30), (57), (79), and (82), defining "Baseline performance," "Flux," "Pass," "Stage," and "Vessel," respectively. For the definition of "Flux" in adopted §290.38(30), the language is taken from the EPA's *Membrane Filtration Guidance Manual*. For the definition of "Stage" in §290.38(79), the adopted language is from the AWWA's *Manual of Water Supply Practices M46*. The other definitions adopted by the commission in §290.38(10), (57), and (82) are consistent with the intent of the adopted rule and based on standard operation of these technologies. The commission amends existing §290.38(34), which defines "Innovative/alternate treatment," by deleting the examples of treatment types that were considered innovative/alternate treatment prior to this rulemaking. In addition, the adopted change in the definition of "Innovative/alternate treatment" will help prevent the misinterpretation of treatment types that would be innovative/alternate treatment in some circumstances.

The commission adopts §290.39(e)(6) and (7) as part of a staff-initiated change to allow use of reverse osmosis and nanofiltration technologies for desalination without the need for a granted exception. Specifically, these adopted changes require planning materials in an engineering report and an addendum to be submitted to and approved by the executive director prior to the construction and use of a reverse osmosis or nanofiltration membrane system. The desalination technology's engineering report requirements are specified in adopted §290.39(e)(6) and its subdivisions. The engineering report must provide a clear source description, reverse osmosis or nanofiltration modeling analysis (or one of the accepted alternatives), proof of conformance with appropriate NSF International (NSF) standards, blending calculations, analysis of disinfection byproduct potential, and process control details. When the desalination facility is placed into service, the design engineer must prepare an addendum to the engineering report to document the system's performance. The addendum's requirements are specified in adopted §290.39(e)(7) and its subdivisions. The addendum shall include initial baseline performance (for net driving pressure, normalized permeate flow, and salt rejection), set points for membrane cleaning or replacement, verification of the design model's accuracy, verification of plant capacity, and a complete physical and chemical analysis of the raw and treated water. Some of these additional engineering report requirements provide engineering criteria and performance validation data that were previously required by the pilot study requirements in existing §290.42(g) for innovative/alternate treatment. The adopted rule in §290.39(e)(6) formalizes the option to use industry-accepted manufacturer's modeling tools (and submit the modeling results in the engineering report) and then requires validation data for the full-scale treatment process after the start-up of the facility (and requires the PWS to report that data as an addendum to the previously submitted engineering report required by adopted §290.39(e)(7)). This adopted rule allows the design engineer to use pilot testing in cases where the pilot process would be beneficial. In response to comment, the commission revised §290.39(j)(1) by

moving proposed §290.39(j)(1)(E) and revising it as adopted §290.39(j)(4)(A) - (E), and relettering proposed §290.39(j)(1)(F) as adopted §290.39(j)(1)(E). Adopted §290.39(j)(4)(A) - (E) requires written notification of membrane replacement or change of membrane modules instead of requiring plan submittal in all cases as proposed. Under the adopted rule, a new plan submittal and baseline performance data will most likely need to be provided any time the manufacture or model is changed, but may not be required in all circumstances. Because there may be some situations where a new plan submittal and/or baseline data may not be necessary, the adopted rule requires notification and the PWS will be notified if a new plan submittal and/or baseline performance data is required.

The commission adopts §290.42(b)(2)(D) and (9) and its subdivisions to allow the use of reverse osmosis and nanofiltration technologies for treatment by providing acceptable design standards. Adopted §290.42(b)(2)(D) and (9) and its subdivisions allow a PWS to implement the technology without having to request and receive an exception before submitting the plans and specifications for the executive director's review. Because adopted §290.42(b)(2)(D) defines specific design parameters for the approval of groundwater systems using reverse osmosis or nanofiltration, the use of these technologies will no longer be considered innovative/alternate treatment. To complement the addition of reverse osmosis and nanofiltration design requirements in §290.42(b)(9) and its subdivisions, the commission adopts §290.42(b)(9)(C)(i) to allow a design process based on the industry-accepted modeling tools of the membrane's manufacturer to demonstrate the efficacy of the reverse osmosis or nanofiltration membrane for groundwater treatment. Existing §290.42(b)(2) states that groundwater treatment facilities shall be provided in conformance with established and proven methods. To expand the list of established and proven options, the commission adopts §290.42(b)(2)(D), which directs PWSs proposing to use reverse osmosis or nanofiltration for groundwater treatment to the adopted design requirements in §290.42(b)(9) and its subdivisions. Adopted §290.42(b)(9) and its subdivisions replace the design information that was previously submitted to the TCEQ under the exception requirements in existing §290.42(g). Specifically, adopted §290.42(b)(9) and its subdivisions includes a rule for a design based on an approved method of production validation (modeling, pilot, alternate site, or allowable manufacturer parameters), acceptable methods of pretreatment, post-treatment for corrosion control and re-mineralization, pipes and pipe galleries, chemical storage, cross connection protection, and process monitoring equipment. In response to comment, the commission revised §290.42(b)(9)(G) to specify feed and permeate conductivity monitoring on each individual membrane unit at a nanofiltration or reverse osmosis plant because the executive director's staff inadvertently used an undefined term of "facility" instead of the defined term of "membrane unit." In response to comment, the commission adopts §290.42(c)(8) to address an inadvertent oversight, thus including the ability for a PWS treating groundwater under the direct influence of surface water to use reverse osmosis or nanofiltration design requirements in the same circumstances as surface water systems. The commission adopts §290.42(d)(17) to allow PWSs treating surface water or groundwater under the direct influence of surface water to use the reverse osmosis and nanofiltration design requirements as outlined in adopted §290.42(b)(9) and its subdivisions for groundwater systems, which would be applicable only when this technology is proposed for chemical removal treatment, not pathogen treatment. This adopted change will extend

the benefits of the rule for the use of reverse osmosis and nanofiltration technologies to PWSs treating surface water or groundwater under the direct influence of surface water as long as the required microbiological control is achieved through other approved treatments and technologies. The commission amends §290.42(j) to correct the references to American National Standards Institute (ANSI) NSF Standards 60 and 61 as the terms "direct additives" and "indirect additives" are no longer used in the ANSI/NSF Standards 60 and 61 descriptions. For ANSI/NSF Standard 60, "direct additives" has changed to "Drinking Water Treatment Chemicals." For ANSI/NSF Standard 61, "indirect additives" has changed to "Drinking Water System Components." The commission amends §290.42(l) to ensure that the plant operations manual includes additional information when reverse osmosis or nanofiltration technologies are used. The additional information in the plant operations manual must include the system's configuration, baseline performance data, and any set point for membrane cleaning or replacement. The additional information is required so that operators can know: 1) when the membrane systems should be cleaned; and 2) what the baseline performance of the membrane was when new. By comparing present day performance with baseline performance, the operators can see if: the cleaning is working; the membranes are still performing adequately; or, whether it is time for the membrane's replacement. Failing membranes should be replaced because they will not provide the quantity or quality of the water expected by the PWS's customers.

The commission amends §290.45(a)(6) and its subdivisions to ensure that the production capacity of PWSs using reverse osmosis or nanofiltration membrane systems is calculated properly. The calculated capacity must consider any water losses associated with the membrane processes, such as concentrate and permeate used for cleaning, when calculating the capacity of the treatment units.

The commission adopts §290.46(e)(2)(D) to require operators who operate a reverse osmosis or nanofiltration membrane system to obtain reverse osmosis or nanofiltration membrane specific training by successfully completing at least one executive director-approved course or one executive director-approved training event. The existing operator licensing rules do not provide course work to address the unique operating processes at a membrane treatment plant. In response to comment, the commission amends §290.46(e)(2)(D) to allow operators to complete the training by August 31, 2016. This will allow adequate time for operators to take a training class if they have not previously taken one. Additionally, the commission will consider courses an operator has previously taken which meet the executive director's criteria for approval. The TCEQ's criteria for approving training courses or events will be developed through a stakeholder process. The commission amends §290.46(e)(5)(C) and (D), and (6)(A) and (B) to update the course titles to be consistent with existing 30 TAC §30.390(f). The commission amends §290.46(f)(3)(A)(vi) to ensure that PWSs are maintaining records of each reverse osmosis or nanofiltration membrane cleaning event for at least two years. These records are necessary as evidence to demonstrate that the membrane facility is operated in accordance with the conditions of approval. Typically, any conditions of approval for the use of reverse osmosis or nanofiltration desalination technologies will require a treatment facility to clean or replace membranes based on a specified limit for salt passage, pressure differential, or another similar parameter to prevent irreparable damage to the membrane equipment. The commission adopts

§290.46(f)(3)(B)(x) to ensure that PWSs using reverse osmosis or nanofiltration membranes maintain records of treatment effectiveness monitoring for at least three years. These records are necessary as evidence to demonstrate that the membrane facility is operated in accordance with the conditions of approval. The conditions of approval, based on the commission's review of the engineering report and supplemental addendums, will require any membrane treatment facility to make operational adjustments based on any critical change in performance in the membrane equipment. The adopted requirement in §290.46(f)(3)(B)(x) to keep these records for at least three years should help existing and new personnel at the PWSs better understand the required frequency of and benefits to these operational adjustments. In response to comment, the commission revised §290.46(f)(3)(B)(x) to specify feed and permeate conductivity monitoring on each individual membrane unit at a reverse osmosis or nanofiltration plant because the proposed rule did not specify the location for the conductivity results that are to be maintained for three years. Also in response to comment, the commission revised §290.46(f)(3)(B)(x) to change the phrase "transmembrane pressure differential" to "pressure differential across a membrane vessel" as the term "transmembrane pressure" is generally not associated with reverse osmosis and nanofiltration membranes. The commission adopts §290.46(m)(7) to ensure that PWSs using reverse osmosis or nanofiltration membranes maintain the good working condition of the system's facilities and equipment. This adopted rule limits reverse osmosis or nanofiltration plant operations to the allowable operating conditions of the membrane manufacturer and requires membrane cleaning or replacement based on predetermined set points for changes in salt passage, pressure differential, and/or normalized permeate flow to prevent irreparable damage to the membrane equipment. The commission amends §290.46(s)(1) to ensure that flow-measuring devices and rate-of-flow controllers, as required by §290.42(b)(9)(J) for reverse osmosis or nanofiltration membrane systems, are properly calibrated at least once every 12 months for PWSs using reverse osmosis or nanofiltration. This adopted rule helps a PWS to know that the instruments used for flow measurement are accurate. The commission adopts §290.46(s)(2)(G) to ensure that conductivity (or total dissolved solids) monitors and pressure instruments are properly calibrated for PWSs using reverse osmosis or nanofiltration. This adopted rule helps a PWS and the TCEQ to know that the instruments used to determine when maintenance or corrective measures are required are accurate. The commission adopts §290.46(s)(2)(H) to ensure that temperature-measuring devices are properly calibrated for PWSs using reverse osmosis or nanofiltration and also to correct a typographical error. This adopted rule helps a PWS know that the instruments used to determine when maintenance or corrective measures are required are accurate. By placing the requirements for desalination through reverse osmosis and nanofiltration within Chapter 290, a PWS - including those impacted by on-going drought conditions - can implement this technology without undergoing the added time and expense associated with requesting and receiving an exception before submitting the plans and specifications, including the required engineering report, for review by the executive director's staff.

Chloramine Disinfection Criteria -- The use of chloramines has become a common practice at PWSs. The TCEQ's existing exception process prescribes the required public notice, sampling frequency, equipment requirements, nitrification action plans, records retention, chemical injection locations, chemical feed and storage requirements for chloraminating PWSs. The com-

mission amends Chapter 290 to allow the use of chloramines without requiring a site-specific exception review to reduce the time involved for both the regulated community and TCEQ staff by moving the design, operation, maintenance, monitoring, and documentation criteria currently in the exception approval letters to the rules to simplify the process for the TCEQ and PWSs. The commission adopts §290.39(e)(8) to require the submission of calculations for sizing feed pumps and chemical storage tanks along with the submission of engineering plans to support the approval of chloramination without an exception request. Under existing rules, the chloramine chemical pump and tank sizing are reviewed by the executive director's staff using the site-specific exception process to assure the chemical facilities can deliver and store the amount of chloramine chemical needed for effective dosing. By placing this requirement in the rule, this adopted change will allow staff to review this information during the review of the submitted plans and specifications and will also reduce confusion in the regulated community regarding when to submit the chemical pump and tank sizing information. Having this information readily available will also speed up TCEQ's review and prevent delays encountered while awaiting the submission of this required information under existing rules.

The commission amends §290.42(e)(3)(B) to allow for manual control instead of automatic proportioning of disinfectant dosage at all treatment plants if the flow varies less than 50% above or below the average flow. The existing rule only allows manual controls at PWS using surface water or groundwater under the direct influence of surface water. The change is to ensure that disinfectant chemicals are dosed properly at all plants with automatically variable water flow rates or with highly variable flow rates, regardless of water source. The commission amends §290.42(e)(3)(D) to simplify the language by replacing the phrase "as well as" with the word "and" to make the rule easier to understand. The commission amends §290.42(e)(3)(G) to remove the requirement that all PWSs with chloramine residual in their drinking water must have a granted exception. By adding design and other requirements for chloramination to the adopted rule, an exception will no longer be needed for most situations, thus saving the regulated community and TCEQ staff time. However, under amended §290.42(e)(3)(G), if chloraminated and chlorinated water will be blended, an exception request will be required to be submitted and a case-by-case review will be performed by the executive director's staff as chloramination is only successful when the ratio of chlorine and ammonia is carefully controlled. Improper mixing can cause a low disinfectant residual as well as unpleasant tasting and smelling water. An exception is needed when water containing chloramines will be blended with water containing free chlorine so that the executive director can review the specific design components and determine site-specific conditions based upon staffs' review. The commission adopts §290.42(e)(7) and its subdivisions to add the minimum chloramine design requirements to Chapter 290, thus making a chloramine exception unnecessary. Design requirements regarding the order of chemical addition, mixing of chloramination chemicals, feed and storage of chemicals, laboratory equipment, and sampling taps are adopted in this rulemaking to incorporate the standard policies and procedures that have been required on a case-by-case basis for past exception reviews.

In its rulemaking proposal, the TCEQ requested public comment on the way PWSs should inject the chloramine chemicals. The proposed rule had the following requirements: inject the first chemical, mix, and then inject the second chemical and mix. The best practice for controlling the chlorine-to-ammonia ratio was

stated as measuring the first chemical residual before adding the second chemical, because the second chemical dose can be based on the actual concentration of the first chemical, including loss due to demand, instead of dosing based on the calculated dose. In keeping with best practices, the commission proposed in §290.42(e)(7)(C) to require a sample tap before and after each chemical injection point. By monitoring upstream of any injection, between the first and second chemical injections, and also downstream of the second chemical injection, operators will be able to know how much of the first chemical is needed based on the first sampling point, how much of the second chemical is needed based on the residual found in the water of the first chemical, and finally, after the last point, the disinfecting species - monochloramine - can be monitored to assure that the ratio and amount of chemicals added are appropriate. The TCEQ proposed these sampling taps because improper chloramine dosing can cause taste and odor issues, low disinfectant residual, and potentially nitrification. Furthermore, because low disinfectant and nitrification can lead to acute health risks, the TCEQ proposed design requirements in §290.42(e)(7)(B) and (C) to allow the most accurate dosing of chemicals. In its proposal, the commission sought public comment on the effect this proposed design criteria would have on PWSs that are currently adding chloramines. In response to TCEQ's call for comment, written comments were received and have been addressed in the Response to Comments section of this rulemaking. In response to comment, the commission revised §290.42(e)(7)(C) and its subdivisions to apply the need for sample taps between chloramine injection points to installations submitted for plan approval starting January 1, 2016. The TCEQ recognizes that after January 1, 2016, some installations may need to locate chlorine injection points closer to the subsequent ammonia injection point to control disinfection byproduct formation, leaving no room for the tap between the two injectors; however, a tap must be provided before any chemical injection and after the second chemical is injected.

The commission amends §290.42(f) by removing the word "surface" to clarify that the chemical feed and storage facility rule applies to all PWSs. When initially adopted, only surface water systems required complex chemical feed and storage facilities; however, these design standards have been applied on a case-by-case basis through the TCEQ's exception process for innovative/alternate treatment involving chemical addition regardless of the water source, including chloramination and reverse osmosis. Because the adopted rulemaking incorporates requirements for chloramination and reverse osmosis by rule, it is necessary to add the requirements of §290.42(f) to the rule so that groundwater and purchased water systems will also be designed to handle, store, and feed chemicals properly. Stakeholders also supported this adopted change. One impact of the addition of chemical storage and feed requirements relates to the use of day tanks. The commission amends §290.42(f)(1)(B) to specify that the day tanks in the adopted rule are only required for bulk storage tanks. A day tank holds the volume of chemical used in one typical day and the installation of a day tank can prevent the possibility of severely overfeeding the chemical from bulk storage. Small chemical storage tanks, such as a 55-gallon drum, would require a very small day tank if the rule were applied to all chemical storage. A very small day tank is impractical. The adopted rule avoids confusion and the unnecessary installment of day tanks. The commission amends §290.42(f)(1)(E)(ii)(V) to exempt 55-gallon hypochlorite solution containers from spill containment. The existing rule allows 35-gallon hypochlorite solution containers to be installed without spill containment. The ex-

isting rule was intended to allow the exemption to non-permanent containers that are replaced instead of refilled, unlike permanent chemical storage facilities. Currently, 55-gallon non-permanent containers are commonly used, thus the adopted rule expands the volume allowed to the size of a commonly used, non-permanent chemical storage container.

Nitrification is a biological process that can occur in distribution pipes and storage tanks, causing a loss of residual and regrowth of bacteria. Nitrification of the PWS's distribution system is also a concern as it can raise nitrite and nitrate to levels that have been shown to potentially harm infants. In the past, some PWSs have had nitrifying organisms colonize a storage tank and have needed to drain the tank to fight nitrification. When a nitrification event occurs, PWSs should be able to quickly drain water storage tanks with high levels of nitrifying organisms, nitrite, or nitrate levels; however, some storage tanks were not designed for efficient draining, sometimes taking several days to drain, even with the use of pumps and other equipment. Therefore, the commission proposed amending §290.43(c)(7) by adding a requirement that storage tanks containing chloraminated water shall be designed to drain "efficiently" as a means to control nitrification. In response to comment, the commission revised §290.43(c)(7) to read "[e]ach clearwell or potable water storage tank must be designed to drain the tank." The rule requires a tank to have a drain, but will not contain a potentially vague term about how the tank must be drained.

The commission amends §290.46(d)(2)(B) to reword the type of distribution system and finished water storage tank that are required to have a chloramine residual. The existing rule states that only PWSs that feed ammonia may have a chloramine residual (measured as total chlorine). Chemically, chloramines are formed when free chlorine reacts with ammonia creating chlorinated compounds. When a PWS has chloramines in the water, no matter how the chemicals are added to create them, the disinfectant will be expressed as "total chlorine" when measured. "Free chlorine" is not present in correctly chloraminated water because the chlorine has reacted with ammonia to form a family of chlorinated nitrogen compounds that are measured as "total chlorine." Of the approximately 7,000 PWSs in Texas, approximately 800 have a chloramine residual in their PWS without adding ammonia. If the PWS purchases and redistributes water which already has a chloramine residual, or if the source of the water has naturally occurring ammonia, then only chlorine may be added. Since the monitoring equipment measures total chlorine in a chloraminated PWS (no matter what chemicals are added or occur naturally), the water from a PWS that purchases and redistributes chloraminated water, adds chlorine to water with naturally occurring ammonia, or adds ammonia to chlorinated water must still measure total chlorine to have meaningful results. The adopted rule applies the total chlorine residual requirement in §290.46(d)(2)(B) for PWSs that distribute chloraminated water, regardless of which chemicals are added by the system. The adopted rule allows the TCEQ to approve the use of chloramines without a site-specific exception review. Recordkeeping is one of the conditions applied with a granted exception. Existing §290.46(f)(3)(A)(ii) requires all water systems to keep the records of the volume of water treated for two years. There is some confusion regarding whether a purchased water system "treats" water and whether records of the volume should be kept. To reduce confusion while still requiring the same amount of recordkeeping, the commission amends §290.46(f)(3)(A)(ii) and its subdivisions to require all PWSs to keep records of the volume of water distributed. In

support of the adopted rule change to approve chloramines based on design requirements instead of an exception, the commission also changes in §290.46(f)(3)(A)(ii) the use of the word "treated" to "distributed" and to require groundwater and purchased water systems to keep records of the volume of water treated. In the adopted rule the word "treated" means that PWSs that add chemicals or provide pathogen or chemical removal "treat" the water. For some systems, the treated water and distributed water may be the same volume and may be monitored by the same flow meter. For example, a groundwater system that adds only chlorine will most likely have the same volume of distributed and treated water. Knowing the volume of water is essential to the operators of PWSs when dosing any chemicals and determining the system's water loss. The commission adopts §290.46(f)(3)(B)(ix) to require records on chloramination be kept for at least three years, which will give the PWSs sufficient information to identify seasonal trends in chloramination. The commission adopts §290.46(s)(2)(D), which adds a requirement for the calibration of the chloramine analyzers every 90 days. Calibration is necessary to assure that the analyzers used to monitor the effectiveness of the chloramination process and to check for potential nitrification chemicals provide accurate results. The commission reletters existing §290.46(s)(2)(D) and (E) with the addition of adopted §290.46(s)(2)(D). The commission amends §290.46(y) and (y)(1) to comply with *Texas Register* requirements and also correct a typographical error. The commission adopts §290.46(z) and its subdivisions, adding requirements for a PWS that uses chloraminated water to create a nitrification action plan. The nitrification action plan is a site-specific plan describing the levels of total chlorine, monochloramine, ammonia, nitrite, and nitrate that are acceptable and what levels should initiate actions such as additional sampling to determine the cause of the imbalance, which is usually a low disinfectant residual. Nitrification in the PWS's distribution system is a concern as it can cause a loss of residual that allows bacterial regrowth and raise nitrite and nitrate to levels that have been shown to potentially harm infants. Each PWS using chloramines must have a nitrification action plan to show what trends in the monitoring data suggest incipient nitrification, what steps to take to prevent nitrification, and actions to take if nitrification is found. The nitrification action plan is only required under existing rules when a chloramination exception is granted. In response to comment, the phrase used to describe the nitrification action plan, "to prevent nitrification," was removed from §290.46(z) to eliminate confusion; additionally, the phrase "distributing chloraminated water" was added to §290.46(z) to maintain consistency with Chapter 290.

The commission adopts Figure: 30 TAC §290.47(h), Sample Language for Notification Upon Changing from Free Chlorine to Chloramines, to contain the required customer notification language of a pending change in the PWS's disinfectant from chlorine to chloramines. Due to the nature of chloramines, some health care facilities and persons with pet fish might need to change their equipment to accommodate the chloramines instead of chlorine. By notifying the customers, they can make any necessary changes before they begin receiving the chloraminated water. The adopted notification language will assure a correct and consistent message is relayed to affected PWS customers. Exception approval letters for chloramines under existing rules include this notification requirement and language; therefore, the chloramine requirement in the adopted rule contains consistent language for customer notification.

The commission amends §290.110(b)(2), (4), and (5) to clarify the type of chloramine measurement that is used when determining whether a PWS meets the required minimum or maximum chloramine level. These requirements are required under existing rules through site-specific exceptions. This rulemaking adopts minimum chloramine design requirements in Chapter 290, making a chloramine exception unnecessary. Because the species of chloramines that provides disinfection is monochloramine, the adopted rule refers to monochloramine. By introducing monochloramine into the adopted rule, it becomes unclear which measurement the PWSs should use to determine compliance when the word "chloramine" is used. The commission adds the clarification that the chloramine level in this condition shall be "measured as total chlorine." The commission amends §290.110(c)(1) - (4) by adding catchlines to differentiate the sampling location and purpose - whether for compliance or to manage treatment processes for effective chloramination. Catchlines are added so that the regulated community can more easily identify the sampling requirements at each point in the PWS. The commission amends §290.110(c)(1)(A) and (B) by replacing the phrase "entering the distribution system" with the phrase "at each entry point" which is defined in existing §290.103(13). The commission also adopts §290.110(c)(1)(C) to specify the frequency at which the disinfectant residual must be recorded. Adopted §290.110(c)(1)(C) is contrasted with existing rule, §290.110(c)(1)(A) and (B), which states that the residual at the entry point must be recorded continuously. Since "continuous" is not defined, and as a true continuous recording is not possible, the commission requires a 30-minute recording interval, which is consistent with existing guidance in Regulatory Guidance-211, *Monthly Testing and Reporting at Surface Water Treatment Plants*. The commission adopts §290.110(c)(2)(A) and (B) to add specificity by restating the requirements for entry point disinfection instead of cross-referencing to §290.110(b)(2). The commission further amends §290.110(c) to include the monitoring requirements included when a chloramine exception is granted. These adopted chloramine effectiveness monitoring requirements can be summarized in the following table. The commission requires that a water system with a chloramine residual must, at a minimum, measure and record the following:

Figure: 30 TAC Chapter 290--Preamble

The commission adopts §290.110(c)(5) to include the chloramine effectiveness monitoring and to also demonstrate when the sample results will be used to determine compliance with the MCLs, maximum residual disinfectant levels (MRDLs), action levels, or treatment techniques. To clearly differentiate between results used for compliance and those not used for the MRDLs, action levels, or treatment technique compliance; total chlorine monitoring is included in §290.110(c)(4). Total chlorine monitoring is not included with the chloramine effectiveness monitoring because all total chlorine monitoring in the distribution system is used for MRDL compliance, thus it cannot be included with the adopted chloramine effectiveness monitoring. The commission adopts §290.110(c)(4)(E) to require that PWSs distributing chloraminated water test for chloramines (measured as total chlorine) at any distribution system site that adds chemicals to boost the chloramine residual. The testing is completed weekly or whenever the chemical dosage is changed at the disinfection booster station. The monitoring is in conjunction with chloramine effectiveness sampling described in adopted §290.110(c)(5)(C). The commission adopts §290.110(c)(5) with a non-substantive change to the catchline. To correct a typographical error, the commission removed the hyphen

from between the words "chloramine" and "effectiveness." The commission adopts §290.110(c)(5) describing the sampling that must occur to assure that chloramines are being formed properly and that nitrification is controlled in the PWS to establish the chloramine requirements in rule instead of requiring an exception request. Sampling as adopted in §290.110(c)(5) has been previously required as a condition to a granted exception. Poor chloramine addition can result in taste and odor issues, low disinfectant residual, and nitrification. Low disinfectant residual levels and nitrification can both cause acute health effects. Sampling lets the PWS know what levels of chemicals exist throughout the PWS's distribution system. The sampling results inform the PWS if nitrification or poor chloramination is occurring. Adopted §290.110(c)(5)(A) requires monitoring of ammonia, nitrite, and nitrate at the water coming into the PWS at least once to determine if the source water has ammonia, nitrite, or nitrate. If the ammonia levels are higher than 0.5 milligram per liter free ammonia (as nitrogen), additional samples are required to determine if the ammonia level is consistent or variable. Free ammonia is used in the creation of chloramines so knowing the source water's concentration is necessary for downstream dosing and evaluating trends in the distribution system. Nitrite and nitrate monitoring is needed to allow a PWS's operator to know whether these chemicals are from the source or from nitrification. Knowing what the nitrite and nitrate levels are in the PWS's source water helps to determine if the nitrite or nitrate levels are rising. The PWS can take action when the levels first begin rising, not when they are near the level that can cause acute health effects to infants or complete loss of disinfectant residual. Adopted §290.110(c)(5)(B) and (B)(i) require sampling the chloraminated water that just entered the distribution system for total chlorine, ammonia and monochloramine. This sampling point is located after the chloramine chemical addition and can show if the chemical addition successfully made monochloramine. Nitrite and nitrate are required to be monitored in §290.110(c)(5)(B)(ii) for at least six months to find a baseline for the PWS and to develop the nitrification action plan. Nitrite and nitrate are monitored in §290.110(c)(5)(B)(iii) to determine if any of the levels in the nitrification action plan have been exceeded. Knowing the entry point nitrite and nitrate levels in the water after treatment, but before distribution, will allow the PWS to determine if the nitrite or nitrate levels are rising, thus the PWS can take action when the levels first begin rising, not when they are near the level that can cause acute health effects. Adopted §290.110(c)(5)(B)(ii) explicitly disallows the use of the results of the nitrite and nitrate samples collected to determine the effectiveness of chloramination dosing from also being used for compliance with §290.106 because PWSs are directed to take them at the first customer, which is not a federal compliance site, and because they are taken with a field instrument, which is accurate but which does not use an EPA-approved method. In §290.110(c)(5)(B)(iii), the adopted rule explicitly allows the use of samples collected for compliance with §290.106 to also be used for chloramine treatment effectiveness sampling. Currently, those compliance samples are collected by a TCEQ contractor, while process effectiveness samples are collected and potentially analyzed by the PWS. These "self-collected" samples are not to be used for compliance because they would not use an EPA-approved method, and would not be collected at the federal compliance location, but TCEQ contractor collected samples can be used for treatment effectiveness. Adopted §290.110(c)(5)(C) and its subdivisions describe the sampling that must be performed immediately upstream and downstream of the chloramine

chemical injection points. These treatment samples are taken to be able to dose chloramines based on actual residual, not on a calculated dose. The process described in the adopted rule provides a more accurate chloramine dosing strategy and limits the potential health effects caused by low residual or nitrification. In response to comment, §290.110(c)(5)(C)(iii) was revised to reference that the sampling must occur between the injection of the two chemicals only if a sample tap is required or present. Though sampling between the injection points of the two chloramine chemicals is best practice, the responses that TCEQ received in response to its call for comment upon this issue was that not all PWSs have taps or can have taps between the injection of the chemicals already. To allow for flexibility, the commission is only requiring sample taps on new construction. Because the taps may not be available at all PWSs, the sampling is only required where taps are installed or required. Adopted §290.110(c)(5)(C)(iv) and (v) describe which chemicals must be monitored if the treatment occurs before the entry point or if the treatment occurs in the distribution system. Adopted §290.110(c)(5)(D) and its subdivisions describe the sampling that must be performed in the PWS's distribution system. Monochloramine and free ammonia must be monitored once per week in conjunction with the disinfectant residual samples in the distribution system described in existing §290.110(c)(4). Nitrite and nitrate must be monitored quarterly. Monochloramine, free ammonia, nitrite and nitrate are sampled in the distribution system to determine if nitrification is occurring. Changes in these levels can indicate nitrification. The PWS can then take the steps outlined in the PWS's nitrification action plan to control or prevent the nitrification. The commission amends §290.110(d) and its subdivisions to provide the analytical sensitivity required for the analysis methods for chloramine chemicals. Adopted §290.110(d) and (d)(3) - (6) support the chloramination requirements by providing analytical methods for the tests that need to be performed to monitor chloramination. In response to comment, §290.110(d)(5) and (6) was revised to change the accuracy requirement from 0.5 milligrams per liter as nitrogen (mg/L as N) to 0.1 mg/L as N for nitrate and from 0.05 mg/L as N to 0.05 mg/L as N for nitrite. The adopted accuracy levels will allow PWSs to better detect changes in the distribution system that may indicate nitrification. Existing §290.110(d) includes a reference for nitrite and nitrate sampling in existing §290.119, which references EPA approved methods; however ammonia and monochloramine do not have EPA approved drinking water methods and the field methods commonly used to determine nitrite and nitrate are not EPA approved. The sensitivity for each test is described in adopted §290.110(d)(3) - (6), and will allow PWSs greater flexibility when choosing a test method. Adopted §290.110(d) and its subdivisions also assures the test methods are sensitive enough to detect changes in water quality that could indicate nitrification, which could potentially cause acute health effects in infants. The commission amends §290.110(d)(1) to specify which chloramine test may be used to determine the chloramine residual. Because the species of chloramines that provides disinfection is monochloramine, the adopted rule refers to monochloramine. By introducing the term "monochloramine" into the rule, it becomes unclear which measurement the PWSs should use to determine compliance when the word "chloramine" is used. Therefore, the commission adds that the chloramine is "measured as total chlorine" to avoid confusion. Also, §290.110(d)(1) is amended to no longer require written permission of the executive director to use a color comparator, commonly referred to as a "color wheel." The adopted rulemaking supports the chloramination

use requirements by removing another requirement for written permission. The adoption will shorten the activities required and time spent by a PWS when electing to use chloramines. Adopted §290.110(d)(1) establishes requirements on the appearance of the color comparator, the age of the comparator, the age of the reagents, proper storage of the comparator, and the range of the comparator. If the comparator or sample cells are old, discolored, or in a different range than the water, the test will provide inaccurate results, potentially providing inaccurate chloramine dosing or monitoring. The commission amends §290.110(e)(2) to incorporate forms needed to report disinfectant levels at the entry point and in the distribution system for PWSs using surface water or groundwater under the direct influence of surface water. There are currently three forms for PWSs that treat surface water and groundwater under the direct influence of surface water but only two are listed in the existing rule. This adopted rule supports the chloramination use requirements for Chapter 290 by adopting all three forms for use when reporting disinfection information. The commission amends §290.110(e)(5) and renumbers existing §290.110(e)(5) and (6) as a result of the adopted addition. The adopted addition sets the report requirements for a nitrification action plan, which is kept at the PWS unless the plan is required to be seen by the executive director. The recordkeeping requirement in adopted §290.110(e)(5) is a condition on current letters granting chloramine exceptions as required by the existing rules. Keeping the nitrification action plan for three years will allow the regulated community to compare past nitrification action plans to see how water quality has changed over time, as well as highlight any trends and seasonal fluctuations. The commission amends §290.110(f)(6) - (9) to specify which chloramine test may be used to determine the chloramine residual. Because the species of chloramines that provides disinfection is monochloramine, the adopted rule refers to monochloramine. By introducing monochloramine into the rules, it becomes unclear which measurement the PWSs should use to determine compliance when the word "chloramine" is used. Therefore, the commission adds that the chloramine is "measured as total chlorine" to avoid confusion. The commission amends §290.110(g)(5) to clarify that the monitoring for chloramines will not fall under the requirements for public notices required on federally mandated compliance monitoring and reporting violations. The chloramination monitoring is to ensure proper disinfection and avoid nitrification, and is not for federal compliance purposes. Nitrite and nitrate have MCLs, but they are measured at the entry point, not in the PWSs distribution system. The adopted rule change in §290.110(g)(5) is to avoid confusion and clearly state that public notice would be needed if a PWS fails to perform federally mandated compliance monitoring; however, a public notice is not required if the PWS fails to perform the chloramination effectiveness monitoring. The commission also adopts §290.110(g)(6) and its subdivisions to require PWSs notify their retail and wholesale customers when the PWS first provides chloraminated water and also when new customers begin receiving the chloraminated water. Adopted §290.110(g)(6) and its subdivisions describe when the notification must be sent, how it must be sent, and who must be notified. Adopted §290.110(g)(6)(D) and (E) also clarify when new customers must be notified and state that the notice must be provided in multiple languages, if appropriate. This notification is a condition of a granted exception as required by existing rules. Due to the nature of chloramines, some health-care facilities and persons with pet fish might need to change their equipment to accommodate the switch to chloramines. By amending the

notice requirements, customers of affected PWSs can make any changes needed before they begin receiving the chloraminated water.

The commission amends §290.111(d)(4)(C) to specify which chloramine test - total chlorine - may be used to determine the chloramine residual. Because the species of chloramines that provides disinfection is monochloramine, the adopted rule refers to monochloramine. By introducing monochloramine into the rule, it becomes unclear which measurement the PWSs should use to determine compliance when the word "chloramine" is used. Therefore, the commission adds that the chloramine is "measured as total chlorine" to avoid confusion. Also, §290.111(d)(4)(C) is amended to no longer require written permission of the executive director to use a color comparator. This adopted change in §290.111(d)(4)(C) supports the adopted chloramination use requirements by removing another requirement for written permission. The adoption will shorten the activities required and time spent by a PWS when electing to use chloramines. As adopted, §290.111(d)(4)(C) would establish requirements on the appearance of the color comparator, the age of the comparator and the reagents, proper storage of the comparator, and the range of the comparator. If the comparator or sample cells are old, discolored, or in a different range than the water, the test will provide inaccurate results, thus potentially providing inaccurate chloramine dosing and monitoring information. The commission amends §290.111(h)(2) and its subdivisions to incorporate forms needed to report disinfectant levels at the entry point and in the PWS's distribution system. There are currently three forms for PWSs that treat surface water and groundwater under the direct influence of surface water, but only two are listed in the existing rule. The adopted rule specifies which form is appropriate for use by the PWSs in §290.111(h)(2)(A) - (C). The commission removes §290.111(h)(3) because the requirement in this section was moved to adopted §290.111(h)(2)(C). The commission also deletes §290.111(h)(7) and (8) as these have been incorporated into the forms required by §290.111(h)(2). The commission also renumbers the paragraphs as a result of the adopted changes.

The commission amends §290.116(a)(1) and (d)(2) by adding the word "must" to address a syntax error. The commission amends §290.116(c)(3)(C) to specify which chloramine test - total chlorine - may be used to determine chloramine residual. Because the species of chloramines that provides disinfection is monochloramine, the adopted rule refers to monochloramine. By introducing monochloramine into the rule, it becomes unclear which measurement the PWSs should use to determine compliance when the word "chloramine" is used. Therefore, the commission adds that the chloramine is "measured as total chlorine" to avoid confusion. Also, §290.116(c)(3)(C) is amended to no longer require written permission of the executive director to use a color comparator. Adopted §290.116(c)(3)(C) supports the chloramination use requirements by removing the requirement for written permission. The adoption will shorten the activities required and time spent by a PWS when electing to use chloramines. Adopted §290.116(c)(3)(C) establishes requirements for the appearance of the color comparator, the age of the comparator, the age of the reagents, proper storage of the comparator, and the range of the comparator. If the comparator or sample cells are old, discolored or in a different range than the water, the test will provide inaccurate results, thus potentially providing inaccurate chloramine dosing and monitoring information.

Modification of the Plan Review Submittal Process -- The commission amends §290.39(i) by adding the words "previously

approved" to describe the submittal of information on changes to plans that have already been approved by TCEQ, whereas other sections require plan submittal for new projects that have not been approved by TCEQ. The commission amends §290.39(j) and its subdivisions to provide a more efficient submittal process and clarify the definition of a "significant change" in §290.39(j)(1)(A) - (F). Existing §290.39(j) instructs PWSs to first notify the TCEQ of significant changes and then submit plans and specifications upon TCEQ's request. The commission amends §290.39(j)(1) by requiring PWSs to submit plans and specifications for significant changes to reduce confusion in the regulated community and reduce staffs' processing time currently spent issuing requests for plans and specification submission. The commission further amends §290.39(j)(1)(D) by simplifying the criteria for a change to be considered as "significant" under the rule. As amended, §290.39(j)(1)(D) will be simplified to consider any changes greater than 10% of the number of connections, any change that results in the system's inability to comply with any of the applicable capacity requirements of §290.45 and any change that involves an interconnection with another PWS. The adopted distribution system criteria is 10% of connections, instead of, 10% of the existing distribution capacity or 250 connections, whichever is smaller. The two criteria for a significant change in distribution caused much confusion for the regulated community. The commission also amends §290.39(j)(2) and its subdivisions to move the requirement for approval of long term-treatment changes that will impact the corrosivity of the water and that need written approval from the executive director from existing §290.39(j)(1)(G) to adopted §290.39(j)(2) because the long-term treatment changes, though considered significant changes and must have approval, may not require the submittal of plans and specifications. Adopted §290.39(j)(2)(A) is a portion of existing §290.39(j)(1)(G) that provides examples of long-term treatment changes, while adopted §290.39(j)(2)(B) allows the executive director to determine the need for plan and specification submittal. Lastly, the commission adopts §290.39(j)(3) and its subdivisions to include the requirements for another entity to review plans and specification in lieu of the TCEQ's review, as taken from existing §290.39(j)(2)(B)(i) - (iii) and (C). The adopted amendments to existing §290.39(j)(1) and (2) providing for a more efficient submittal process and clarifying the definition of a "significant change" required a reorganization of this section, including the adopted movement of rule language from existing §290.39(j)(2)(B)(i) - (iii) and (C) to adopted §290.39(j)(3) and its subdivisions. As previously discussed in the *Process for Approving Desalination Technology* portion of the Section by Section Discussion, in response to comment, the commission revised §290.39(j)(1) by moving proposed §290.39(j)(1)(E) and revising it as adopted §290.39(j)(4)(A) - (E), and relettering proposed §290.39(j)(1)(F) as adopted §290.39(j)(1)(E). Adopted §290.39(j)(4)(A) - (E) requires written notification of membrane replacement or change of membrane modules instead of requiring plan submittal in all cases as proposed. Under the adopted rule, a new plan submittal and baseline performance data will most likely need to be provided any time the manufacture or model is changed, but may not be required in all circumstances. Because there may be some situations where a new plan submittal and/or baseline data may not be necessary, the adopted rule requires notification and the PWS will be sent a letter if a new plan submittal and/or baseline performance data is required. The explanation of revisions made in response to comment has been repeated in this portion

of the Section by Section Discussion to give a full picture of the changes to the rule.

Enforceability of Exceptions -- The commission adopts §290.39(l)(4) and (5) to streamline the process when a PWS does not follow the conditions of a granted exception. Under existing §290.39(l)(2), if a PWS does not meet the requirements of a granted exception, the exception can only be revoked and a violation issued through a time-consuming and cumbersome process, in which a TCEQ field investigator who finds a PWS violating the exception's conditions must contact the agency's Central Office to request revocation of the exception, then wait for its revocation before issuing a violation. To streamline this process while also ensuring a PWS follows the conditions established in the granted exception, the adopted rule clarifies that failing to follow the conditions of a granted exception is a violation and allows the TCEQ's field investigators to directly issue violations for failure to follow an exception's conditions.

Clarification for Well Construction Review Process -- The commission amends §290.41(c)(3)(C) to clarify and specify well construction for a PWS. The commission amends §290.41(c)(3)(C) to specify the grouting mixture for pressure cementing as neat cement as specified in the most current AWWA Standard for Water Wells and to which a maximum of 6%, by dry weight, bentonite and 2%, by dry weight, calcium chloride may be added. The commission further amends §290.41(c)(3)(C) to specifically define well annular space for a PWS well as the minimum annular space between the outside diameter of the casing pipe and the borehole shall be no less than 1 1/2 inches in radial thickness or three inches in net diametrical difference and to clearly explain that well annular space pressure grouting shall be from the bottom upward utilizing one of the methods listed in §290.41(c)(3)(C) for all PWS groundwater well construction. Existing §290.41(c)(3)(C) refers to the current AWWA standard for determining pressure cementing method. Amended §290.41(c)(3)(C) will reduce confusion in the regulated community, reduce staffs' processing time currently spent issuing continuing requests for documentation regarding proper construction, and reduce approval time for the regulated community. The rule adoption serves also to consolidate the requirements for wells into one location, making them more accessible to the PWSs by not requiring separate access to the AWWA standards.

Alternative Appurtenances for Overflow Devices -- The commission amends §290.43(c)(3) to allow other acceptable options for a tank overflow cover. The existing rule requires a "gravity-hinged and weighted cover" at the end of the overflow pipe on water storage tanks; however, other designs have also proven to be effective at preventing backflow and the entrance of contaminants. The adopted rule allows a duckbill or any other overflow cover that closes automatically to less than 1/16 inch gap. The adopted rule allows any design that meets this specific criterion. The commission adopts a gap criteria of 1/16 inch because that is the size of a midge fly and the cover is used to prevent wildlife and insects from being able to enter the water storage tank. The midge fly, in particular, is a small insect that can enter the tank, lay eggs, and then distribute its hatched, red colored worms to the distribution system. Establishing the gap tolerance at 1/16 inch will prevent incursions from this insect. The existing rule requires PWSs to receive a case-by-case exception to use these other devices. The commission amends §290.43 to establish a standard to streamline the process for PWSs using other pipe cover designs and to reduce staffs' time currently spent reviewing these exception requests.

Water Storage -- The commission amends §290.43(c) to remove the reference to AWWA D103 and address the perception that other types of bolted tanks are not allowed. The existing rule states "all facilities for potable water storage shall be covered and designed, fabricated, erected, tested, and disinfected in strict accordance with current AWWA standards." Thus, the existing rule already allows the use of any tank with an AWWA standard, and the reference to D103 is redundant and has caused misunderstanding of the rule. The removal of the sentence referencing D103 from §290.43(c) allows PWSs more flexibility when designing water storage tanks by allowing tanks of other materials approved by the AWWA. The commission amends §290.43(c)(9) by replacing the word "Commission" with the phrase "executive director" to correct a typographical error.

Water Distribution Crossings -- During a rule change in 1995, language applicable to waterlines crossing under wastewater lines was added to §290.44 which created conflict with the requirements for wastewater lines in 30 TAC §217.53. The commission amends §290.44(e)(4)(B) and its subdivisions to: adjust the water and wastewater line crossing requirements for protection of public health; reduce confusion within the regulated community and its consultants; and remove the conflict with the requirements for wastewater lines in existing §217.53. The commission has an on-going rulemaking for wastewater, Rule Project Number 2012-040-217-OW, *Amendments to Chapter 217: Design Criteria*. The TCEQ's Office of Water's wastewater and drinking water programs have been working together to maintain consistency across programs. The commission amends a cross-reference in §290.44(e)(4)(B)(iii) to maintain consistency with Rule Project Number 2012-040-217-OW. In this rulemaking, Rule Project Number 2013-046-290-OW, the commission also amends §290.44(e)(5) by inserting the word "manhole" between the words "main or" in the first two sentences of that paragraph to address a point of confusion in the regulated community. With the addition of the word "manhole" in this paragraph, the commission clarifies that a potable waterline is to be separated from a wastewater main manhole or lateral manhole or cleanout, instead of requiring separation from a wastewater main, lateral manhole, or cleanout as interpreted by some readers of this rule.

Appendices -- With the adopted amendment to Figure: 30 TAC §290.47(b), the commission revisited the other figures in existing §290.47 and adopts the removal of existing Figures: 30 TAC §290.47(c), (d), and (f) and reletters existing Figures: 30 TAC §290.47(e), (g), (h), (i), and (j) as Figures: 30 TAC §290.47(c), (d), (e), (f), and (g), respectively. Additionally, the commission adopts updated cross-references to the relettered Appendices in §§290.39(c)(4)(A) and (o)(1); 290.44(h)(1)(A) and (4); and, 290.46(j)(2), (p)(2), and (q)(1) and (2). The commission adopts the removal of existing Figure: 30 TAC §290.47(c), *Sample Sanitary Control Easement Document for a Public Water Well*; existing Figure: 30 TAC §290.47(d), *Customer Service Inspection Certificate*, and existing Figure: 30 TAC §290.47(f), *Sample Backflow Prevention Assembly Test and Maintenance Report* to allow the executive director's staff to make revisions to these forms outside of a formal rulemaking. Existing Figure: 30 TAC §290.47(c), *Sample Sanitary Control Easement Document for a Public Water Well*, is an example only and is not required to be used by the regulated community. An agency form that can be amended outside of a rulemaking process allows the form to be revised as improvements are suggested after consideration by the regulated community through the TCEQ's Drinking Water Advisory Work Group and its subcommittees instead of amending the form during a formal rulemaking. This also allows

the document to be provided in a format that can be modified as needed by a PWS to incorporate the PWS's specific information. Adopting existing Figure: 30 TAC §290.47(d), *Customer Service Inspection Certificate*, and existing Figure: 30 TAC §290.47(f), *Sample Backflow Prevention Assembly Test and Maintenance Report*, as agency forms will allow the regulated community to use the forms in a recordable, electronic format. The existing Figures are available only as portable document formats, PDFs, and require the regulated community to retype the certificate or report to keep an electronic record or fill in the portions of the certificate or report that are applicable to each PWS. Providing these two Figures as forms facilitates the end user's ability to comply with applicable records retention requirements by being able to retain the forms electronically. Once this rulemaking is effective, the commission's forms will be available as: No. 20698, *Sanitary Control Easement*; No. 20699, *Customer Service Inspection Certificate*; and No. 20700, *Backflow Prevention Assembly Test and Maintenance Report*. Additionally, references to the existing Figures that are adopted as agency forms once this rulemaking is effective are also updated in §§290.39(e)(4), 290.44(h)(4)(C), and 290.46(j). Further, the commission amends existing §290.38(70) and §290.44(h)(4)(B) to refer to agency forms and further clarify their usage.

Final Regulatory Impact Analysis Determination

The commission reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225 and determined that the rulemaking is not subject to Texas Government Code, §2001.0225. A "major environmental rule" means a rule with a specific intent to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

First, the adopted rulemaking does not meet the statutory definition of a "major environmental rule" because its specific intent is not to protect the environment or reduce risks to human health from environmental exposure. The specific intent of the adopted rulemaking is fourfold.

The first intent of the adopted rulemaking is to comply with requirements and standards established by the EPA pursuant to its federal requirements related to Texas' primary enforcement responsibility with regard to drinking water. Specifically, the federal drinking water standards changed regarding two contaminants. First, the lead content allowed in pipes, pipe fittings, and plumbing fittings and fixtures was reduced through federal legislation. Second, the EPA provided states the discretion to allow small PWSs using surface water or groundwater under the influence of surface water to monitor for *E. coli* rather than *Cryptosporidium*. Texas adopted this alternate monitoring, with a trigger level of 10 or 50 *E. coli*/100 milliliters, depending on the water source. Federal guidance subsequently established the *E. coli* trigger level of 100 *E. coli*/100 milliliters, no matter the water source. As a primacy state, Texas has the obligation of complying with EPA drinking water standards. The federal requirements that would be implemented through the adopted rulemaking are designed to reduce risks to human health from environmental exposure by limiting exposure to lead and microbial pathogens, but the changes in the adopted rules are intended to maintain compliance and consistency with EPA requirements and standards.

The second intent of the adopted rulemaking is to implement state legislation enacted during the 2013 legislative session.

This legislation related to the transfer of the commission's utilities and rates program to the PUC. Specifically, the adopted rulemaking removes a requirement related to a CCN with notification of changes or additions to a PWS. CCNs are part of the utilities and rates program transferred effective September 1, 2014, and the agency no longer has jurisdiction over CCNs as they relate to Chapter 291. The adopted rulemaking implements HB 1600, §2.96 and SB §§1, 4, 95 and 96, both enacted by the 83rd Texas Legislature, though the majority of the rule changes necessary to implement this legislation will occur in a different rulemaking, specifically Rule Project Number 2013-057-291-OW.

The third intent of the adopted rulemaking is to clarify existing rules and make them more efficient by amending language, correcting cross-references, and eliminating potential ambiguities. The adopted rulemaking provides a more efficient plan submittal process; clarifies that an exception once granted must be complied with; clarifies the well construction review process; provides alternative appurtenances to use for overflow devices; provides more flexibility for PWSs in selecting water storage tanks; and aligns the commission's water and wastewater rules related to pipes and water distribution. Part of this intent involves correction of typographical and syntax errors, updating of citations, cross-references, and terminology.

The fourth intent of the adopted rulemaking is to make the rules more cost-effective and efficient for the regulated community and for the agency by eliminating the requirement to process desalination treatment requests and requests for use of chloramines as a primary disinfectant through the exceptions process under existing rules. The exceptions process can be burdensome and time-consuming. Desalination has become of increasing interest in the regulated community because of the on-going drought and the degradation of potential source water quality. The use of desalination technologies has become common for PWSs and the adopted rulemaking contains adequate safeguards to ensure that safe drinking water is provided to the public, while streamlining approval for the use of such technologies. Chloramines have been used as a secondary disinfectant for several years; its use as a primary disinfectant under the current rules requires approval through the exceptions process. The adopted rulemaking streamlines the use of chloramines as a primary disinfectant while ensuring adequate safeguards to ensure the provision of safe drinking water to the public.

Second, the adopted rulemaking does not meet the statutory definition of a "Major environmental rule" because the adopted rules would not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. It is not anticipated that the cost of complying with the adopted rules will be significant with respect to the economy as a whole or with respect to a sector of the economy; therefore, the adopted amendments will not adversely affect in a material way the economy, a sector of the economy, competition, or jobs.

Finally, the adopted rulemaking does not meet any of the four applicability requirements for a "Major environmental rule" listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225 only applies to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or

representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. The adopted rulemaking does not meet any of the preceding four applicability requirements because this rulemaking does not exceed any standard set by federal law for PWSs and is adopted to comply with standards set by the EPA; does not exceed any express requirement of state law under Texas Health and Safety Code (THSC), Chapter 341, Subchapter C; does not exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government but rather is adopted to comply with applicable federal standards related to the federal Safe Drinking Water Act; and is not adopted solely under the general powers of the agency, but specifically under THSC, §341.031, which gives the commission authority to establish standards ensuring the supply of safe drinking water, as well as the other general powers of the commission.

The commission invited public comment regarding this draft regulatory impact analysis determination during the public comment period. No comments were received on the draft regulatory impact analysis determination.

Takings Impact Assessment

The commission evaluated this adopted rulemaking and performed analysis of whether these adopted rules constitute a taking under Texas Government Code, Chapter 2007. The specific purpose of the adopted rules is to amend Chapter 290 for consistency with TWC, §12.013, and Chapter 13, and with existing federal legislation and guidance; and provide clarification on and increased efficiency under existing state rules. The adopted rules would substantially advance the stated purpose by amending the rules to reflect the reduced lead content allowed under federal legislation in pipes, pipe fittings, and plumbing fittings and fixtures; by changing the appropriate *E. coli* trigger level for small PWSs; by creating a process for approving desalination technology; by establishing chloramine disinfection criteria; by modifying the plan review submittal process; by clarifying the enforceability of exceptions; by clarifying the well construction review process; by providing alternative appurtenances for overflow devices; by clarifying water storage requirements; by clarifying the rules regulating water distribution crossings; by correcting typographical and syntax errors; and by updating citations, cross-references, and terminology.

The commission's analysis indicates that Texas Government Code, Chapter 2007, does not apply to these adopted rules based upon exceptions to applicability in Texas Government Code, §2007.003(b). First, the adopted rulemaking is an action that is reasonably taken to fulfill an obligation mandated by federal law, exempt under Texas Government Code, §2007.003(b)(4). In order to maintain primacy over public drinking water, the state must enact rules no less stringent than the federal requirements. Second, the adopted rulemaking includes a modification of an existing regulation that provides a unilateral expectation that does not rise to the level of a recognized interest in private real property, exempt under Texas Government Code, §2007.003(b)(5). Chapter 290 is a set of existing rules that regulate public drinking water. The unilateral expectation on the part of the agency is that the regulated community will comply with the amended rules in Chapter 290; the unilateral expectation on the part of the regulated community is that the agency will enforce the amended rules in Chapter 290. Neither unilateral expectation rises to the level of a recognized interest

in private real property because Chapter 290 regulates public drinking water.

Further, the commission has determined that promulgation and enforcement of these adopted rules would be neither a statutory nor a constitutional taking of private real property. Specifically, there are no burdens imposed on private real property under the rules because the adopted rules neither relate to, nor have any impact on, the use or enjoyment of private real property, and there would be no reduction in property value as a result of these rules. The rules require PWSs to comply with drinking water standards protective of human health and the environment, and the rules bring those standards into concurrence with the corresponding federal requirements. The rules also clarify and make existing rules more efficient, thereby streamlining regulation rather than making it burdensome. Therefore, the adopted rules would not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the adopted rules and found that they are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor will they affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the adopted rules are not subject to the Texas Coastal Management Program (CMP).

The commission invited public comment regarding the consistency with the CMP during the public comment period. No comments were received regarding the consistency of this rulemaking with the CMP.

Public Comment

The commission held a public hearing on this proposal in Austin on February 26, 2015, and no oral testimony occurred. The comment period closed on March 10, 2015. The commission received timely written comments from the South Central Membrane Association with the support of the American Membrane Technology Association (SCMA/AMTA) and two individuals.

The comments focused on the reverse osmosis and nanofiltration requirements and the chloramination requirements. The comments on reverse osmosis and nanofiltration included questions on: a reverse osmosis and nanofiltration definition; the water sources that may be treated by reverse osmosis and nanofiltration; when a plan review and a baseline study is required; the location of conductivity samples; the use of historical classes for training requirements; the maintenance of records; when a module must be replaced; and, the calibration interval for instruments. The comments on chloramination included questions on: when a nitrification action plan is required; where the nitrification action plan samples can be taken; disinfection sample collection; mixing requirements; drain requirements; sample accuracy limits; and, color comparators. The comments have been summarized in the Response to Comments section of the preamble.

Response to Comments

An individual commented on the preamble's fiscal note stating that the "*Costs to State and Local Government, Additional Staff Recommendations, Chloramine Disinfection Criteria*" did not include the cost of creating a nitrification action plan.

The commission respectfully disagrees that the cost of creating a nitrification action plan should have been addressed in the fiscal note. The nitrification action plan is a site-specific plan de-

scribing the levels of total chlorine, monochloramine, ammonia, nitrite, and nitrate that are acceptable and what levels should initiate actions such as additional sampling to determine the cause of the imbalance. Nitrification in the PWS's distribution system is a concern as it can cause a loss of residual that allows bacterial regrowth and raise nitrite and nitrate to levels that have been shown to potentially harm infants. The commission responds that the TCEQ has directed significant resources toward ensuring PWSs have the most recent exception language which includes a requirement for a nitrification action plan and plain-language instructions on how to create the nitrification action plan, which is available as *Enclosure 2: Monitoring Plan Alert and Action Levels* at http://www.tceq.texas.gov/assets/public/permitting/watersupply/pdw/Use_of_Chloramines.pdf. Additionally, the cost associated with creation of a nitrification action plan is minimal. The commission provides free, on-site assistance for creation of a nitrification action plan through the Water Supply Division's financial, managerial and technical (FMT) assistance program, which can further lessen the cost for a PWS to develop a nitrification action plan. Information regarding the TCEQ's FMT program is available at <http://www.tceq.texas.gov/drinkingwater/fmt>. Interested PWSs can contact the FMT Program Coordinator by calling (512) 239-4691, by email at pdws@tceq.texas.gov, or by submitting the TCEQ's *Financial, Managerial & Technical Assistance Referral Form* (commission Form 20167). No change has been made in response to this comment.

Process for Approving Desalination Technology

An individual commented on §290.38(79), stating that "*while this definition of stage is certainly correct, it is not completely clear as to its intent*" and further commented "*single stage would be a set of pressure vessels installed in parallel. Any vessels connected in series to those parallel vessels would then be considered an additional stage.*" The individual requested TCEQ clarify this definition as it pertains to multiple stages.

The commission responds that this definition was taken directly from the AWWA's manual of *Water Supply Practices, M46, Reverse Osmosis and Nanofiltration*. The commission acknowledges that PWSs may be constructed with multiple stages and passes, and in different configurations. The definition of "stage" is not intended to cover all scenarios. The commission's intent in incorporating this definition in the adopted rule is to assist readers of the rule with a basic understanding of the commission's regulatory requirements. No change has been made in response to this comment.

SCMA/AMTA commented on §290.39(e)(7), asking if there is a minimum time period expected for collecting the baseline performance data reported in the engineering report's addendum.

The commission responds that a minimum time to collect baseline performance data has not been specified in the rule. However, the rule does specify that the addendum must be submitted to the executive director and approved prior to using the reverse osmosis or nanofiltration system to produce drinking water. Each source water is different and the time necessary to collect the baseline data should be determined by the PWS and its professional engineer. Please contact the Water Supply Division's Plan and Technical Review Team at (512) 239-4691 if individual guidance is needed. No change has been made in response to this comment.

SCMA/AMTA commented on §290.39(e)(7), asking if "*the submitted addendum subject to review and approval by the TCEQ*

before the production of drinking water or is the addendum for record purposes."

The commission responds that the addendum must be submitted to the executive director and approved prior to using the reverse osmosis or nanofiltration system to produce drinking water. The commission has mimicked the existing process for its approval of wells in its desalination technology rules. The well approval process allows the design engineer to present the engineering plans and specifications for approval first then, after construction, to validate the water quality produced by the well. No change has been made in response to this comment.

SCMA/AMTA commented on §290.39(e)(7)(A), questioning if the PWS is responsible for providing TCEQ with a new baseline upon membrane replacement at some time in the future. SCMA/AMTA also commented on §290.39(e)(6), questioning "*what documentation would TCEQ require if a water utility changes membranes from one manufacturer to another,*" identifying two potential scenarios: 1) changing to recognized equivalent (both brackish reverse osmosis membranes), and 2) changing the type of membrane (from brackish reverse osmosis to low energy reverse osmosis, or vice versa).

The commission responds that a new plan submittal and baseline performance data will most likely need to be provided any time the manufacture or model has been changed, but these items may not be required in all circumstances. The TCEQ acknowledges that there may be some situations where a new plan submittal and/or baseline data may not be necessary. In response to this comment, the commission has revised §290.39(j)(1)(D) - (F) and has added §290.39(j)(4)(A) - (E) to require written notification of membrane replacement or change of membrane modules instead of requiring plan submittal in all cases. The PWS will be sent a letter if a new plan submittal and/or baseline performance data is required.

SCMA/AMTA commented on §290.39(e)(7)(A) - (E), asking "*[i]s the membrane cleaning frequency, as required in Section 7(B), the design cleaning frequency or the verified frequency determined after sufficient operating time? Depending on the interpretation of Section 7, there may be a scenario where a PWS would be required to delay drinking water production until items (A) - (E) are established for inclusion in the addendum.*"

The commission responds that the items specified in the addendum must be reviewed and approved prior to drinking water production. However, the intent of the addendum is for the PWS and their engineer to compile data to determine baseline performance during start up in a relatively short timeframe (for example, a few days and not the standard 90 day pilot study), with the exception of the PWS's receipt of laboratory results. Regarding §290.39(e)(7)(B), the design engineer should select a set-point (based on the loss of performance from baseline) that would be a trigger for the PWS to clean the membranes. Alternatively, the rule allows for the engineer to set a time interval for cleaning. In §290.39(e)(7)(A) - (E), the commission mimicked the existing process for its approval of wells. The well approval process allows the design engineer to present the engineering plans and specifications for approval first then, after construction, to validate the water quality produced by the well. No change has been made in response to this comment.

SCMA/AMTA commented on §290.42(b)(9)(G), questioning "*[i]s TCEQ looking at total feed and permeate conductivity reading at each unit?*" SCMA/AMTA further commented on

§290.46(f)(3)(B)(x), asking *"[i]s the requirement for monitoring the conductivity with respect to total or individual units?"*

The commission agrees that clarification of the proposed rules is necessary. In response to this comment, the commission has revised §290.42(b)(9)(G) to specify feed and permeate conductivity monitoring on each individual membrane unit at a nanofiltration or reverse osmosis plant because the executive director's staff inadvertently used an undefined term of "facility" in the proposed rule instead of the defined term of "membrane unit." The commission also revised §290.46(f)(3)(B)(x) to specify feed and permeate conductivity monitoring on each individual membrane unit at a nanofiltration or reverse osmosis plant because the location for the conductivity results that are to be maintained for three years was not specified in the proposed rule.

SCMA/AMTA commented on §290.42(b)(9)(K), stating they *"liked the requirement for having instrumentation between stages, such as pressure indicators, which make it easier to troubleshoot systems."*

The commission acknowledges the support expressed by the commenter. No change has been made in response to this comment.

An individual commented on §290.42(d)(17), noting that it will greatly reduce the burden for surface water systems which would also wish to include reverse osmosis nanofiltration and commending its inclusion. The individual also requested that TCEQ consider the inclusion of identical language in proposed §290.42(d)(17) in a new paragraph under §290.42(c).

The commission acknowledges the support expressed by the commenter and agrees that the language in proposed §290.42(d)(17) should be included in §290.42(c). PWSs using groundwater under the direct influence of surface water sources should be able to utilize reverse osmosis and nanofiltration as contemplated by the proposed rules. In response to this comment, the commission added §290.42(c)(8) to address this inadvertent oversight in the proposed rule.

SCMA/AMTA commented on §290.42(l), asking if the baseline performance data (that is required to be maintained in the Plant Operations Manual) will need to be changed after cleaning when the membrane performance is not restored to the original baseline performance.

The commission responds that regardless of the changes in performance after membrane cleaning, the original baseline performance data is the only baseline data to be kept in the Plant Operations Manual. The intent of the requirement to maintain the original baseline data is for the plant operations staff to be aware of changes in plant performance since start up so they can evaluate the effectiveness of cleaning regimes, and prepare for when membrane replacement or other service is required. No change has been made in response to this comment.

SCMA/AMTA questioned whether the TCEQ will require a minimum license level for operation of membrane facilities in §290.46(e)(2)(D).

The adopted rule does not change the minimum operator level required for either a groundwater or surface water treatment facility. The rule change only addresses the requirement for an approved training that addresses concerns unique to reverse osmosis and nanofiltration processes. No change has been made in response to this comment.

SCMA/AMTA questioned whether the TCEQ will recognize/grandfather training taken by an operator prior to the rule's effective date.

The commission responds that it will consider courses taken in the past. The criteria for course acceptance is being developed through a stakeholder process. In response to comment, the commission amended §290.46(e)(2)(D) to allow operators to complete the training by August 31, 2016. This will allow adequate time for operators to take a training class if they have not previously taken one. Additionally, the commission will consider courses an operator has previously taken which meet the executive director's criteria for approval. The TCEQ's criteria for approving training courses or events will be developed through a stakeholder process.

SCMA/AMTA asked whether operators will be required to have a minimum experience of operating a membrane plant in addition to certification in §290.46(e)(2)(D).

At this time, there are no minimum experience requirements for operators at a membrane plant. No change has been made in response to this comment.

SCMA/AMTA commented on §290.46(f)(3)(A)(vi), requesting that the TCEQ consider adding the chemicals used and the reason that triggered the cleaning (e.g., an increase of pressure to 10 pounds per square inch) to the list for maintained records of the clean-in-place procedure.

The commission respectfully disagrees that the requested rule additions are necessary. The commission responds that, under existing §290.46(f)(3)(A)(i), the list of chemicals used must be maintained in the PWS's records; therefore, no change has been made in response to this comment. The commission concurs that the PWS best practices should include documenting the reason for the clean-in-place, even if the clean-in-place was simply conducted at a scheduled interval. Knowing the reason for the cleaning is important to extend the lifecycle of the membrane and also when troubleshooting problems. Knowing the reason for the cleaning is not necessary to support TCEQ's health-based requirements; therefore, no change has been made in response to this comment.

SCMA/AMTA commented on §290.46(f)(3)(B)(x), requesting that TCEQ consider changing the phrase "transmembrane pressure differential" to "pressure differential across a membrane vessel" as the term "transmembrane pressure" is generally associated with low pressure membranes.

The commission concurs and, in response, has revised §290.46(f)(3)(B)(x).

SCMA/AMTA commented on §290.46(m)(7), suggesting that the cleaning and replacement of membrane elements be left to the discretion of the PWS instead of the proposed requirement that reverse osmosis or nanofiltration systems be cleaned or replaced in accordance with the allowable operating conditions of the manufacturer.

The commission respectfully disagrees that the rule infringes on the discretion of a PWS to make operating decisions. The commission responds that the adopted rule is not intended to require the PWS to replace the membranes based solely upon the manufacturer's terms. The rule requires the cleaning and replacement of membranes to be based upon local membrane performance. The commission cautions that unintended damage may occur if membranes are exposed to chemicals, pressures, temperatures, or operating procedures that have been identified as

unacceptable by the manufacturer. No change has been made in response to this comment.

SCMA/AMTA commented on §290.46(s)(2)(G), proposing the replacement of the requirement for calibration of conductivity monitoring devices from once a year to *"in accordance with the manufacturer's specifications."* SCMA/AMTA asks if once a year is sufficient for calibrating a conductivity meter.

The commission respectfully disagrees that calibration for conductivity monitoring devices should be based on the manufacturer's specifications because the proposed rule is clear, yet offers flexibility. The adopted rule states that conductivity (or total dissolved solids) meters must be calibrated at least once a year and does not preclude the PWS from conducting more frequent calibrations based upon the manufacturer's recommendations or local decisions. No change has been made in response to this comment.

Chloramine Disinfection Criteria

An individual requests clarification on mixing that is required to disperse chemicals in §290.42(e)(7)(B). The individual questioned *"what defines mixing"* and further commented *"or example, is an injector designed to inject chemical at the center of a pipe sufficient?"* SCMA/AMTA commented that the commission should grandfather those plants that are not designed or constructed with mixing equipment (e.g., in-line mixers) in order to allow them to meet the requirements of §290.42(e)(7)(B).

The commission respectfully disagrees that revision of the proposed rule is necessary and responds that the intent of the requirement was to assure efficient chemical dispersion. Mixing chlorine and ammonia correctly assures adequate disinfection and saves a PWS money by ensuring that chemicals are not overdosed. There are numerous ways to assure adequate mixing, including those referenced in the comments. The proposed rule language allowed flexibility for PWSs to implement appropriate technology as necessary. Therefore, there is no need to grandfather those plants because flexibility has already been provided in §290.42(e)(7)(B) and many of the methods already installed work adequately. No change has been made in response to these comments.

An individual stated that a sample tap is required before and after each chemical injection point in §290.42(e)(7)(C) and that chlorine must be monitored before ammonia is added in §290.110(c)(5)(C). The individual commented that these plants feed chlorine and ammonia close together to limit disinfection byproduct formation, thus making sampling before and after each injection point impractical. The individual recommended putting this practice of measuring free chlorine prior to the addition of ammonia in a guidance document instead of in the commission's rules. SCMA/AMTA also commented that the commission should grandfather those plants not built to accommodate the proposed sample points in §290.42(e)(7)(C).

The commission specifically requested comments regarding this requirement because the commission recognized that the industry could have difficulty making changes to accomplish the proposed requirement. This requirement was proposed because dosing chloramines correctly in surface water treatment plants is important to ensure the assumed viral log removal in the EPA's Surface Water Treatment Rules and correct dosing at any location is required to ensure that monochloramine is formed and that chemicals are not over or underfed. However, some source waters are more challenging to treat because even short periods (seconds) of free chlorine contact before ammonia addi-

tion can allow formation of regulated disinfection byproducts. In response to these comments, the commission has revised §290.42(e)(7)(C) and its subdivisions to apply to installations submitted for plan approval starting January 1, 2016, and to include the recognition that some installations after that time may have the need to locate chlorine injection points closer to the subsequent ammonia injection point to control disinfection byproduct formation so that there is no room for the tap between the two injectors. However, a tap must be provided before any chemical injection and after the second chemical is injected. The January 1, 2016, date was chosen to give the professional engineers time to add the additional taps to projects. Also, the date was chosen to not impose the condition on projects that had already been submitted to the commission for approval. Additionally, in response to these comments, the commission has revised §290.110(c)(5)(C)(iii) to reference that the sampling must occur between the injection of the two chemicals only if a sample tap is required or present.

SCMA/AMTA commented on §290.43(c)(7), questioning what the word "efficiently" means, and asked TCEQ to consider grandfathering tanks not designed or constructed with the means to drain efficiently.

The commission acknowledges that the term "efficiently" could be vague, and in response has revised §290.43(c)(7) to instead state *"[e]ach clearwell or potable water storage tank must be designed to drain the tank."* Regarding the request to grandfather the design of tanks, the commission respectfully disagrees that revision of the proposed rule is necessary because the commission does not approve tanks designed without drains. In the preamble the commission referenced an example where a PWS took several days to drain a tank during a nitrification event, which is a public health risk. The lack of a drain presents an immediate public health risk. The ability to drain a tank to remove water with high levels of nitrate or nitrite is critical. No change has been made in response to this comment.

An individual suggested requiring a nitrification action plan in §290.46(z) only if distribution chlorine residual regulations are not met, or allowing reduced monitoring for systems in compliance with total chlorine residual requirements. Alternatively, SCMA/AMTA referenced §290.110(c)(5), suggesting that a nitrification action plan may only be required if action levels are exceeded.

The commission respectfully disagrees that revision of the proposed rules is necessary and responds that chloramination is a complex process that must be monitored to assure safe drinking water is produced. A PWS with compliant total chlorine residuals can experience nitrification. The intent of the nitrification action plan is to prevent or control nitrification. If the nitrification action plan is only required after exceedances which may cause unsafe water, it would not fulfill the public health intent of the requirement, because it would not prevent or control nitrification. The commission has required nitrification action plans as a condition of the site-specific exceptions for several years. No change has been made in response to these comments.

SCMA/AMTA recommended amending §290.46(z), replacing the word "prevent" with "control."

The commission concurs with this comment and responds that while prevention is the ultimate goal, nothing in nature can be completely prevented. In response to this comment, the phrase "to prevent nitrification" is removed from §290.46(z) as proposed, rather than replacing the verb with "control" as

suggested, to eliminate confusion. Additionally, the phrase "distributing chloraminated water" has been added to adopted §290.46(z) to maintain consistency with Chapter 290.

An individual questioned what will be the specific sampling requirements of the nitrification action plan in §290.46(z).

The commission responds that the minimum nitrification action plan baseline and continuing sampling locations and frequencies has been specified in §290.110(c)(4) and (5) and their subdivisions. No change has been made in response to this comment.

An individual recommends Total Coliform Rule (TCR) sample sites be used for nitrification action plan sampling described in §290.46(z). Similarly, SCMA/AMTA recommends using the TCR sample sites for nitrification action plan sampling, referencing §290.110(c)(4).

The commission respectfully disagrees that revision of the proposed rules is necessary. The commission responds that nitrification action plan distribution system samples for monochloramine and free ammonia are to be taken at the same time and place as the total chlorine residual samples required by §290.110(c)(4). The existing rule allows the flexibility for the disinfectant residual samples to be taken at the TCR sample locations or at the routine disinfectant level monitoring locations. Existing regulations in §290.110 and §290.121 require PWSs to set appropriate sample sites that are representative of the distribution system and to document these locations in their monitoring plan. No change has been made in response to these comments.

SCMA/AMTA recommends incorporating a one or two year grace period for PWSs to develop a meaningful data set for action levels in §290.46(z)(2) and §290.110(c)(5) because the baseline data collection may take longer than proposed.

The commission respectfully disagrees that revision of the proposed rules is necessary. The commission responds that an initial nitrification action plan may be developed with less than a year of data collection. A nitrification action plan, like any operating instruction document, is a living document that will be revised to accommodate changes over time, including subsequent data collection. Further, the commission notes that the site-specific exceptions have required development of nitrification action plans for several years, so most PWSs have already developed a nitrification action plan. Finally, the TCEQ provides free, on-site assistance for nitrification action plan development through the Water Supply Division's FMT assistance program. Information regarding the TCEQ's FMT program is available at <http://www.tceq.texas.gov/drinkingwater/fmt>. Interested PWSs can contact the FMT Program Coordinator by calling (512) 239-4691, by email at pdws@tceq.texas.gov, or by submitting the TCEQ's *Financial, Managerial & Technical Assistance Referral Form* (commission Form 20167). No change has been made in response to this comment.

SCMA/AMTA suggested quarterly or annual sampling for the chloramine effectiveness suite for systems that demonstrate consistently meeting target levels for weekly sampling as required in §290.110(c)(5)(C).

The commission respectfully disagrees that revision of the proposed rules is necessary. The commission responds that distribution systems are a dynamic and changing environment and small changes in the system, not caused by the PWS, can result in large changes in the chloramination chemistry. For example, many PWSs had trouble in 2007 during an extremely wet year

which caused nitrification in PWSs that had not had any issues previously. Weekly sampling is required to assure the health and safety of the drinking water. No change has been made in response to this comment.

SCMA/AMTA commented requesting clarification of whether TCR sample sites are intended to be used for the monitoring described under §290.110(c)(5)(C)(v), which relates to monitoring for monochloramine and free ammonia after injection of chloramination chemicals within the distribution system.

The commission responds that the requirements of §290.110(c)(5)(C)(v) regarding the monitoring monochloramine and free ammonia after the addition of chloramination chemicals within the distribution system, commonly known as booster chloramination, is to determine whether the chloramines are being dosed properly. Therefore, the sample locations used for this monitoring should be close enough to the booster location to provide immediate knowledge of the impact of chemical addition on the ratio and concentration of total chlorine, monochloramine, and free ammonia. If a coliform sample site is present in such a location, the rule allows the flexibility to use that sample site. However, the PWS's existing coliform sample sites may be too far away from the booster station to provide meaningful data, so requiring use of a TCR site would not accomplish the intent of the rule. No change has been made in response to this comment.

SCMA/AMTA suggested increased nitrate and nitrite sampling from quarterly to monthly at TCR sites in §290.110(c)(5)(D)(ii).

The commission respectfully disagrees that revision of the proposed rules is necessary and responds that the intent of the chloramine effectiveness suite is to provide the water system with the ability to respond prior to nitrification events. Monitoring parameters such as monochloramine, free ammonia and total chlorine frequently provides the PWS with meaningful data to be able to respond before nitrification occurs. Nitrification has an acute health impact and can also be difficult to eliminate once it has begun; thus, the TCEQ has focused on providing proactive - not reactive - steps within its rule. The quarterly nitrate and nitrite sampling is intended to be a minimum sampling frequency. The commission concurs that many PWSs may find that additional sampling is necessary as a response to system specific action levels as defined in each PWS's nitrification action plan. Also, a PWS may want to expand the number of sampling points or frequency of the sampling to provide more insight into the condition of the distribution system. The rule's flexibility allows for more frequent than quarterly sampling. No change has been made in response to this comment.

SCMA/AMTA expressed concern on the requirements for the use of color comparators in §290.110(d)(1), specifically asking whether color comparators have been a source of inaccurate compliance data.

The commission responds that color comparators have been a source of inaccurate data in the past. The causes of the inaccuracies, such as a faded color chart, were used to create the criteria for accurate operation of the color comparator tool that appears in the rule. No change has been made in response to this comment.

SCMA/AMTA questioned if the proposed minimum accuracy level for nitrite and nitrate is adequate for detecting nitrification and recommended amending §290.42(e)(7)(E)(v) to include a detection limit of 0.01 mg/L as N for nitrite.

The commission responds that the specific minimum accuracy levels for the equipment listed in §290.42(e)(7)(E)(v) are contained in §290.110(d)(5) and (6) as 0.5 mg/L as N for nitrate and 0.05 mg/L as N for nitrite, respectively. The commission acknowledges that changes in levels as low as 0.01 mg/L as N for nitrite may be meaningful in detecting nitrification. Upon consideration of the submitted comment and based upon the proven accuracy of commonly available methods, the commission agrees that the minimum accuracy levels of nitrite and nitrate in §290.110(d)(5) and (6) should be revised to 0.1 mg/L as N for nitrate and 0.01 mg/L as N for nitrite, respectively, and, in response, has revised §290.110(d)(5) and (6) accordingly. The commission notes that PWSs can still choose more stringent methods.

SUBCHAPTER D. RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS

30 TAC §§290.38, 290.39, 290.41 - 290.47

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, which establishes the commission's general authority necessary to carry out its jurisdiction; TWC, §5.103, which establishes the commission's general authority to adopt rules; TWC, §5.105, which establishes the commission's authority to set policy by rule; Texas Health and Safety Code (THSC), §341.031, which allows the commission to adopt rules to comply with standards established by the United States Environmental Protection Agency pursuant to the federal Safe Drinking Water Act, 42 United States Code, §§300f to 300j-6; and, THSC, §341.0315, which requires public water systems to comply with commission rules adopted to ensure the supply of safe drinking water.

The adopted amendments implement TWC, §§5.102, 5.103, and 5.105; THSC, §341.031 and §341.0315; and, House Bill 1600 and Senate Bill 567, both enacted during the 83rd Texas Legislature, 2013.

§290.39. *General Provisions.*

(a) Authority for requirements. Texas Health and Safety Code (THSC), Chapter 341, Subchapter C prescribes the duties of the commission relating to the regulation and control of public drinking water systems in the state. The statute requires that the commission ensure that public water systems: supply safe drinking water in adequate quantities, are financially stable and technically sound, promote use of regional and area-wide drinking water systems, and review completed plans and specifications and business plans for all contemplated public water systems not exempted by THSC, §341.035(d). The statute also requires the commission be notified of any subsequent material changes, improvements, additions, or alterations in existing systems and, consider compliance history in approving new or modified public water systems. Texas Water Code (TWC), §13.1395, prescribes the duties of the commission relating to standards for emergency operations of affected utilities. The statute requires that the commission ensure that affected utilities provide water service as soon as safe and practicable during an extended power outage following the occurrence of a natural disaster.

(b) Reason for this subchapter and minimum criteria. This subchapter has been adopted to ensure regionalization and area-wide options are fully considered, the inclusion of all data essential for comprehensive consideration of the contemplated project, or improvements, additions, alterations, or changes thereto and to establish minimum standardized public health design criteria in compliance

with existing state statutes and in accordance with good public health engineering practices. In addition, minimum acceptable financial, managerial, technical, and operating practices must be specified to ensure that facilities are properly operated to produce and distribute safe, potable water.

(c) Required actions and approvals prior to construction. A person may not begin construction of a public drinking water supply system unless the executive director determines the following requirements have been satisfied and approves construction of the proposed system.

(1) A person proposing to install a public drinking water system within the extraterritorial jurisdiction of a municipality; or within 1/2-mile of the corporate boundaries of a district, or other political subdivision providing the same service; or within 1/2-mile of a certificated service area boundary of any other water service provider shall provide to the executive director evidence that:

(A) written application for service was made to that provider; and

(B) all application requirements of the service provider were satisfied, including the payment of related fees.

(2) A person may submit a request for an exception to the requirements of paragraph (1) of this subsection if the application fees will create a hardship on the person. The request must be accompanied by evidence documenting the financial hardship.

(3) A person who is not required to complete the steps in paragraph (1) of this subsection, or who completes the steps in paragraph (1) of this subsection and is denied service or determines that the existing provider's cost estimate is not feasible for the development to be served, shall submit to the executive director:

(A) plans and specifications for the system; and

(B) a business plan for the system.

(4) Emergency Preparedness Plan for Public Water Systems that are Affected Utilities.

(A) Each public water system that is also an affected utility, as defined by §290.38 of this title (relating to Definitions), is required to submit to the executive director, receive approval for, and adopt an emergency preparedness plan in accordance with §290.45 of this title (relating to Minimum Water System Capacity Requirements) using either the template in Appendix G of §290.47 of this title (relating to Appendices) or another emergency preparedness plan that meets the requirements of this section. Emergency preparedness plans are required to be prepared under the direction of a licensed professional engineer when an affected utility has been granted or is requesting an alternative capacity requirement in accordance with §290.45(g) of this title, or is requesting to meet the requirements of TWC, §13.1395, as an alternative to any rule requiring elevated storage, or as determined by the executive director on a case-by-case basis.

(B) Each affected utility that supplies, provides, or conveys surface water to wholesale customers shall include in its emergency preparedness plan under subparagraph (A) of this paragraph provision for the actual installation and maintenance of automatically starting auxiliary generators or distributive generation facilities for each raw water intake pump station, water treatment plant, pump station, and pressure facility necessary to provide water to its wholesale customers.

(C) The executive director shall review an emergency preparedness plan submitted under subparagraph (A) of this paragraph. If the executive director determines that the plan is not acceptable, the

executive director shall recommend changes to the plan. The executive director must make its recommendations on or before the 90th day after the executive director receives the plan. In accordance with commission rules, an emergency preparedness plan must include one of the options listed in §290.45(h)(1)(A) - (H) of this title.

(D) Each affected utility shall install any required equipment to implement the emergency preparedness plan approved by the executive director immediately upon operation.

(E) The executive director may grant a waiver of the requirements for emergency preparedness plans to an affected utility if the executive director determines that compliance with this section will cause a significant financial burden on customers of the affected utility. The affected utility shall submit financial, managerial, and technical information as requested by the executive director to demonstrate the financial burden.

(d) Submission of plans.

(1) Plans, specifications, and related documents will not be considered unless they have been prepared under the direction of a licensed professional engineer. All engineering documents must have engineering seals, signatures, and dates affixed in accordance with the rules of the Texas Board of Professional Engineers.

(2) Detailed plans must be submitted for examination at least 30 days prior to the time that approval, comments or recommendations are desired. From this, it is not to be inferred that final action will be forthcoming within the time mentioned.

(3) The limits of approval are as follows.

(A) The commission's public drinking water program furnishes consultation services as a reviewing body only, and its licensed professional engineers may neither act as design engineers nor furnish detailed estimates.

(B) The commission's public drinking water program does not examine plans and specifications in regard to the structural features of design, such as strength of concrete or adequacy of reinforcing. Only the features covered by this subchapter will be reviewed.

(C) The consulting engineer and/or owner must provide surveillance adequate to assure that facilities will be constructed according to approved plans and must notify the executive director in writing upon completion of all work. Planning materials shall be submitted to the Texas Commission on Environmental Quality, Water Supply Division, MC 159, P.O. Box 13087, Austin, Texas 78711-3087.

(e) Submission of planning material. In general, the planning material submitted shall conform to the following requirements.

(1) Engineering reports are required for new water systems and all surface water treatment plants. Engineering reports are also required when design or capacity deficiencies are identified in an existing system. The engineering report shall include, at least, coverage of the following items:

- (A) statement of the problem or problems;
- (B) present and future areas to be served, with population data;
- (C) the source, with quantity and quality of water available;
- (D) present and estimated future maximum and minimum water quantity demands;
- (E) description of proposed site and surroundings for the water works facilities;

(F) type of treatment, equipment, and capacity of facilities;

(G) basic design data, including pumping capacities, water storage and flexibility of system operation under normal and emergency conditions; and

(H) the adequacy of the facilities with regard to delivery capacity and pressure throughout the system.

(2) All plans and drawings submitted may be printed on any of the various papers which give distinct lines. All prints must be clear, legible and assembled to facilitate review.

(A) The relative location of all facilities which are pertinent to the specific project shall be shown.

(B) The location of all abandoned or inactive wells within 1/4-mile of a proposed well site shall be shown or reported.

(C) If staged construction is anticipated, the overall plan shall be presented, even though a portion of the construction may be deferred.

(D) A general map or plan of the municipality, water district, or area to be served shall accompany each proposal for a new water supply system.

(3) Specifications for construction of facilities shall accompany all plans. If a process or equipment which may be subject to probationary acceptance because of limited application or use in Texas is proposed, the executive director may give limited approval. In such a case, the owner must be given a bonded guarantee from the manufacturer covering acceptable performance. The specifications shall include a statement that such a bonded guarantee will be provided to the owner and shall also specify those conditions under which the bond will be forfeited. Such a bond will be transferable. The bond shall be retained by the owner and transferred when a change in ownership occurs.

(4) A copy of each fully executed sanitary control easement and any other documentation demonstrating compliance with §290.41(c)(1)(F) of this title (relating to Water Sources) shall be provided to the executive director prior to placing the well into service. Each original easement document, if obtained, must be recorded in the deed records at the county courthouse. For an example, see commission Form 20698.

(5) Construction features and siting of all facilities for new water systems and for major improvements to existing water systems must be in conformity with applicable commission rules.

(6) For public water systems using reverse osmosis or nanofiltration membranes, the engineering report must include the requirements specified in paragraph (1)(A) - (H) of this subsection, and additionally must provide sufficient information to ensure effective treatment. Specifically:

(A) Provide a clear identification of the proposed raw water source.

(i) If the well has been constructed, a copy of the State of Texas Well Report according to 16 TAC Chapter 76 (relating to Water Well Drillers and Water Well Pump Installers), a cementing certificate (as required by §290.41(c)(3)(A) of this title), and a copy of the complete physical and chemical analysis of the raw water from the well as required by §290.41(c)(3)(G) of this title; or

(ii) If the well has not been constructed, the approximate longitude and latitude for the new well and the projected water quality.

(B) Provide a description of the pretreatment process that includes:

- (i) target water quality of the proposed pretreatment process;
- (ii) constituent(s) to be removed or treated;
- (iii) method(s) or technologies used; and
- (iv) operating parameters, such as chemical dosages, filter loading rates, and empty bed contact times.

(C) The design of a reverse osmosis or nanofiltration membrane system shall be based on the standard modeling tools of the manufacturer. The model must be run for both new membranes and end-of-life membranes. All design parameters required by the membrane manufacturer's modeling tool must be included in the modeled analysis. At a minimum, the model shall provide:

- (i) system flow rate;
- (ii) system recovery;
- (iii) number of stages;
- (iv) number of passes;
- (v) feed pressure;
- (vi) system configuration with the number of vessels per stage, the number of passes (if applicable), and the number of elements per vessel;
- (vii) flux (in gallons per square foot per day) for the overall system;
- (viii) selected fouling factor for new and end-of-life membranes; and
- (ix) ion concentrations in the feed water for all constituents required by the manufacturer's model and the projected ion concentrations for the permeate water and concentrate water.

(D) In lieu of the modeling requirements as detailed in subparagraph (C) of this paragraph, the licensed professional engineer may provide either a pilot study or similar full-scale data in accordance with §290.42(g) of this title (relating to Water Treatment). Alternatively, for reverse osmosis or nanofiltration units rated for flow rates less than 300 gallons per minute, the design specifications can be based on the allowable operating parameters of the manufacturer.

(E) Provide documentation that the components and chemicals for the proposed treatment process conform to American National Standards Institute/NSF International (ANSI/NSF) Standard 60 for Drinking Water Treatment Chemicals and ANSI/NSF Standard 61 for Drinking Water System Components.

(F) Provide the details for post-treatment and re-mineralization to reduce the corrosion potential of the finished water. If carbon dioxide and/or hydrogen sulfide is present in the reverse osmosis permeate, include the details for a degasifier for post-treatment.

(G) For compliance with applicable drinking water quality requirements in Subchapter F of this chapter (relating to Drinking Water Standards Governing Drinking Water Quality and Reporting Requirements for Public Water Systems), provide the projected water quality at the entry point to the distribution system and the method(s) used to make the water quality projections.

(H) When blending is proposed, provide the blending ratio, source of the water to be blended, and the calculations showing the concentrations of regulated constituents in the finished water.

(I) Provide a description of the disinfection byproduct formation potential based on total organic carbon and other precursor sample results.

(J) Provide the process control details to ensure the integrity of the membrane system. The engineering report shall identify specific parameters and set points that indicate when membrane cleaning, replacement, and/or inspection is necessary.

(i) The parameters shall be based on one, or more of the following: increased salt passage, increased or decreased pressure differential, and/or change in normalized permeate flow.

(ii) Define the allowable change from baseline performance.

(7) Before reverse osmosis or nanofiltration membrane systems can be used to produce drinking water, but after the reverse osmosis or nanofiltration membrane system has been constructed at the water system, the licensed professional engineer must submit an addendum to the engineering report required by paragraph (6) of this subsection to the executive director for review and approval. The addendum shall include the following verification data of the full-scale treatment process:

(A) Provide the initial baseline performance of the plant. The baseline net driving pressure, normalized permeate flow, salt rejection (or salt passage) must be documented when the reverse osmosis or nanofiltration membrane systems are placed online.

(B) Provide the frequency of cleaning or membrane replacement. The frequency must be based on a set time interval or at a set point relative to baseline performance of the unit(s).

(C) If modeling is used as the basis for the design, provide verification of the model's accuracy. If the baseline performance evaluation shows that the modeling projection in the engineering report were inaccurate, the licensed professional engineer shall determine if the deviation from the modeled projections resulted from incorrect water quality assumptions or from other incorrect data in the model. The model shall be considered inaccurate if the overall salt passage or the required feed pressure is 10% greater than the model projection. For any inaccurate model, provide a corrected model with the addendum to the engineering report.

(D) Provide verification of plant capacity. The capacity of the reverse osmosis and nanofiltration membrane facility shall be based on the as-built configuration of the system and the design parameters in the engineering report with adjustments as indicated by the baseline performance. Refer to paragraph (6)(C) of this subsection and §290.45(a)(6) of this title for specific considerations.

(E) Provide a complete physical and chemical analysis of the water. The analyses shall be in accordance with §290.41(c)(3)(G) of this title for the raw water (before any treatment), the water produced from the membrane systems, and the water after any post-treatment. Samples must be submitted to an accredited laboratory for chemical analyses.

(8) The calculations for sizing feed pump(s) and chemical storage tank(s) must be submitted to demonstrate that a project meets chemical feed and storage capacity requirements.

(f) Submission of business plans. The prospective owner of the system or the person responsible for managing and operating the system must submit a business plan to the executive director that demonstrates that the owner or operator of the system has available the financial, managerial, and technical capability to ensure future operation of the system in accordance with applicable laws and rules. The executive director may order the prospective owner or operator to

demonstrate financial assurance to operate the system in accordance with applicable laws and rules as specified in Chapter 37, Subchapter O of this title (relating to Financial Assurance for Public Drinking Water Systems and Utilities), or as specified by commission rule, unless the executive director finds that the business plan demonstrates adequate financial capability. A business plan shall include the information and be presented in a format prescribed by the executive director. For community water systems, the business plan shall contain, at a minimum, the following elements:

- (1) description of areas and population to be served by the potential system;
- (2) description of drinking water supply systems within a two-mile radius of the proposed system, copies of written requests seeking to obtain service from each of those drinking water supply systems, and copies of the responses to the written requests;
- (3) time line for construction of the system and commencement of operations;
- (4) identification of and costs of alternative sources of supply;
- (5) selection of the alternative to be used and the basis for that selection;
- (6) identification of the person or entity which owns or will own the drinking water system and any identifiable future owners of the drinking water system;
- (7) identification of any other businesses and public drinking water system(s) owned or operated by the applicant, owner(s), parent organization, and affiliated organization(s);
- (8) an operations and maintenance plan which includes sufficient detail to support the budget estimate for operation and maintenance of the facilities;
- (9) assurances that the commitments and resources needed for proper operation and maintenance of the system are, and will continue to be, available, including the qualifications of the organization and each individual associated with the proposed system;
- (10) for retail public utilities as defined by TWC, §13.002:
 - (A) projected rate revenue from residential, commercial, and industrial customers; and
 - (B) pro forma income, expense, and cash flow statements;
- (11) identification of any appropriate financial assurance, including those being offered to capital providers;
- (12) a notarized statement signed by the owner or responsible person that the business plan has been prepared under his direction and that he is responsible for the accuracy of the information; and
- (13) other information required by the executive director to determine the adequacy of the business plan or financial assurance.

(g) Business plans not required. A person is not required to file a business plan if the person:

- (1) is a county;
- (2) is a retail public utility as defined by TWC, §13.002, unless that person is a utility as defined by that section;
- (3) has executed an agreement with a political subdivision to transfer the ownership and operation of the water supply system to the political subdivision; or

(4) is a noncommunity nontransient water system and the person has demonstrated financial assurance under THSC, Chapter 361 or Chapter 382 or TWC, Chapter 26.

(h) Beginning and completion of work.

(1) No person may begin construction on a new public water system before receiving written approval of plans and specifications and, if required, approval of a business plan from the executive director. No person may begin construction of modifications to a public water system without providing notification to the executive director and submitting and receiving approval of plans and specifications if requested in accordance with subsection (j) of this section.

(2) The executive director shall be notified in writing by the design engineer or the owner before construction is started.

(3) Upon completion of the water works project, the engineer or owner shall notify the executive director in writing as to its completion and attest to the fact that the completed work is substantially in accordance with the plans and change orders on file with the commission.

(i) Changes in previously approved plans and specifications. Any addenda or change orders which may involve a health hazard or relocation of facilities, such as wells, treatment units, and storage tanks, shall be submitted to the executive director for review and approval.

(j) Changes in existing systems or supplies. Public water systems shall notify the executive director prior to making any significant change or addition to the system's production, treatment, storage, pressure maintenance, or distribution facilities. Significant changes in existing systems or supplies shall not be instituted without the prior approval of the executive director.

(1) Public water systems shall submit plans and specifications to the executive director for the following significant changes:

(A) proposed changes to existing systems which result in an increase or decrease in production, treatment, storage, or pressure maintenance capacity;

(B) proposed changes to the disinfection process used at plants that treat surface water or groundwater that is under the direct influence of surface water including changes involving the disinfectants used, the disinfectant application points, or the disinfectant monitoring points;

(C) proposed changes to the type of disinfectant used to maintain a disinfectant residual in the distribution system;

(D) proposed changes in existing distribution systems when the change is greater than 10% of the number of connections, results in the water system's inability to comply with any of the applicable capacity requirements of §290.45 of this title, or involves interconnection with another public water system; and

(E) any other material changes specified by the executive director.

(2) Public water systems shall notify the executive director in writing of the addition of treatment chemicals, including long-term treatment changes, that will impact the corrosivity of the water. These are considered to be significant changes that require written approval from the executive director.

(A) Examples of long-term treatment changes that could impact the corrosivity of the water include the addition of a new treatment process or modification of an existing treatment process. Examples of modifications include switching secondary disinfectants, switching coagulants, and switching corrosion inhibitor products.

Long-term changes can include dose changes to existing chemicals if the system is planning long-term changes to its finished water pH or residual inhibitor concentration. Long-term treatment changes would not include chemical dose fluctuations associated with daily raw water quality changes.

(B) After receiving the notification, the executive director will determine whether the submittal of plans and specifications will be required. Upon request of the executive director, the water system shall submit plans and specifications in accordance with the requirements of subsection (d) of this section.

(3) Plans and specifications may not be required for changes that are specifically addressed in paragraph (1)(D) of this subsection in the following situations:

(A) Unless plans and specifications are required by Chapter 293 of this title (relating to Water Districts), the executive director will not require another state agency or a political subdivision to submit planning material on distribution line improvements if the entity has its own internal review staff and complies with all of the following criteria:

(i) the internal review staff includes one or more licensed professional engineers that are employed by the political subdivision and must be separate from, and not subject to the review or supervision of, the engineering staff or firm charged with the design of the distribution extension under review;

(ii) a licensed professional engineer on the internal review staff determines and certifies in writing that the proposed distribution system changes comply with the requirements of §290.44 of this title (relating to Water Distribution) and will not result in a violation of any provision of §290.45 of this title;

(iii) the state agency or political subdivision includes a copy of the written certification described in this subparagraph with the initial notice that is submitted to the executive director.

(B) Unless plans and specifications are required by Chapter 293 of this title, the executive director will not require planning material on distribution line improvements from any public water system that is required to submit planning material to another state agency or political subdivision that complies with the requirements of subparagraph (A) of this paragraph. The notice to the executive director must include a statement that a state statute or local ordinance requires the planning materials to be submitted to the other state agency or political subdivision and a copy of the written certification that is required in subparagraph (A) of this paragraph.

(4) Public water systems shall notify the executive director in writing of proposed replacement or change of membrane modules, which may be a significant change. After receiving the notification, the executive director will determine whether the submittal of plans and specifications will be required. Upon request of the executive director, the system shall submit plans and specifications in accordance with the requirements of subsection (d) of this section. In its notification to the executive director, the system shall include the following information:

(A) The membrane module make/type, model, and manufacturer;

(B) The membrane plant's water source (groundwater, surface water, groundwater under the direct influence of surface water, or other);

(C) Whether the membrane modules are used for pathogen treatment or not;

(D) Total number of membrane modules per membrane unit; and

(E) The number of membrane modules being replaced or changed for each membrane unit.

(k) Planning material acceptance. Planning material for improvements to an existing system which does not meet the requirements of all sections of this subchapter will not be considered unless the necessary modifications for correcting the deficiencies are included in the proposed improvements, or unless the executive director determines that reasonable progress is being made toward correcting the deficiencies and no immediate health hazard will be caused by the delay.

(l) Exceptions. Requests for exceptions to one or more of the requirements in this subchapter shall be considered on an individual basis. Any water system which requests an exception must demonstrate to the satisfaction of the executive director that the exception will not compromise the public health or result in a degradation of service or water quality.

(1) The exception must be requested in writing and must be substantiated by carefully documented data. The request for an exception shall precede the submission of engineering plans and specifications for a proposed project for which an exception is being requested.

(2) Any exception granted by the commission is subject to revocation.

(3) Any request for an exception which is not approved by the commission in writing is denied.

(4) The executive director may establish site-specific requirements for systems that have been granted an exception. The requirements may include, but are not limited to: site-specific design, operation, maintenance, and reporting requirements.

(5) Water systems that are granted an exception shall comply with the requirements established by the executive director under paragraph (4) of this subsection.

(m) Notification of system startup or reactivation. The owner or responsible official must provide written notification to the commission of the startup of a new public water supply system or reactivation of an existing public water supply system. This notification must be made immediately upon meeting the definition of a public water system as defined in §290.38 of this title.

(n) The commission may require the owner or operator of a public drinking water supply system that was constructed without the approval required by THSC, §341.035, that has a history of noncompliance with THSC, Chapter 341, Subchapter C or commission rules, or that is subject to a commission enforcement action to take the following action:

(1) provide the executive director with a business plan that demonstrates that the system has available the financial, managerial, and technical resources adequate to ensure future operation of the system in accordance with applicable laws and rules. The business plan must fulfill all the requirements for a business plan as set forth in subsection (f) of this section;

(2) provide adequate financial assurance of the ability to operate the system in accordance with applicable laws and rules. The executive director will set the amount of the financial assurance, after the business plan has been reviewed and approved by the executive director.

(A) The amount of the financial assurance will equal the difference between the amount of projected system revenues and the

projected cash needs for the period of time prescribed by the executive director.

(B) The form of the financial assurance will be as specified in Chapter 37, Subchapter O of this title and will be as specified by the executive director.

(C) If the executive director relies on rate increases or customer surcharges as the form of financial assurance, such funds shall be deposited in an escrow account as specified in Chapter 37, Subchapter O of this title and released only with the approval of the executive director.

(o) Emergency Preparedness Plans for Affected Utilities.

(1) Each public water system that is also an affected utility and that exists as of November 1, 2011 is required to adopt and submit to the executive director an emergency preparedness plan in accordance with §290.45 of this title and using the template in Appendix G of §290.47 of this title or another emergency preparedness plan that meets the requirements of this subchapter no later than February 1, 2012. Emergency preparedness plans are required to be prepared under the direction of a licensed professional engineer when an affected utility has been granted or is requesting an alternative capacity requirement in accordance with §290.45(g) of this title, or is requesting to meet the requirements of TWC, §13.1395, as an alternative to any rule requiring elevated storage, or as determined by the executive director on a case-by-case basis.

(2) Each affected utility that supplies, provides, or conveys surface water to wholesale customers shall include in its emergency preparedness plan under this subsection provisions for the actual installation and maintenance of automatically starting auxiliary generators or distributive generation facilities for each raw water intake pump station, water treatment plant, pump station, and pressure facility necessary to provide water to its wholesale customers.

(3) The executive director shall review an emergency preparedness plan submitted under this subsection. If the executive director determines that the plan is not acceptable, the executive director shall recommend changes to the plan. The executive director must make its recommendations on or before the 90th day after the executive director receives the plan. In accordance with the commission rules, an emergency preparedness plan must include one of the options listed in §290.45(h)(1)(A) - (H) of this title.

(4) Not later than June 1, 2012, each affected utility shall implement the emergency preparedness plan approved by the executive director.

(5) An affected utility may file with the executive director a written request for an extension not to exceed 90 days, of the date by which the affected utility is required under this subsection to submit the affected utility's emergency preparedness plan or of the date by which the affected utility is required under this subsection to implement the affected utility's emergency preparedness plan. The executive director may approve the requested extension for good cause shown.

(6) The executive director may grant a waiver of the requirements for emergency preparedness plans to an affected utility if the executive director determines that compliance with this section will cause a significant financial burden on customers of the affected utility. The affected utility shall submit financial, managerial, and technical information as requested by the executive director to demonstrate the financial burden.

§290.42. *Water Treatment.*

(a) Capacity and location.

(1) Based on current acceptable design standards, the total capacity of the public water system's treatment facilities must always be greater than its anticipated maximum daily demand.

(2) The water treatment plant and all pumping units shall be located in well-drained areas not subject to flooding and away from seepage areas or where the groundwater water table is near the surface.

(A) Water treatment plants shall not be located within 500 feet of a sewage treatment plant or lands irrigated with sewage effluent. A minimum distance of 150 feet must be maintained between any septic tank drainfield line and any underground treatment or storage unit. Any sanitary sewers located within 50 feet of any underground treatment or storage unit shall be constructed of ductile iron or polyvinyl chloride (PVC) pipe with a minimum pressure rating of 150 pounds per square inch (psi) and have watertight joints.

(B) Plant site selection shall also take into consideration the need for disposition of all plant wastes in accordance with all applicable regulations and state statutes, including both liquid and solid wastes, or by-product material from operation and/or maintenance.

(3) Each water treatment plant shall be located at a site that is accessible by an all-weather road.

(b) Groundwater.

(1) Disinfection facilities shall be provided for all groundwater supplies for the purpose of microbiological control and distribution protection and shall be in conformity with applicable disinfection requirements in subsection (e) of this section.

(2) Treatment facilities shall be provided for groundwater if the water does not meet the drinking water standards. The facilities provided shall be in conformance with established and proven methods.

(A) Filters provided for turbidity and microbiological quality control shall be preceded by coagulant addition and shall conform to the requirements of subsection (d)(11) of this section. Filtration rates for iron and manganese removal, regardless of the media or type of filter, shall be based on a maximum rate of five gallons per minute per square foot (gpm/sq ft).

(B) The removal of iron and manganese may not be required if it can be demonstrated that these metals can be sequestered so that the discoloration problems they cause do not exist in the distribution system.

(C) All processes involving exposure of the water to atmospheric contamination shall provide for subsequent disinfection of the water ahead of ground storage tanks. Likewise, all exposure of water to atmospheric contamination shall be accomplished in a manner such that insects, birds, and other foreign materials will be excluded from the water. Aerators and all other such openings shall be screened with 16-mesh or finer corrosion-resistant screen.

(D) If reverse osmosis or nanofiltration membrane systems are used, the design shall conform to the requirements in paragraph (9) of this subsection.

(3) Any proposed change in the extent of water treatment required will be determined on the basis of geological data, well construction features, nearby sources of contamination, and on qualitative and quantitative microbiological and chemical analyses.

(4) Appropriate laboratory facilities shall be provided for controls as well as to check the effectiveness of disinfection or any other treatment processes employed.

(5) All plant piping shall be constructed to minimize leakage.

(6) All groundwater systems shall provide sampling taps for raw water, treated water, and at a point representing water entering the distribution system at every entry point.

(7) Air release devices shall be installed in such a manner as to preclude the possibility of submergence or possible entrance of contaminants. In this respect, all openings to the atmosphere shall be covered with 16-mesh or finer corrosion-resistant screening material or an equivalent acceptable to the executive director.

(8) The executive director may require 4-log removal or inactivation of viruses based on raw water sampling results required by §290.116 of this title (relating to Groundwater Corrective Actions and Treatment Techniques).

(9) Reverse osmosis or nanofiltration membrane systems used for the treatment of primary and secondary contaminants defined in Subchapter F of this chapter (relating to Drinking Water Standards Governing Drinking Water Quality and Reporting Requirements for Public Water Systems), must meet the design criteria in subparagraphs (A) - (L) of this paragraph.

(A) The design for all reverse osmosis and nanofiltration membrane systems must be in accordance with the findings of the engineering report. Variations from the engineering report must be explained and shall not compromise public health. Minimum engineering report requirements are found in §290.39(e)(1) and (6) of this title (relating to General Provisions).

(B) The reverse osmosis and nanofiltration membrane systems must be designed to ensure adequate cleaning of the membrane system.

(C) The reverse osmosis or nanofiltration membrane systems must be designed to operate at flux rates which assure effective filtration at all times based on at least one of the following:

(i) manufacturer's computer models for new and end-of-life membranes;

(ii) site-specific pilot study;

(iii) comparable design data from an alternative site;

or

(iv) the manufacturer's allowable operating parameters, if the membrane unit's capacity is rated less than 300 gallons per minute (gpm).

(D) Pretreatment shall be provided such that the feed water quality to the membrane units shall meet the minimum allowable requirements of the membrane manufacturer. Pretreatment processes shall be sized correctly for the flow of the plant, and the components and chemicals used for pretreatment in contact with the water must conform to American National Standards Institute/NSF International (ANSI/NSF) Standard 60 for Drinking Water Treatment Chemicals or ANSI/NSF Standard 61 for Drinking Water System Components. Other pretreatment processes will be reviewed on an individual basis in accordance the innovative/alternate treatment requirements specified in subsection (g) of this section. Acceptable pretreatment techniques include:

(i) bags, cartridge filters or screens for particulate removal;

(ii) chemical addition that will not adversely affect the reverse osmosis or nanofiltration membrane;

(iii) filters for iron and manganese removal in accordance with paragraph (2)(A) of this subsection;

(iv) aeration or degasification; and

(v) ion exchange softening.

(E) The treatment plant must include post-treatment facilities for corrosivity control, re-mineralization and the removal of dissolved gases, such as carbon dioxide and hydrogen sulfide, if necessary to meet the system's water quality goals. The treatment must be sized correctly for the flow of the plant, and the components and chemicals used for treatment must conform to ANSI/NSF Standard 60 for Drinking Water Treatment Chemicals or ANSI/NSF Standard 61 for Drinking Water System Components.

(F) Pipes and pipe galleries shall meet the minimum requirements specified in subsection (d)(12) and (13) of this section.

(G) Each reverse osmosis or nanofiltration membrane unit shall be equipped to measure conductivity or total dissolved solids in the feed and the permeate water.

(H) Chemical storage and chemical feed facilities shall comply with subsection (f) of this section.

(I) Provide cross-connection protection for common piping used for cleaning and normal production modes.

(J) Provide flow meters on the pipes for feed, permeate, and concentrate water. Additional metering devices shall be provided as appropriate to monitor the flow rate through specific treatment processes. Metering devices shall be located to facilitate use and to assist in the determination of chemical dosages, the accumulation of water production data, and the operation of plant facilities.

(K) The water system must provide pressure measuring and recording devices before and after each membrane stage.

(L) The water system must provide equipment to monitor the temperature of the water. The temperature of the water must be measured using a thermometer or thermocouple with a minimum accuracy of plus or minus 0.5 degrees Celsius.

(c) Springs and other water sources.

(1) Water obtained from springs, infiltration galleries, wells in fissured areas, wells in carbonate rock formations, or wells that do not penetrate impermeable strata or any other source subject to surface or near surface contamination of recent origin shall be evaluated for the provision of treatment facilities. Minimum treatment shall consist of coagulation with direct filtration and adequate disinfection. In all cases, the treatment process shall be designed to achieve at least a 2-log removal of *Cryptosporidium* oocysts, a 3-log removal or inactivation of *Giardia* cysts, and a 4-log removal or inactivation of viruses before the water is supplied to any consumer. The executive director may require additional levels of treatment in cases of poor source water quality. Based on raw water monitoring results, the executive director may require additional levels of treatment for *Cryptosporidium* treatment as specified in §290.111 of this title (relating to Surface Water Treatment).

(A) Filters provided for turbidity and microbiological quality control shall conform to the requirements of subsection (d)(11) of this section.

(B) All processes involving exposure of the water to atmospheric contamination shall provide for subsequent disinfection of the water ahead of ground storage tanks. Likewise, all exposure of water to atmospheric contamination shall be accomplished in a manner such that insects, birds, and other foreign materials will be excluded from the water. Aerators and all other such openings shall be screened with 16-mesh or finer corrosion-resistant screen.

(2) Any proposed change in the extent of water treatment required will be determined on the basis of geological data, well con-

struction features, nearby sources of contamination, and qualitative and quantitative microbiological and chemical analyses.

(3) Appropriate laboratory facilities shall be provided for controls as well as for checking the effectiveness of disinfection or any other treatment processes employed.

(4) All plant piping shall be constructed to minimize leakage. No cross-connection or interconnection shall be permitted to exist between a conduit carrying potable water and another conduit carrying raw water or water in a prior stage of treatment.

(5) All systems using springs and other water sources shall provide sampling taps for raw water, treated water, and at a point representing water entering the distribution system at every entry point.

(6) Return of the decanted water or sludge to the treatment process shall be adequately controlled so that there will be a minimum of interference with the treatment process and shall conform to the applicable requirements of subsection (d)(3) of this section. Systems that do not comply with the provisions of subsection (d)(3) of this section commit a treatment technique violation and must notify their customers in accordance with the requirements of §290.122(b) of this title (relating to Public Notification).

(7) Air release devices on treated waterlines shall be installed in such a manner as to preclude the possibility of submergence or possible entrance of contaminants. In this respect, all openings to the atmosphere shall be covered with 16-mesh or finer corrosion-resistant screening material or an equivalent acceptable to the executive director.

(8) Reverse osmosis and nanofiltration membrane systems not provided for microbiological quality control shall conform to the requirements of subsection (b) of this section.

(d) Surface water.

(1) All water secured from surface sources shall be given complete treatment at a plant which provides facilities for pretreatment disinfection, taste and odor control, continuous coagulation, sedimentation, filtration, covered clearwell storage, and terminal disinfection of the water with chlorine or suitable chlorine compounds. In all cases, the treatment process shall be designed to achieve at least a 2-log removal of *Cryptosporidium* oocysts, a 3-log removal or inactivation of *Giardia* cysts, and a 4-log removal or inactivation of viruses before the water is supplied to any consumer. The executive director may require additional levels of treatment in cases of poor source water quality. Based on raw water monitoring results, the executive director may require additional levels of treatment for *Cryptosporidium* treatment as specified in §290.111 of this title.

(2) All plant piping shall be constructed so as to be thoroughly tight against leakage. No cross-connection or interconnection shall be permitted to exist in a filtration plant between a conduit carrying filtered or post-chlorinated water and another conduit carrying raw water or water in any prior stage of treatment.

(A) Vacuum breakers must be provided on each hose bibb within the plant facility.

(B) No conduit or basin containing raw water or any water in a prior stage of treatment shall be located directly above, or be permitted to have a single common partition wall with another conduit or basin containing finished water.

(C) Make-up water supply lines to chemical feeder solution mixing chambers shall be provided with an air gap or other acceptable backflow prevention device.

(D) Filters shall be located so that common walls will not exist between them and aerators, mixing and sedimentation basins or clearwells. This rule is not strictly applicable, however, to partitions open to view and readily accessible for inspection and repair.

(E) Filter-to-waste connections, if included, shall be provided with an air gap connection to waste.

(F) Air release devices on treated waterlines shall be installed in such a manner as to preclude the possibility of submergence or possible entrance of contaminants. In this respect, all openings to the atmosphere shall be covered with 16-mesh or finer corrosion-resistant screening material or an equivalent acceptable to the executive director.

(3) Return of the decanted water or solids to the treatment process shall be adequately controlled so that there will be a minimum of interference with the treatment process. Systems that do not comply with the provisions of this paragraph commit a treatment technique violation and must notify their customers in accordance with the requirements of §290.122(b) of this title.

(A) Unless the executive director has approved an alternate recycling location, spent backwash water and the liquids from sludge settling lagoons, spent backwash water tanks, sludge thickeners, and similar dewatering facilities shall be returned to the raw waterline upstream of the raw water sample tap and coagulant feed point. The blended recycled liquids shall pass through all of the major unit processes at the plant.

(B) Recycle facilities shall be designed to minimize the magnitude and impact of hydraulic surges that occur during the recycling process.

(C) Solids produced by dewatering facilities such as sludge lagoons, sludge thickeners, centrifuges, mechanical presses, and similar devices shall not be returned to the treatment plant without the prior approval of the executive director.

(4) Reservoirs for pretreatment or selective quality control shall be provided where complete treatment facilities fail to operate satisfactorily at times of maximum turbidities or other abnormal raw water quality conditions exist. Recreational activities at such reservoirs shall be prohibited.

(5) Flow-measuring devices shall be provided to measure the raw water supplied to the plant, the recycled decant water, the treated water used to backwash the filters, and the treated water discharged from the plant. Additional metering devices shall be provided as appropriate to monitor the flow rate through specific treatment processes. Metering devices shall be located to facilitate use and to assist in the determination of chemical dosages, the accumulation of water production data, and the operation of plant facilities.

(6) Chemical storage facilities shall comply with applicable requirements in subsection (f)(1) of this section.

(7) Chemical feed facilities shall comply with the applicable requirements in subsection (f)(2) of this section.

(8) Flash mixing equipment shall be provided.

(A) Plants with a design capacity greater than 3.0 million gallons per day (MGD) must provide at least one hydraulic mixing unit or at least two sets of mechanical flash mixing equipment designed to operate in parallel. Public water systems with other surface water treatment plants, interconnections with other systems, or wells that can meet the system's average daily demand are exempt from the requirement for redundant mechanical flash mixing equipment.

(B) Flash mixing equipment shall have sufficient flexibility to ensure adequate dispersion and mixing of coagulants and other chemicals under varying raw water characteristics and raw water flow rates.

(9) Flocculation equipment shall be provided.

(A) Plants with a design capacity greater than 3.0 MGD must provide at least two sets of flocculation equipment which are designed to operate in parallel. Public water systems with other surface water treatment plants, interconnections with other systems, or wells that can meet the system's average daily demand are exempt from the requirement for redundant flocculation equipment.

(B) Flocculation facilities shall be designed to provide adequate time and mixing intensity to produce a settleable floc under varying raw water characteristics and raw water flow rates.

(i) Flocculation facilities for straight-flow and up-flow sedimentation basins shall provide a minimum theoretical detention time of at least 20 minutes when operated at their design capacity. Flocculation facilities constructed prior to October 1, 2000, are exempt from this requirement if the settled water turbidity of each sedimentation basin remains below 10.0 nephelometric turbidity units and the treatment plant meets with turbidity requirements of §290.111 of this title.

(ii) The mixing intensity in multiple-stage flocculators shall decrease as the coagulated water passes from one stage to the next.

(C) Coagulated water or water from flocculators shall flow to sedimentation basins in such a manner as to prevent destruction of floc. Piping, flumes, and troughs shall be designed to provide a flow velocity of 0.5 to 1.5 feet per second. Gates, ports, and valves shall be designed at a maximum flow velocity of 4.0 feet per second in the transfer of water between units.

(10) Clarification facilities shall be provided.

(A) Plants with a design capacity greater than 3.0 MGD must provide at least two sedimentation basins or clarification units which are designed to operate in parallel. Public water systems with other surface water treatment plants, interconnections with other systems, or wells that can meet the system's average daily demand are exempt from the requirement for redundant sedimentation basins or clarification units.

(B) The inlet and outlet of clarification facilities shall be designed to prevent short-circuiting of flow or the destruction of floc.

(C) Clarification facilities shall be designed to remove flocculated particles effectively.

(i) When operated at their design capacity, basins for straight-flow or up-flow sedimentation of coagulated waters shall provide either a theoretical detention time of at least six hours in the flocculation and sedimentation chambers or a maximum surface overflow rate of 0.6 gpm/sq ft of surface area in the sedimentation chamber.

(ii) When operated at their design capacity, basins for straight-flow or up-flow sedimentation of softened waters shall provide either a theoretical detention time of at least 4.5 hours in the flocculation and sedimentation chambers or a maximum surface overflow rate of 1.0 gpm/sq ft of surface area in the sedimentation chamber.

(iii) When operated at their design capacity, sludge-blanket and solids-recirculation clarifiers shall provide either a theoretical detention time of at least two hours in the flocculation and sedimentation chambers or a maximum surface overflow rate of 1.0 gpm/sq ft in the settling chamber.

(iv) A side wall water depth of at least 12 feet shall be provided in clarification basins that are not equipped with mechanical sludge removal facilities.

(v) The effective length of a straight-flow sedimentation basin shall be at least twice its effective width.

(D) Clarification facilities shall be designed to prevent the accumulation of settled solids.

(i) At treatment plants with a single clarification basin, facilities shall be provided to drain the basin within six hours. In the event that the plant site topography is such that gravity draining cannot be realized, a permanently installed electric-powered pump station shall be provided to dewater the basin. Public water systems with other potable water sources that can meet the system's average daily demand are exempt from this requirement.

(ii) Facilities for sludge removal shall be provided by mechanical means or by hopper-bottomed basins with valves capable of complete draining of the units.

(11) Gravity or pressure type filters shall be provided.

(A) The use of pressure filters shall be limited to installations with a treatment capacity of less than 0.50 MGD.

(B) Filtration facilities shall be designed to operate at filtration rates which assure effective filtration at all times.

(i) The design capacity of gravity rapid sand filters shall not exceed a maximum filtration rate of 2.0 gpm/sq ft. At the beginning of filter runs for declining rate filters, a maximum filtration rate of 3.0 gpm/sq ft is allowed.

(ii) Where high-rate gravity filters are used, the design capacity shall not exceed a maximum filtration rate of 5.0 gpm/sq ft. At the beginning of filter runs for declining rate filters, a maximum filtration rate of 6.5 gpm/sq ft is allowed.

(iii) The design capacity of pressure filters shall not exceed a maximum filtration rate of 2.0 gpm/sq ft with the largest filter off-line

(iv) Except as provided in clause (vi) of this subparagraph, any surface water treatment plant that provides, or is being designed to provide, less than 7.5 MGD must be able to meet either the maximum daily demand or the minimum required 0.6 gpm per connection, whichever is larger, with all filters on-line.

(v) Any surface water treatment plant that provides, or is being designed to provide, 7.5 MGD or more must be able to meet either the maximum daily demand or the minimum required 0.6 gpm per connection, whichever is larger, with the largest filter off-line.

(vi) Any surface water treatment plant that uses pressure filters must be able to meet either the maximum daily demand or the minimum required 0.6 gpm per connection, whichever is larger, with the largest filter off-line.

(C) The depth and condition of the media and support material shall be sufficient to provide effective filtration.

(i) The filtering material shall conform to American Water Works Association (AWWA) standards and be free from clay, dirt, organic matter, and other impurities.

(ii) The grain size distribution of the filtering material shall be as prescribed by AWWA standards.

(iii) The depth of filter sand, anthracite, granular activated carbon, or other filtering materials shall be 24 inches or greater

and provide an L/d ratio, as defined in §290.38 of this title (relating to Definitions), of at least 1,000.

(I) Rapid sand filters typically contain a minimum of eight inches of fine sand with an effective size of 0.35 to 0.45 millimeter (mm), eight inches of medium sand with an effective size of 0.45 to 0.55 mm, and eight inches of coarse sand with an effective size of 0.55 to 0.65 mm. The uniformity coefficient of each size range should not exceed 1.6.

(II) High-rate dual media filters typically contain a minimum of 12 inches of sand with an effective size of 0.45 to 0.55 mm and 24 inches of anthracite with an effective size of 0.9 to 1.1 mm. The uniformity coefficient of each material should not exceed 1.6.

(III) High-rate multi-media filters typically contain a minimum of three inches of garnet media with an effective size of 0.2 to 0.3 mm, nine inches of sand with an effective size of 0.5 to 0.6 mm, and 24 inches of anthracite with an effective size of 0.9 to 1.1 mm. The uniformity coefficient of each size range should not exceed 1.6.

(IV) High-rate mono-media anthracite or granular activated carbon filters typically contain a minimum of 48 inches of anthracite or granular activated carbon with an effective size of 1.0 to 1.2 mm. The uniformity coefficient of each size range should not exceed 1.6.

(iv) Under the filtering material, at least 12 inches of support gravel shall be placed varying in size from 1/16 inch to 2.5 inches. The gravel may be arranged in three to five layers such that each layer contains material about twice the size of the material above it. Other support material may be approved on an individual basis.

(D) The filter shall be provided with facilities to regulate the filtration rate.

(i) With the exception of declining rate filters, each filter unit shall be equipped with a manually adjustable rate-of-flow controller with rate-of-flow indication or flow control valves with indicators.

(ii) Each declining rate filter shall be equipped with a rate-of-flow limiting device or an adjustable flow control valve with a rate-of-flow indicator.

(iii) The effluent line of each filter installed after January 1, 1996, must be equipped with a slow opening valve or another means of automatically preventing flow surges when the filter begins operation.

(E) The filters shall be provided with facilities to monitor the performance of the filter. Monitoring devices shall be designed to provide the ability to measure and record turbidity as required by §290.111 of this title.

(i) Each filter shall be equipped with a sampling tap so that the effluent turbidity of the filter can be individually monitored.

(ii) Each filter operated by a public water system that serves fewer than 10,000 people shall be equipped with an on-line turbidimeter and recorder which will allow the operator to measure and record the turbidity at 15-minute intervals. The executive director may allow combined filter effluent monitoring in lieu of individual filter effluent monitoring under the following conditions:

(I) The public water system has only two filters that were installed prior to October 1, 2000, and were never equipped with individual on-line turbidimeters and recorders; and

(II) The plant is equipped with an on-line turbidimeter and recorder which will allow the operator to measure and record the turbidity level of the combined filter effluent at a location prior to clearwell storage at 15-minute intervals.

(iii) Each filter operated by a public water system that serves at least 10,000 people shall be equipped with an on-line turbidimeter and recorder which will allow the operator to measure and record the turbidity at 15-minute intervals.

(iv) Each filter installed after October 1, 2000, shall be equipped with an on-line turbidimeter and recorder which will allow the operator to determine the turbidity at 15-minute intervals.

(v) Each filter unit that is not equipped with an on-line turbidimeter and recorder shall be equipped with a device to indicate loss of head through the filter. In lieu of loss-of-head indicators, declining rate filter units may be equipped with rate-of-flow indicators.

(F) Filters shall be designed to ensure adequate cleaning during the backwash cycle.

(i) Only filtered water shall be used to backwash the filters. This water may be supplied by elevated wash water tanks, by the effluent of other filters, or by pumps which take suction from the clearwell and are provided for backwashing filters only. For installations having a treatment capacity no greater than 150,000 gallons per day, water for backwashing may be secured directly from the distribution system if proper controls and rate-of-flow limiters are provided.

(ii) The rate of filter backwashing shall be regulated by a rate-of-flow controller or flow control valve.

(iii) The rate of flow of backwash water shall not be less than 20 inches vertical rise per minute (12.5 gpm/sq ft) and usually not more than 35 inches vertical rise per minute (21.8 gpm/sq ft).

(iv) The backwash facilities shall be capable of expanding the filtering bed during the backwash cycle.

(I) For facilities equipped with air scour, the backwash facilities shall be capable of expanding the filtering bed at least 15% during the backwash cycle.

(II) For mixed-media filters without air scour, the backwash facilities shall be capable of expanding the filtering bed at least 25% during the backwash cycle.

(III) For mono-media sand filters without air scour, the backwash facilities shall be capable of expanding the filtering bed at least 40% during the backwash cycle.

(v) The filter freeboard in inches shall exceed the wash rate in inches of vertical rise per minute.

(vi) When used, surface filter wash systems shall be installed with an atmospheric vacuum breaker or a reduced pressure principle backflow assembly in the supply line. If an atmospheric vacuum breaker is used, it shall be installed in a section of the supply line through which all the water passes and which is located above the overflow level of the filter.

(vii) Gravity filters installed after January 1, 1996, shall be equipped with air scour backwash or surface wash facilities.

(G) Each filter installed after October 1, 2000, shall be equipped with facilities that allow the filter to be completely drained without removing other filters from service.

(12) Pipe galleries shall provide ample working room, good lighting, and good drainage provided by sloping floors, gutters,

and sumps. Adequate ventilation to prevent condensation and to provide humidity control is also required.

(13) The identification of influent, effluent, waste back-wash, and chemical feed lines shall be accomplished by the use of labels or various colors of paint. Where labels are used, they shall be placed along the pipe at no greater than five-foot intervals. Color coding must be by solid color or banding. If bands are used, they shall be placed along the pipe at no greater than five-foot intervals.

(A) A plant that is built or repainted after October 1, 2000, must use the following color code. The color code to be used in labeling pipes is as follows:

Figure: 30 TAC §290.42(d)(13)(A) (No change.)

(B) A plant that was repainted before October 1, 2000, may use an alternate color code. The alternate color code must provide clear visual distinction between process streams.

(C) The system must maintain clear, current documentation of its color code in a location easily accessed by all personnel.

(14) All surface water treatment plants shall provide sampling taps for raw, settled, individual filter effluent, and clearwell discharge. Additional sampling taps shall be provided as appropriate to monitor specific treatment processes.

(15) An adequately equipped laboratory shall be available locally so that daily microbiological and chemical tests can be conducted.

(A) For plants serving 25,000 persons or more, the local laboratory used to conduct the required daily microbiological analyses must be accredited by the executive director to conduct coliform analyses.

(B) For plants serving populations of less than 25,000, the facilities for making microbiological tests may be omitted if the required microbiological samples can be submitted to a laboratory accredited by the executive director on a timely basis.

(C) All surface water treatment plants shall be provided with equipment for making at least the following determinations:

- (i) pH;
- (ii) temperature;
- (iii) disinfectant residual;
- (iv) alkalinity;
- (v) turbidity;
- (vi) jar tests for determining the optimum coagulant

dose; and

(vii) other tests deemed necessary to monitor specific water quality problems or to evaluate specific water treatment processes.

(D) An amperometric titrator with platinum-platinum electrodes shall be provided at all surface water treatment plants that use chlorine dioxide.

(E) Each surface water treatment plant that uses sludge-blanket clarifiers shall be equipped with facilities to monitor the depth of the sludge blanket.

(F) Each surface water treatment plant that uses solids-recirculation clarifiers shall be equipped with facilities to monitor the solids concentration in the slurry.

(16) Each surface water treatment plant shall be provided with a computer and software for recording performance data, maintaining records, and submitting reports to the executive director. The executive director may allow a water system to locate the computer at a site other than the water treatment plant only if performance data can be reliably transmitted to the remote location on a real-time basis, the plant operator has access to the computer at all times, and performance data is readily accessible to agency staff during routine and special investigations.

(17) Reverse osmosis and nanofiltration membrane systems not provided for microbiological quality control shall conform to the requirements of subsection (b)(9) of this section.

(e) Disinfection.

(1) All water obtained from surface sources or groundwater sources that are under the direct influence of surface water must be disinfected in a manner consistent with the requirements of §290.110 of this title (relating to Disinfectant Residuals).

(2) All groundwater must be disinfected prior to distribution. The point of application must be ahead of the water storage tank(s) if storage is provided prior to distribution. Permission to use alternate disinfectant application points must be obtained in writing from the executive director.

(3) Disinfection equipment shall be selected and installed so that continuous and effective disinfection can be secured under all conditions.

(A) Disinfection equipment shall have a capacity at least 50% greater than the highest expected dosage to be applied at any time. It shall be capable of satisfactory operation under every prevailing hydraulic condition.

(B) Automatic proportioning of the disinfectant dosage to the flow rate of the water being treated shall be provided at plants where the treatment rate varies automatically and at all plants where the treatment rate varies more than 50% above or below the average flow. Manual control shall be permissible only if an operator is always on hand to make adjustments promptly.

(C) All disinfecting equipment in surface water treatment plants shall include at least one functional standby unit of each capacity for ensuring uninterrupted operation. Common standby units are permissible but, generally, more than one standby unit must be provided because of the differences in feed rates or the physical state in which the disinfectants are being fed (solid, liquid, or gas).

(D) Facilities shall be provided for determining the amount of disinfectant used daily and the amount of disinfectant remaining for use.

(E) When used, solutions of calcium hypochlorite shall be prepared in a separate mixing tank and allowed to settle so that only a clear supernatant liquid is transferred to the hypochlorinator container.

(F) Provisions shall be made for both pretreatment disinfection and post-disinfection in all surface water treatment plants. Additional application points shall be installed if they are required to adequately control the quality of the treated water.

(G) The use of disinfectants other than free chlorine and chloramines will be considered on a case-by-case basis under the exception guidelines of §290.39(l) of this title. If water containing chloramines and water containing free chlorine are blended, then a case-by-case review under §290.39(l) of this title will be required.

(4) Systems that use chlorine gas must ensure that the risks associated with its use are limited as follows.

(A) When chlorine gas is used, a full-face self-contained breathing apparatus or supplied air respirator that meets Occupational Safety and Health Administration (OSHA) standards for construction and operation, and a small bottle of fresh ammonia solution (or approved equal) for testing for chlorine leakage shall be readily accessible outside the chlorinator room and immediately available to the operator in the event of an emergency.

(B) Housing for gas chlorination equipment and cylinders of chlorine shall be in separate buildings or separate rooms with impervious walls or partitions separating all mechanical and electrical equipment from the chlorine facilities. Housing shall be located above ground level as a measure of safety. Equipment and cylinders may be installed on the outside of the buildings when protected from adverse weather conditions and vandalism.

(C) Adequate ventilation, which includes both high level and floor level screened vents, shall be provided for all enclosures in which gas chlorine is being stored or fed. Enclosures containing more than one operating 150-pound cylinder of chlorine shall also provide forced air ventilation which includes: screened and louvered floor level and high level vents; a fan which is located at and draws air in through the top vent and discharges to the outside atmosphere through the floor level vent; and a fan switch located outside the enclosure. Alternately, systems may install negative pressure ventilation as long as the facilities also have gas containment and treatment as prescribed by the current International Fire Code (IFC).

(5) Hypochlorination solution containers and pumps must be housed in a secure enclosure to protect them from adverse weather conditions and vandalism. The solution container top must be completely covered to prevent the entrance of dust, insects, and other contaminants.

(6) Where anhydrous ammonia feed equipment is utilized, it must be housed in a separate enclosure equipped with both high and low level ventilation to the outside atmosphere. The enclosure must be provided with forced air ventilation which includes: screened and louvered floor level and high level vents; a fan which is located at and draws air in through the floor vent and discharges through the top vent; and a fan switch located outside the enclosure. Alternately, systems may install negative pressure ventilation as long as the facilities also have gas containment and treatment as prescribed by the current IFC.

(7) Chloramine disinfection shall be performed in a manner which assures that the proper chlorine to ammonia (as nitrogen) ratio is achieved in order to maintain a monochloramine residual and limit nitrification.

(A) The order of chlorine and ammonia injection must be accomplished in a manner which allows inactivation of viruses and oxidation of cyanide.

(i) When chlorine is injected upstream of any other disinfectant, the ammonia injection point must be downstream of the chlorine injection point.

(ii) When chlorine and ammonia are added to distribution water that has a chloramine residual, ammonia should be added first.

(iii) When chlorine and ammonia are added to distribution water that has a free chlorine residual, chlorine should be added first.

(B) Mixing shall be provided to disperse chemicals.

(C) Sampling taps must be provided at locations that allow for chlorine and ammonia to be added to the water to form monochloramine as the primary chloramine species. These locations

must be listed in the system's monitoring plan as described in §290.121 of this title (relating to Monitoring Plans). Sample taps must be provided as follows:

(i) upstream of the chlorine or ammonia chemical injection point, whichever is furthest upstream;

(ii) between the addition of the chloramine chemicals at chloramination facilities submitted for plan review after December 31, 2015. For these facilities, an installation without this sample tap may be approved if an acceptable technical reason is described in the plan review documents. Technical reasons, such as disinfection byproduct control, must be supported by bench scale sampling results. Other technical reasons, such as membrane integrity, must be supported by documentation; and

(iii) at a point after mixing to be able to measure fully-formed monochloramine levels.

(D) When using chloramines, the feed and storage must be designed as described in subsection (f) of this section, regardless of water source.

(E) When using chloramines, the public water systems shall provide equipment for making at least the following determinations for purposes of complying with the requirements in §290.110 of this title:

(i) free ammonia (as nitrogen);

(ii) monochloramine;

(iii) total chlorine;

(iv) free chlorine; and

(v) nitrite and nitrate (both as nitrogen). The public water systems must either obtain equipment for measuring nitrite and nitrate or identify an accredited laboratory that can perform nitrite and nitrate analysis and can provide results to the public water systems within 48 hours of sample delivery.

(f) Water treatment plant chemical storage and feed facilities.

(1) Chemical storage facilities shall be designed to ensure a reliable supply of chemicals to the feeders, minimize the possibility and impact of accidental spills, and facilitate good housekeeping.

(A) Bulk storage facilities at the plant shall be adequate to store at least a 15-day supply of all chemicals needed to comply with minimum treatment technique and maximum contaminant level (MCL) requirements. The capacity of these bulk storage facilities shall be based on the design capacity of the treatment plant. However, the executive director may require a larger stock of chemicals based on local resupply ability.

(B) Day tanks shall be provided to minimize the possibility of severely overfeeding liquid chemicals from bulk storage facilities. Day tanks will not be required if adequate process control instrumentation and procedures are employed to prevent chemical overfeed incidents.

(C) Every chemical bulk storage facility and day tank shall have a label that identifies the facility's or tank's contents and a device that indicates the amount of chemical remaining in the facility or tank.

(D) Dry chemicals shall be stored off the floor in a dry room that is located above ground and protected against flooding or wetting from floors, walls, and ceilings.

(E) Bulk storage facilities and day tanks must be designed to minimize the possibility of leaks and spills.

(i) The materials used to construct bulk storage and day tanks must be compatible with the chemicals being stored and resistant to corrosion.

(ii) Except as provided in this clause, adequate containment facilities shall be provided for all liquid chemical storage tanks.

(I) Containment facilities for a single container or for multiple interconnected containers must be large enough to hold the maximum amount of chemical that can be stored with a minimum freeboard of six vertical inches or to hold 110% of the total volume of the container(s), whichever is less.

(II) Common containment for multiple containers that are not interconnected must be large enough to hold the volume of the largest container with a minimum freeboard of six vertical inches or to hold 110% of the total volume of the container(s), whichever is less.

(III) The materials used to construct containment structures must be compatible with the chemicals stored in the tanks.

(IV) Incompatible chemicals shall not be stored within the same containment structure.

(V) No containment facilities are required for hypochlorite solution containers that have a capacity of 55 gallons or less.

(VI) On a site-specific basis, the executive director may approve the use of double-walled tanks in lieu of separate containment facilities.

(F) Chemical transfer pumps and control systems must be designed to minimize the possibility of leaks and spills.

(G) Piping, pumps, and valves used for chemical storage and transfer must be compatible with the chemical being fed.

(2) Chemical feed and metering facilities shall be designed so that chemicals shall be applied in a manner which will maximize reliability, facilitate maintenance, and ensure optimal finished water quality.

(A) Each chemical feeder that is needed to comply with a treatment technique or MCL requirement shall have a standby or reserve unit. Common standby feeders are permissible, but generally, more than one standby feeder must be provided due to the incompatibility of chemicals or the state in which they are being fed (solid, liquid, or gas).

(B) Chemical feed equipment shall be sized to provide proper dosage under all operating conditions.

(i) Devices designed for determining the chemical feed rate shall be provided for all chemical feeders.

(ii) The capacity of the chemical feeders shall be such that accurate control of the dosage can be achieved at the full range of feed rates expected to occur at the facility.

(iii) Chemical feeders shall be provided with tanks for chemical dissolution when applicable.

(C) Chemical feeders, valves, and piping must be compatible with the chemical being fed.

(D) Chemical feed systems shall be designed to minimize the possibility of leaks and spills and provide protection against backpressure and siphoning.

(E) If enclosed feed lines are used, they shall be designed and installed so as to prevent clogging and be easily maintained.

(F) Dry chemical feeders shall be located in a separate room that is provided with facilities for dust control.

(G) Coagulant feed systems shall be designed so that coagulants are applied to the water prior to or within the mixing basins or chambers so as to permit their complete mixing with the water.

(i) Coagulant feed points shall be located downstream of the raw water sampling tap.

(ii) Coagulants shall be applied continuously during treatment plant operation.

(H) Chlorine feed units, ammonia feed units, and storage facilities shall be separated by solid, sealed walls.

(I) Chemical application points shall be provided to achieve acceptable finished water quality, adequate taste and odor control, corrosion control, and disinfection

(g) Other treatment processes. Innovative/alternate treatment processes will be considered on an individual basis, in accordance with §290.39(l) of this title. Where innovative/alternate treatment systems are proposed, the licensed professional engineer must provide pilot test data or data collected at similar full-scale operations demonstrating that the system will produce water that meets the requirements of Subchapter F of this chapter. Pilot test data must be representative of the actual operating conditions which can be expected over the course of the year. The executive director may require a pilot study protocol to be submitted for review and approval prior to conducting a pilot study to verify compliance with the requirements of §290.39(l) of this title and Subchapter F of this chapter. The executive director may require proof of a one-year manufacturer's performance warranty or guarantee assuring that the plant will produce treated water which meets minimum state and federal standards for drinking water quality.

(1) Package-type treatment systems and their components shall be subject to all applicable design criteria in this section.

(2) Bag and cartridge filtration systems or modules installed or replaced after April 1, 2012, and used for microbiological treatment, can receive up to 3.0-log *Giardia* removal credit, up to 2.0-log *Cryptosporidium* removal credit for individual bag or cartridge filters, and up to 2.5-log *Cryptosporidium* removal credit for bag or cartridge filters operated in series only if the cartridges or bags meet the criteria in subparagraphs (A) - (C) of this paragraph.

(A) The filter system must treat the entire plant flow.

(B) To be eligible for this credit, systems must receive approval from the executive director based on the results of challenge testing that is conducted according to the criteria established by 40 Code of Federal Regulations (CFR) §141.719(a) and the executive director.

(i) A factor of safety equal to 1.0-log for individual bag or cartridge filters and 0.5-log for bag or cartridge filters in series must be applied to challenge testing results to determine removal credit.

(ii) Challenge testing must be performed on full-scale bag or cartridge filters, and the associated filter housing or pressure vessel, that are identical in material and construction to the filters and housings the system will use for removal of *Cryptosporidium* and *Giardia*.

(iii) Bag or cartridge filters must be challenge tested in the same configuration that the system will use, either as individual filters or as a series configuration of filters.

(iv) Systems may use results from challenge testing conducted prior to January 5, 2006, if prior testing was consistent with 40 CFR §141.719, submitted by the system's licensed professional engineer, and approved by the executive director.

(v) If a previously tested filter is modified in a manner that could change the removal efficiency of the filter product line, additional challenge testing to demonstrate the removal efficiency of the modified filter must be conducted and results submitted to the executive director for approval.

(C) Pilot studies must be conducted using filters that will meet the requirements of this section.

(3) Membrane filtration systems or modules installed or replaced after April 1, 2012, and used for microbiological treatment, can receive *Cryptosporidium* and *Giardia* removal credit for membrane filtration only if the systems or modules meet the criteria in subparagraphs (A) - (F) of this paragraph.

(A) The membrane module used by the system must undergo challenge testing to evaluate removal efficiency. Challenge testing must be conducted according to the criteria established by 40 CFR §141.719(b)(2) and the executive director.

(i) All membrane module challenge test protocols and results, the protocol for calculating the representative Log Removal Value for each membrane module, the removal efficiency, calculated results of Membrane LRV_{C-Test}, and the non-destructive performance test with its Quality Control Release Value (QCRV) must be submitted to the executive director for review and approval prior to beginning a membrane filtration pilot study at a public water system.

(ii) Challenge testing must be conducted on either a full-scale membrane module identical in material and construction to the membrane modules to be used in the system's treatment facility, or a smaller-scale membrane module identical in material and similar in construction to the full-scale module if approved by the executive director.

(iii) Systems may use data from challenge testing conducted prior to January 5, 2006, if prior testing was consistent with 40 CFR §141.719, submitted by the system's licensed professional engineer, and approved by the executive director.

(iv) If a previously tested membrane is modified in a manner that could change the removal efficiency of the membrane product line or the applicability of the non-destructive performance test and associated QCRV, additional challenge testing to demonstrate the removal efficiency of the modified membrane and determine a new QCRV for the modified membrane must be conducted and results submitted to the executive director for approval.

(B) The membrane system must be designed to conduct and record the results of direct integrity testing in a manner that demonstrates a removal efficiency equal to or greater than the removal credit awarded to the membrane filtration system approved by the executive director and meets the requirements in clauses (i) and (ii) of this subparagraph.

(i) The design must provide for direct integrity testing of each membrane unit.

(ii) The design must provide direct integrity testing that has a resolution of 3 micrometers or less.

(iii) The design must provide direct integrity testing with sensitivity sufficient to verify the log removal credit approved by the executive director. Sensitivity is determined by the criteria in 40 CFR §141.719(b)(3)(iii).

(iv) The executive director may reduce the direct integrity testing requirements for membrane units.

(C) The membrane system must be designed to conduct and record continuous indirect integrity monitoring on each membrane unit. The turbidity of the water produced by each membrane unit must be measured using the Hach FilterTrak Method 10133. The executive director may approve the use of alternative technology to monitor the quality of the water produced by each membrane unit.

(D) The level of removal credit approved by the executive director shall not exceed the lower of:

(i) the removal efficiency demonstrated during challenge testing conducted under the conditions in subparagraph (A) of this paragraph, or

(ii) the maximum removal efficiency that can be verified through direct integrity testing used with the membrane filtration process under the conditions in subparagraph (B) of this paragraph.

(E) Pilot studies must be conducted using membrane modules that will meet the requirements of this section.

(F) Membrane systems must be designed so that membrane units' feed water, filtrate, backwash supply, waste and chemical cleaning piping shall have cross-connection protection to prevent chemicals from all chemical cleaning processes from contaminating other membrane units in other modes of operation. This may be accomplished by the installation of a double block and bleed valving arrangement, a removable spool system or other alternative methods approved by the executive director.

(4) Bag, cartridge or membrane filtration systems or modules installed or replaced before April 1, 2012, and used for microbiological treatment, can receive up to a 2.0-log removal credit for *Cryptosporidium* and up to a 3.0-log removal credit for *Giardia* based on site-specific pilot study results, design, operation, and reporting requirements.

(5) Ultraviolet (UV) light reactors used for microbiological inactivation can receive *Cryptosporidium*, *Giardia* and virus inactivation credit if the reactors meet the criteria in subparagraphs (A) - (C) of this paragraph.

(A) UV light reactors can receive inactivation credit only if they are located after filtration.

(B) In lieu of a pilot study, the UV light reactors must undergo validation testing to determine the operating conditions under which a UV reactor delivers the required UV dose. Validation testing must be conducted according to the criteria established by 40 CFR §141.720(d)(2) and the executive director.

(i) The validation study must include the following factors: UV absorbance of the water; lamp fouling and aging; measurement uncertainty of on-line sensors; UV dose distributions arising from the velocity profiles through the reactor; failure of UV lamps and other critical system components; inlet and outlet piping or channel configuration of the UV reactor; lamp and sensor locations; and other parameters determined by the executive director.

(ii) Validation testing must be conducted on a full-scale reactor that is essentially identical to the UV reactor(s) to be used by the system and using waters that are essentially identical in quality to the water to be treated by the UV reactor.

(C) The UV light reactor systems must be designed to monitor and record parameters to verify the UV reactors operation within the validated conditions approved by the executive director. The UV light reactor must be equipped with facilities to monitor and record

UV intensity as measured by a UV sensor, flow rate, lamp status, and other parameters designated by the executive director.

(h) Sanitary facilities for water works installations. Toilet and hand washing facilities provided in accordance with established standards of good public health engineering practices shall be available at all installations requiring frequent visits by operating personnel.

(i) Permits for waste discharges. Any discharge of wastewater and other plant wastes shall be in accordance with all applicable state and federal statutes and regulations. Permits for discharging wastes from water treatment processes shall be obtained from the commission, if necessary.

(j) Treatment chemicals and media. All chemicals and any additional or replacement process media used in treatment of water supplied by public water systems must conform to ANSI/NSF Standard 60 for Drinking Water Treatment Chemicals and ANSI/NSF Standard 61 for Drinking Water System Components. Conformance with these standards must be obtained by certification of the product by an organization accredited by ANSI.

(k) Safety.

(1) Safety equipment for all chemicals used in water treatment shall meet applicable standards established by the OSHA or Texas Hazard Communication Act, Texas Health and Safety Code, Chapter 502.

(2) Systems must comply with United States Environmental Protection Agency (EPA) requirements for Risk Management Plans.

(l) Plant operations manual. A thorough plant operations manual must be compiled and kept up-to-date for operator review and reference. This manual should be of sufficient detail to provide the operator with routine maintenance and repair procedures, with protocols to be utilized in the event of a natural or man-made catastrophe, as well as provide telephone numbers of water system personnel, system officials, and local/state/federal agencies to be contacted in the event of an emergency. If operating a reverse osmosis or nanofiltration membrane system, the manual must also include the system's configuration, baseline performance data, and any set point for membrane cleaning or replacement.

(m) Security. Each water treatment plant and all appurtenances thereof shall be enclosed by an intruder-resistant fence. The gates shall be locked during periods of darkness and when the plant is unattended. A locked building in the fence line may satisfy this requirement or serve as a gate.

(n) Corrosion control treatment. Systems must install any corrosion control or source water treatment required by §290.117(f) and (g) of this title (relating to Regulation of Lead and Copper), respectively. Such treatment must be designed and installed consistent with the requirements of this subchapter. The requirements of 40 CFR §141.82(i) and §141.83(b)(7) relating to EPA involvement in treatment determination are adopted by reference.

§290.43. *Water Storage.*

(a) Capacity. The minimum clearwell, storage tank, and pressure maintenance capacity shall be governed by the requirements in §290.45 of this title (relating to Minimum Water System Capacity Requirements).

(b) Location of clearwells, standpipes, and ground storage and elevated tanks.

(1) No public water supply elevated storage or ground storage tank shall be located within 500 feet of any municipal or industrial

sewage treatment plant or any land which is spray irrigated with treated sewage effluent or sludge disposal.

(2) Insofar as possible, clearwells or treated water tanks shall not be located under any part of any buildings and, when possible, shall be constructed partially or wholly above ground.

(3) No storage tank or clearwell located below ground level is allowed within 50 feet of a sanitary sewer or septic tank. However, if the sanitary sewers are constructed of 150 pounds per square inch (psi) pressure-rated pipe with pressure-tested, watertight joints as used in water main construction, the minimum separation distance is ten feet.

(4) No storage tank or clearwell located below ground level is allowed within 150 feet of a septic tank soil absorption system.

(c) Design and construction of clearwells, standpipes, ground storage tanks, and elevated tanks. All facilities for potable water storage shall be covered and designed, fabricated, erected, tested, and disinfected in strict accordance with current American Water Works Association (AWWA) standards and shall be provided with the minimum number, size and type of roof vents, man ways, drains, sample connections, access ladders, overflows, liquid level indicators, and other appurtenances as specified in these rules. The roof of all tanks shall be designed and erected so that no water ponds at any point on the roof and, in addition, no area of the roof shall have a slope of less than 0.75 inch per foot.

(1) Roof vents shall be gooseneck or roof ventilator and be designed by the engineer based on the maximum outflow from the tank. Vents shall be installed in strict accordance with current AWWA standards and shall be equipped with approved screens to prevent entry of animals, birds, insects and heavy air contaminants. Screens shall be fabricated of corrosion-resistant material and shall be 16-mesh or finer. Screens shall be securely clamped in place with stainless or galvanized bands or wires and shall be designed to withstand winds of not less than tank design criteria (unless specified otherwise by the engineer).

(2) All roof openings shall be designed in accordance with current AWWA standards. If an alternate 30-inch diameter access opening is not provided in a storage tank, the primary roof access opening shall not be less than 30 inches in diameter. Other roof openings required only for ventilating purposes during cleaning, repairing or painting operations shall be not less than 24 inches in diameter or as specified by the licensed professional engineer. An existing tank without a 30-inch in diameter access opening must be modified to meet this requirement when major repair or maintenance is performed on the tank. Each access opening shall have a raised curbing at least four inches in height with a lockable cover that overlaps the curbing at least two inches in a downward direction. Where necessary, a gasket shall be used to make a positive seal when the hatch is closed. All hatches shall remain locked except during inspections and maintenance.

(3) Overflows shall be designed in strict accordance with current AWWA standards. If the overflow terminates at any point other than the ground level, it shall be located near enough and at a position accessible from a ladder or the balcony for inspection purposes. The overflow(s) shall be sized to handle the maximum possible fill rate without exceeding the capacity of the overflow(s). The discharge opening of the overflow(s) shall be above the surface of the ground and shall not be subject to submergence. The discharge opening shall be covered with a gravity-hinged and weighted cover, an elastomeric duck-bill valve, or other approved device to prevent the entrance of insects and other nuisances. When the tank is not overflowing, the cover shall close automatically and fit tightly with no gap over 1/16 inch.

(4) All clearwells and water storage tanks shall have a liquid level indicator located at the tank site. The indicator can be a float

with a moving target, an ultrasonic level indicator, or a pressure gauge calibrated in feet of water. If an elevated tank or standpipe has a float with moving target indicator, it must also have a pressure indicator located at ground level. Pressure gauges must not be less than three inches in diameter and calibrated at not more than two-foot intervals. Remote reading gauges at the owner's treatment plant or pumping station will not eliminate the requirement for a gauge at the tank site unless the tank is located at the plant or station.

(5) Inlet and outlet connections shall be located so as to prevent short-circuiting or stagnation of water. Clearwells used for disinfectant contact time shall be appropriately baffled.

(6) Clearwells and potable water storage tanks shall be thoroughly tight against leakage, shall be located above the ground-water table, and shall have no walls in common with any other plant units containing water in the process of treatment. All associated appurtenances including valves, pipes, and fittings shall be tight against leakage.

(7) Each clearwell or potable water storage tank shall be provided with a means of removing accumulated silt and deposits at all low points in the bottom of the tank. Drains shall not be connected to any waste or sewage disposal system and shall be constructed so that they are not a potential agent in the contamination of the stored water. Each clearwell or potable water storage tank must be designed to drain the tank.

(8) All clearwells, ground storage tanks, standpipes, and elevated tanks shall be painted, disinfected, and maintained in strict accordance with current AWWA standards. However, no temporary coatings, wax grease coatings, or coating materials containing lead will be allowed. No other coatings will be allowed which are not approved for use (as a contact surface with potable water) by the United States Environmental Protection Agency, NSF International (NSF), or United States Food and Drug Administration. All newly installed coatings must conform to American National Standards Institute/NSF (ANSI/NSF) Standard 61 and must be certified by an organization accredited by ANSI.

(9) No tanks or containers shall be used to store potable water that have previously been used for any nonpotable purpose. Where a used tank is proposed for use, a letter from the previous owner or owners must be submitted to the executive director which states the use of the tank.

(10) Access manways in the riser pipe, shell area, access tube, bowl area or any other location opening directly into the water compartment shall be located in strict accordance with current AWWA standards. These openings shall not be less than 24 inches in diameter. However, in the case of a riser pipe or access tube of 36 inches in diameter or smaller, the access manway may be 18 inches times 24 inches with the vertical dimension not less than 24 inches. The primary access manway in the lower ring or section of a ground storage tank shall be not less than 30 inches in diameter. Where necessary, for any access manway which allows direct access to the water compartment, a gasket shall be used to make a positive seal when the access manway is closed.

(d) Design and construction of pressure (hydropneumatic) tanks. All hydropneumatic tanks must be located wholly above grade and must be of steel construction with welded seams except as provided in paragraph (8) of this subsection.

(1) Metal thickness for pressure tanks shall be sufficient to withstand the highest expected working pressures with a four to one factor of safety. Tanks of 1,000 gallons capacity or larger must meet the standards of the American Society of Mechanical Engineers (ASME)

Section VIII, Division 1 Codes and Construction Regulations and must have an access port for periodic inspections. An ASME name plate must be permanently attached to those tanks. Tanks installed before July 1, 1988, are exempt from the ASME coding requirement, but all new installations must meet this regulation. Exempt tanks can be relocated within a system but cannot be relocated to another system.

(2) All pressure tanks shall be provided with a pressure release device and an easily readable pressure gauge.

(3) Facilities shall be provided for maintaining the air-water-volume at the design water level and working pressure. Air injection lines must be equipped with filters or other devices to prevent compressor lubricants and other contaminants from entering the pressure tank. A device to readily determine air-water-volume must be provided for all tanks greater than 1,000 gallon capacity. Galvanized tanks which are not provided with the necessary fittings and which were installed before July 1, 1988 shall be exempt from this requirement.

(4) Protective paint or coating shall be applied to the inside portion of any pressure tank. The coating shall be as specified in subsection (c)(8) of this section.

(5) No pressure tank that has been used to store any material other than potable water may be used in a public water system. A letter from the previous owner or owners must be provided as specified in subsection (c)(9) of this section.

(6) Pressure tank installations should be equipped with slow closing valves and time delay pump controls to eliminate water hammer and reduce the chance of tank failure.

(7) All associated appurtenances including valves, pipes and fittings connected to pressure tanks shall be thoroughly tight against leakage.

(8) Where seamless fiberglass tanks are utilized, they shall not exceed 300 gallons in capacity.

(9) No more than three pressure tanks shall be installed at any one site without the prior approval of the executive director.

(e) Facility security. All potable water storage tanks and pressure maintenance facilities must be installed in a lockable building that is designed to prevent intruder access or enclosed by an intruder-resistant fence with lockable gates. Pedestal-type elevated storage tanks with lockable doors and without external ladders are exempt from this requirement. The gates and doors must be kept locked whenever the facility is unattended.

(f) Service pumps. Service pump installations taking suction from storage tanks shall provide automatic low water level cutoff devices to prevent damage to the pumps. The service pump circuitry shall also resume pumping automatically once the minimum water level is reached in the tank.

§290.44. *Water Distribution.*

(a) Design and standards. All potable water distribution systems including pump stations, mains, and both ground and elevated storage tanks, shall be designed, installed, and constructed in accordance with current American Water Works Association (AWWA) standards with reference to materials to be used and construction procedures to be followed. In the absence of AWWA standards, commission review may be based upon the standards of the American Society for Testing and Materials (ASTM), commercial, and other recognized standards utilized by licensed professional engineers.

(1) All newly installed pipes and related products must conform to American National Standards Institute/NSF International

(ANSI/NSF) Standard 61 and must be certified by an organization accredited by ANSI.

(2) All plastic pipes for use in public water systems must also bear the NSF International Seal of Approval (NSF-pw) and have an ASTM design pressure rating of at least 150 pounds per square inch (psi) or a standard dimension ratio of 26 or less.

(3) No pipe which has been used for any purpose other than the conveyance of drinking water shall be accepted or relocated for use in any public drinking water supply.

(4) Water transmission and distribution lines must be installed in accordance with the manufacturer's instructions. However, the top of the waterline must be located below the frost line and in no case shall the top of the waterline be less than 24 inches below ground surface.

(5) The hydrostatic leakage rate shall not exceed the amount allowed or recommended by AWWA formulas.

(b) Lead ban. The following provisions apply to the use of lead in plumbing.

(1) The use of pipes and pipe fittings that contain more than 0.25% lead or solders and flux that contains more than 0.2% lead is prohibited in the following circumstances:

(A) for installation or repair of any public water supply; and

(B) for installation or repair of any plumbing in a residential or nonresidential facility providing water for human consumption and connected to a public drinking water supply system.

(2) This requirement will be waived for lead joints that are necessary for repairs to cast iron pipe.

(3) The following are exempt from prohibitions on the use of lead pipes, solder, and flux:

(A) pipes, pipe fittings, plumbing fittings, or fixtures, including backflow preventers, that are used exclusively for nonpotable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where the water is not anticipated to be used for human consumption; or

(B) toilets, bidets, urinals, fill valves, flush-o-meter valves, tub fillers, shower valves, service saddles, fire hydrants or water distribution main gate valves that are two inches in diameter or larger.

(c) Minimum waterline sizes. 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.
Figure: 30 TAC §290.44(c) (No change.)

(d) Minimum pressure requirement. The system must be designed to maintain a minimum pressure of 35 psi at all points within the distribution network at flow rates of at least 1.5 gallons per minute per connection. When the system is intended to provide fire fighting capability, it must also be designed to maintain a minimum pressure of 20 psi under combined fire and drinking water flow conditions. The distribution system of public water systems that are also affected util-

ities must be designed to meet the requirements of §290.45(h) of this title (relating to Minimum Water System Capacity Requirements).

(1) Air release devices shall be installed in the distribution system at all points where topography or other factors may create air locks in the lines. Air release devices shall be installed in such a manner as to preclude the possibility of submergence or possible entrance of contaminants. In this respect, all openings to the atmosphere shall be covered with 16-mesh or finer, corrosion-resistant screening material or an acceptable equivalent.

(2) When service is to be provided to more than one pressure plane or when distribution system conditions and demands are such that low pressures develop, the method of providing increased pressure shall be by means of booster pumps taking suction from storage tanks. If an exception to this requirement is desired, the designing engineer must furnish for the executive director's review all planning material for booster pumps taking suction from other than a storage tank. The planning material must contain a full description of the supply to the point of suction, maximum demands on this part of the system, location of pressure recorders, safety controls, and other pertinent information. Where booster pumps are installed to take suction directly from the distribution system, a minimum residual pressure of 20 psi must be maintained on the suction line at all times. Such installations must be equipped with automatic pressure cut-off devices so that the pumping units become inoperative at a suction pressure of less than 20 psi. In addition, a continuous pressure recording device may be required at a predetermined suspected critical pressure point on the suction line in order to record the hydraulic conditions in the line at all times. If such a record indicates critical minimum pressures, less than 20 psi, adequate storage facilities must be installed with the booster pumps taking suction from the storage facility. Fire pumps used to maintain pressure on automatic sprinkler systems only for fire protection purposes are not considered as in-line booster pumps.

(3) Service connections that require booster pumps taking suction from the public water system lines must be equipped with automatic pressure cut-off devices so that the pumping units become inoperative at a suction pressure of less than 20 psi. Where these types of installations are necessary, the preferred method of pressure maintenance consists of an air gapped connection with a storage tank and subsequent repressurization facilities.

(4) Each community public water system shall provide accurate metering devices at each residential, commercial, or industrial service connection for the accumulation of water usage data. A water system that furnishes the services or commodity only to itself or its employees when that service or commodity is not resold to or used by others is exempt from this requirement.

(5) The system shall be provided with sufficient valves and blowoffs so that necessary repairs can be made without undue interruption of service over any considerable area and for flushing the system when required. The engineering report shall establish criteria for this design.

(6) The system shall be designed to afford effective circulation of water with a minimum of dead ends. All dead-end mains shall be provided with acceptable flush valves and discharge piping. All dead-end lines less than two inches in diameter will not require flush valves if they end at a customer service. Where dead ends are necessary as a stage in the growth of the system, they shall be located and arranged to ultimately connect the ends to provide circulation.

(e) Location of waterlines. The following rules apply to installations of waterlines, wastewater mains or laterals, and other conveyances/appurtenances identified as potential sources of contamination. Furthermore, all ratings specified shall be defined by ASTM or

AWWA standards unless stated otherwise. New mains, service lines, or laterals are those that are installed where no main, service line, or lateral previously existed, or where existing mains, service lines, or laterals are replaced with pipes of different size or material.

(1) When new potable water distribution lines are constructed, they shall be installed no closer than nine feet in all directions to wastewater collection facilities. All separation distances shall be measured from the outside surface of each of the respective pieces.

(2) Potable water distribution lines and wastewater mains or laterals that form parallel utility lines shall be installed in separate trenches.

(3) No physical connection shall be made between a drinking water supply and a sewer line. Any appurtenance shall be designed and constructed so as to prevent any possibility of sewage entering the drinking water system.

(4) Where the nine-foot separation distance cannot be achieved, the following criteria shall apply.

(A) New waterline installation - parallel lines.

(i) Where a new potable waterline parallels an existing, non-pressure or pressure rated wastewater main or lateral and the licensed professional engineer licensed in the State of Texas is able to determine that the existing wastewater main or lateral is not leaking, the new potable waterline shall be located at least two feet above the existing wastewater main or lateral, measured vertically, and at least four feet away, measured horizontally, from the existing wastewater main or lateral. Every effort shall be exerted not to disturb the bedding and backfill of the existing wastewater main or lateral.

(ii) Where a new potable waterline parallels an existing pressure-rated wastewater main or lateral and it cannot be determined by the licensed professional engineer if the existing line is leaking, the existing wastewater main or lateral shall be replaced with at least 150 psi pressure-rated pipe. The new potable waterline shall be located at least two feet above the new wastewater line, measured vertically, and at least four feet away, measured horizontally, from the replaced wastewater main or lateral.

(iii) Where a new potable waterline parallels a new wastewater main, the wastewater main or lateral shall be constructed of at least 150 psi pressure-rated pipe. The new potable waterline shall be located at least two feet above the wastewater main or lateral, measured vertically, and at least four feet away, measured horizontally, from the wastewater main or lateral.

(B) New waterline installation - crossing lines.

(i) Where a new potable waterline crosses above a wastewater main or lateral, the segment of the waterline pipe shall be centered over and must be perpendicular to the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. When crossing an existing wastewater main or lateral and it is disturbed or shows signs of leaking, the wastewater main or lateral shall be replaced for at least nine feet in both directions (18 feet total) with at least 150 psi pressure-rated pipe embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.

(I) The potable waterline shall be at least two feet above an existing, non-pressure rated wastewater main or lateral.

(II) The potable waterline shall be at least six inches above an existing, pressure-rated wastewater main or lateral.

(ii) Where a new potable waterline crosses a new, non-pressure rated wastewater main or lateral, the segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. The potable waterline shall be at least two feet above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end. The materials and method of installation shall conform to one of the following options:

(I) Within nine feet horizontally of either side of the waterline, the wastewater pipe and joints shall be constructed with pipe material having a minimum pressure rating of at least 150 psi. An absolute minimum vertical separation distance of two feet shall be provided. The wastewater main or lateral shall be located below the waterline.

(II) All sections of wastewater main or lateral within nine feet horizontally of the waterline shall be encased in an 18-foot (or longer) section of pipe. Flexible encasing pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The encasing pipe shall be centered on the waterline and shall be at least two nominal pipe diameters larger than the wastewater main or lateral. The space around the carrier pipe shall be supported at five-foot (or less) intervals with spacers or be filled to the springline with washed sand. Each end of the casing shall be sealed with watertight non-shrink cement grout or a manufactured watertight seal. An absolute minimum separation distance of six inches between the encasement pipe and the waterline shall be provided. The wastewater line shall be located below the waterline.

(iii) When a new waterline crosses under a wastewater main or lateral, the waterline shall be encased as described for wastewater mains or laterals in clause (ii) of this subparagraph or constructed of ductile iron or steel pipe with mechanical or welded joints as appropriate. An absolute minimum separation distance of one foot between the waterline and the wastewater main or lateral shall be provided. When a new waterline crosses under a wastewater main, the procedures in §217.53(d) of this title (relating to Pipe Design) must be followed.

(iv) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the center line of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.

(v) Where cement stabilized sand bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater

main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.

(5) Waterline and wastewater main manhole or lateral manhole or cleanout separation. The separation distance from a potable waterline to a wastewater main manhole or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant.

(6) Location of fire hydrants. Fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater main, wastewater lateral, or wastewater service line regardless of construction.

(7) Location of potable or raw water supply or suction lines. Suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line.

(8) Proximity of septic tank drainfields. Waterlines shall not be installed closer than ten feet to septic tank drainfields.

(f) Sanitary precautions and disinfection. Sanitary precautions, flushing, disinfection procedures, and microbiological sampling as prescribed in AWWA standards for disinfecting water mains shall be followed in laying waterlines.

(1) Pipe shall not be laid in water or placed where it can be flooded with water or sewage during its storage or installation.

(2) Special precautions must be taken when waterlines are laid under any flowing or intermittent stream or semipermanent body of water such as marsh, bay, or estuary. In these cases, the water main shall be installed in a separate watertight pipe encasement and valves must be provided on each side of the crossing with facilities to allow the underwater portion of the system to be isolated and tested to determine that there are no leaks in the underwater line. Alternately, and with the permission of the executive director, the watertight pipe encasement may be omitted.

(3) New mains shall be thoroughly disinfected in accordance with AWWA Standard C651 and then flushed and sampled before being placed in service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure. Sampling shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed waterline will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer.

(g) Interconnections.

(1) Each proposal for a direct connection between public drinking water systems under separate administrative authority will be considered on an individual basis.

(A) Documents covering the responsibility for sanitary control shall accompany the submitted planning material.

(B) Each water supply shall be of a safe, potable quality.

(2) Where an interconnection between systems is proposed to provide a second source of supply for one or both systems, the system being utilized as a second source of supply must be capable of

supplying a minimum of 0.35 gallons per minute per connection for the total number of connections in the combined distribution systems.

(h) Backflow, siphonage.

(1) No water connection from any public drinking water supply system shall be allowed to any residence or establishment where an actual or potential contamination hazard exists unless the public water facilities are protected from contamination.

(A) At any residence or establishment where an actual or potential contamination hazard exists, additional protection shall be required at the meter in the form of an air gap or backflow prevention assembly. The type of backflow prevention assembly required shall be determined by the specific potential hazard identified in §290.47(f) of this title (relating to Appendices).

(B) At any residence or establishment where an actual or potential contamination hazard exists and an adequate internal cross-connection control program is in effect, backflow protection at the water service entrance or meter is not required.

(i) An adequate internal cross-connection control program shall include an annual inspection and testing by a licensed backflow prevention assembly tester on all backflow prevention assemblies used for health hazard protection.

(ii) Copies of all such inspection and test reports must be obtained and kept on file by the water purveyor.

(iii) It will be the responsibility of the water purveyor to ensure that these requirements are met.

(2) No water connection from any public drinking water supply system shall be connected to any condensing, cooling, or industrial process or any other system of nonpotable usage over which the public water supply system officials do not have sanitary control, unless the said connection is made in accordance with the requirements of paragraph (1) of this subsection. Water from such systems cannot be returned to the potable water supply.

(3) Overhead bulk water dispensing stations must be provided with an air gap between the filling outlet hose and the receiving tank to protect against back siphonage and cross-contamination.

(4) All backflow prevention assemblies that are required according to this section and associated table located in §290.47(f) of this title shall be tested upon installation by a licensed backflow prevention assembly tester and certified to be operating within specifications. Backflow prevention assemblies which are installed to provide protection against health hazards must also be tested and certified to be operating within specifications at least annually by a licensed backflow prevention assembly tester.

(A) Backflow prevention assembly testers shall have completed an executive director-approved course on cross-connection control and backflow prevention assembly testing, pass an examination administered by the executive director, and hold a current license as a backflow prevention assembly tester.

(i) Backflow prevention assembly testers are qualified to test and repair assemblies on any domestic, commercial, industrial, or irrigation service.

(ii) Backflow prevention assembly testers may test and repair assemblies on firelines only if they are permanently employed by an Approved Fireline Contractor. The Texas Department of Insurance's State Fire Marshal's Office requires that any person performing maintenance on firelines must be employed by an Approved Fireline Contractor.

(B) Gauges used in the testing of backflow prevention assemblies shall be tested for accuracy annually in accordance with the University of Southern California's Manual of Cross-Connection Control or the AWWA's Recommended Practice for Backflow Prevention and Cross-Connection Control (AWWA Manual M14). Public water systems shall require testers to include test gauge serial numbers on the Backflow Prevention Assembly Test and Maintenance Report (commission Form 20700), and ensure testers have gauges tested for accuracy.

(C) A test report must be completed by the recognized backflow prevention assembly tester for each assembly tested. The signed and dated original must be submitted to the public water supplier for recordkeeping purposes. Any form which varies from the format specified in commission Form 20700 must be approved by the executive director prior to being placed in use.

(5) The use of a backflow prevention assembly at the service connection shall be considered as additional backflow protection and shall not negate the use of backflow protection on internal hazards as outlined and enforced by local plumbing codes.

(6) At any residence or establishment where there is no actual or potential contamination hazard, a backflow prevention assembly is not required.

(i) Water hauling. When drinking water is distributed by tank truck or trailer, it must be accomplished in the following manner.

(1) Water shall be obtained from an approved source.

(2) The equipment used to haul the water must be approved by the executive director and must be constructed as follows.

(A) The tank truck or trailer shall be used for transporting drinking water only and shall be labeled "Drinking Water." Tanks which have been used previously for purposes other than transporting potable liquids shall not be used for hauling drinking water.

(B) The tank shall be watertight and of an approved material which is impervious and easily cleaned and disinfected. Any paint or coating and any plastic or fiberglass materials used as contact surfaces must be approved by the United States Environmental Protection Agency, the United States Food and Drug Administration, or the NSF. Effective January 1, 1993, any newly installed surfaces shall conform to ANSI/NSF Standard 61 and must be certified by an organization accredited by ANSI.

(C) The tank shall have a manhole and a manhole cover which overlaps the raised manhole opening by a minimum of two inches and terminates in a downward direction. The cover shall fit firmly on the manhole opening and shall be kept locked.

(D) The tank shall have a vent which is faced downward and located to minimize the possibility of drawing contaminants into the stored water. The vent must be screened with 16-mesh or finer corrosion-resistant material.

(E) Connections for filling and emptying the tank shall be properly protected to prevent the possible entrance of contamination. These openings must be provided with caps and keeper chains.

(F) A drain shall be provided which will completely empty the tank for cleaning or repairs.

(G) When a pump is used to transfer the water from the tank, the pump shall be permanently mounted with a permanent connection to the tank. The discharge side of the pump shall be properly protected between uses by a protective cap and keeper chain.

(H) Hoses used for the transfer of drinking water to and from the tank shall be used only for that purpose and labeled for drinking water only. The hoses shall conform to ANSI/NSF Standard 61 and must be certified by an entity recognized by the commission. Hoses and related appurtenances must be cleaned and disinfected on a regular basis during prolonged use or before start-up during intermittent use. Hoses must be properly stored between uses and must be provided with caps and keeper chains or have the ends connected together.

(I) The tank shall be disinfected monthly and at any time that contamination is suspected.

(J) At least one sample per month from each tank shall be collected and submitted for microbiological analysis to one of the commission's approved laboratories for each month of operation.

(K) A minimum free chlorine residual of 0.5 milligrams per liter (mg/L) or, if chloramines are used as the primary disinfectant, a chloramine residual of 1.0 mg/L (measured as total chlorine) shall be maintained in the water being hauled. Chlorine or chlorine containing compounds may be added on a "batch" basis to maintain the required residual.

(L) Operational records detailing the amount of water hauled, purchases, microbiological sampling results, chlorine residual readings, dates of disinfection, and source of water shall be maintained.

(j) If a structure is connected to a public water supply system and has a rainwater harvesting system, the structure must have appropriate cross-connection safeguards in accordance with subsection (h)(1) of this section.

(1) A privately owned rainwater harvesting system with a capacity of more than 500 gallons that is connected to a public water system for a back-up supply shall have a backflow prevention assembly or an air gap installed at the storage facility for the harvested rainwater to ensure physical separation between the rainwater harvesting system and the public water system.

(2) At each residence or facility where water from a rainwater harvesting system is used for potable purposes and there is a connection to a public water system, the public water system shall ensure that the rainwater harvesting system is installed and maintained by a master plumber or journeyman plumber licensed by the Texas State Board of Plumbing Examiners and who holds an endorsement issued by the Texas State Board of Plumbing Examiners as a Water Supply Protection Specialist.

(3) A person who intends to connect a rainwater harvesting system to a public water system must give written notice of that intention to the municipality or the owner or operator of the public water system in which the rainwater harvesting system is located.

(4) The public water system used as a back-up supply for the rainwater harvesting system may be connected only to the water storage tank and may not be connected to the plumbing of a structure.

§290.46. Minimum Acceptable Operating Practices for Public Drinking Water Systems.

(a) General. When a public drinking water supply system is to be established, plans shall be submitted to the executive director for review and approval prior to the construction of the system. All public water systems are to be constructed in conformance with the requirements of this subchapter and maintained and operated in accordance with the following minimum acceptable operating practices. Owners and operators shall allow entry to members of the commission and employees and agents of the commission onto any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to public water systems in the state including

the required elements of a sanitary survey as defined in §290.38 of this title (relating to Definitions). Members, employees, or agents acting under this authority shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials.

(b) Microbiological. Submission of samples for microbiological analysis shall be as required by Subchapter F of this chapter (relating to Drinking Water Standards Governing Drinking Water Quality and Reporting Requirements for Public Water Systems). Microbiological samples may be required by the executive director for monitoring purposes in addition to the routine samples required by the drinking water standards. These samples shall be submitted to an accredited laboratory. (A list of the accredited laboratories can be obtained by contacting the executive director.) The samples shall be submitted to the executive director in a manner prescribed by the executive director.

(c) Chemical. Samples for chemical analysis shall be submitted as directed by the executive director.

(d) Disinfectant residuals and monitoring. A disinfectant residual must be continuously maintained during the treatment process and throughout the distribution system.

(1) Disinfection equipment shall be operated and monitored in a manner that will assure compliance with the requirements of §290.110 of this title (relating to Disinfectant Residuals).

(2) The disinfection equipment shall be operated to maintain the following minimum disinfectant residuals in each finished water storage tank and throughout the distribution system at all times:

(A) a free chlorine residual of 0.2 milligrams per liter (mg/L); or

(B) a chloramine residual of 0.5 mg/L (measured as total chlorine) for those systems that distribute chloraminated water.

(e) Operation by trained and licensed personnel. Except as provided in paragraph (1) of this subsection, the production, treatment, and distribution facilities at the public water system must be operated at all times under the direct supervision of a water works operator who holds an applicable, valid license issued by the executive director.

(1) Transient noncommunity public water systems are exempt from the requirements of this subsection if they use only groundwater or purchase treated water from another public water system.

(2) All public water systems that are subject to the provisions of this subsection shall meet the following requirements.

(A) Public water systems shall not allow new or repaired production, treatment, storage, pressure maintenance, or distribution facilities to be placed into service without the prior guidance and approval of a licensed water works operator.

(B) Public water systems shall ensure that their operators are trained regarding the use of all chemicals used in the water treatment plant. Training programs shall meet applicable standards established by the Occupational Safety and Health Administration or the Texas Hazard Communication Act, Texas Health and Safety Code, Chapter 502.

(C) Public water systems using chlorine dioxide shall place the operation of the chlorine dioxide facilities under the direct supervision of a licensed operator who has a Class "C" or higher license.

(D) Effective September 1, 2016, reverse osmosis or nanofiltration membrane systems must have operators that have successfully completed at least one executive director-approved training course or event specific to the operations and maintenance of reverse osmosis or nanofiltration membrane treatment.

(3) Systems that only purchase treated water shall meet the following requirements in addition to the requirements contained in paragraph (2) of this subsection.

(A) Purchased water systems serving no more than 250 connections must employ an operator who holds a Class "D" or higher license.

(B) Purchased water systems serving more than 250 connections, but no more than 1,000 connections, must employ an operator who holds a Class "C" or higher license.

(C) Purchased water systems serving more than 1,000 connections must employ at least two operators who hold a Class "C" or higher license and who each work at least 16 hours per month at the public water system's treatment or distribution facilities.

(4) Systems that treat groundwater and do not treat surface water or groundwater that is under the direct influence of surface water shall meet the following requirements in addition to the requirements contained in paragraph (2) of this subsection.

(A) Groundwater systems serving no more than 250 connections must employ an operator with a Class "D" or higher license.

(B) Groundwater systems serving more than 250 connections, but no more than 1,000 connections, must employ an operator with a Class "C" or higher groundwater license.

(C) Groundwater systems serving more than 1,000 connections must employ at least two operators who hold a Class "C" or higher groundwater license and who each work at least 16 hours per month at the public water system's production, treatment, or distribution facilities.

(5) Systems that treat groundwater that is under the direct influence of surface water must meet the following requirements in addition to the requirements contained in paragraph (2) of this subsection.

(A) Systems which serve no more than 1,000 connections and utilize cartridge or membrane filters must employ an operator who holds a Class "C" or higher groundwater license and has completed a four-hour training course on monitoring and reporting requirements or who holds a Class "C" or higher surface water license and has completed the Groundwater Production course.

(B) Systems which serve more than 1,000 connections and utilize cartridge or membrane filters must employ at least two operators who meet the requirements of subparagraph (A) of this paragraph and who each work at least 24 hours per month at the public water system's production, treatment, or distribution facilities.

(C) Systems which serve no more than 1,000 connections and utilize coagulant addition and direct filtration must employ an operator who holds a Class "C" or higher surface water license and has completed the Groundwater Production course or who holds a Class "C" or higher groundwater license and has completed a Surface Water Production course. Effective January 1, 2007, the public water system must employ at least one operator who has completed the Surface Water Production I course and the Surface Water Production II course.

(D) Systems which serve more than 1,000 connections and utilize coagulant addition and direct filtration must employ at least two operators who meet the requirements of subparagraph (C) of this

paragraph and who each work at least 24 hours per month at the public water system's production, treatment, or distribution facilities. Effective January 1, 2007, the public water system must employ at least two operators who have completed the Surface Water Production I course and the Surface Water Production II course.

(E) Systems which utilize complete surface water treatment must comply with the requirements of paragraph (6) of this subsection.

(F) Each plant must have at least one Class "C" or higher operator on duty at the plant when it is in operation or the plant must be provided with continuous turbidity and disinfectant residual monitors with automatic plant shutdown and alarms to summon operators so as to ensure that the water produced continues to meet the commission's drinking water standards during periods when the plant is not staffed.

(6) Systems that treat surface water must meet the following requirements in addition to the requirements contained in paragraph (2) of this subsection.

(A) Surface water systems that serve no more than 1,000 connections must employ at least one operator who holds a Class "B" or higher surface water license. Part-time operators may be used to meet the requirements of this subparagraph if the operator is completely familiar with the design and operation of the plant and spends at least four consecutive hours at the plant at least once every 14 days and the system also employs an operator who holds a Class "C" or higher surface water license. Effective January 1, 2007, the public water system must employ at least one operator who has completed the Surface Water Production I course and the Surface Water Production II course.

(B) Surface water systems that serve more than 1,000 connections must employ at least two operators; one of the required operators must hold a Class "B" or higher surface water license and the other required operator must hold a Class "C" or higher surface water license. Each of the required operators must work at least 32 hours per month at the public water system's production, treatment, or distribution facilities. Effective January 1, 2007, the public water system must employ at least two operators who have completed the Surface Water Production I course and the Surface Water Production II course.

(C) Each surface water treatment plant must have at least one Class "C" or higher surface water operator on duty at the plant when it is in operation or the plant must be provided with continuous turbidity and disinfectant residual monitors with automatic plant shutdown and alarms to summon operators so as to ensure that the water produced continues to meet the commission's drinking water standards during periods when the plant is not staffed.

(D) Public water systems shall not allow Class "D" operators to adjust or modify the treatment processes at surface water treatment plant unless an operator who holds a Class "C" or higher surface license is present at the plant and has issued specific instructions regarding the proposed adjustment.

(f) Operating records and reports. Water systems must maintain a record of water works operation and maintenance activities and submit periodic operating reports.

(1) The public water system's operating records must be organized, and copies must be kept on file or stored electronically.

(2) The public water system's operating records must be accessible for review during inspections and be available to the executive director upon request.

(3) All public water systems shall maintain a record of operations.

(A) The following records shall be retained for at least two years:

(i) the amount of chemicals used:

(I) Systems that treat surface water or groundwater under the direct influence of surface water shall maintain a record of the amount of each chemical used each day.

(II) Systems that serve 250 or more connections or serve 750 or more people shall maintain a record of the amount of each chemical used each day.

(III) Systems that serve fewer than 250 connections, serve fewer than 750 people, and use only groundwater or purchased treated water shall maintain a record of the amount of each chemical used each week;

(ii) the volume of water treated and distributed:

(I) Systems that treat surface water or groundwater under the direct influence of surface water shall maintain a record of the amount of water treated and distributed each day.

(II) Systems that serve 250 or more connections or serve 750 or more people shall maintain a record of the amount of water distributed each day.

(III) Systems that serve fewer than 250 connections, serve fewer than 750 people, and use only groundwater or purchase treated water shall maintain a record of the amount of water distributed each week.

(IV) Systems that serve 250 or more connections or serve 750 or more people and also add chemicals or provide pathogen or chemical removal shall maintain a record of the amount of water treated each day.

(V) Systems that serve fewer than 250 connections, serve fewer than 750 people, use only groundwater or purchase treated water, and also add chemicals or provide pathogen or chemical removal shall maintain a record of the amount of water treated each week.

(iii) the date, location, and nature of water quality, pressure, or outage complaints received by the system and the results of any subsequent complaint investigation;

(iv) the dates that dead-end mains were flushed;

(v) the dates that storage tanks and other facilities were cleaned;

(vi) the maintenance records for water system equipment and facilities. For systems using reverse osmosis or nanofiltration, maintain records of each clean-in-place process including the date, duration, and procedure used for each event; and

(vii) for systems that do not employ full-time operators to meet the requirements of subsection (e) of this section, a daily record or a monthly summary of the work performed and the number of hours worked by each of the part-time operators used to meet the requirements of subsection (e) of this section.

(B) The following records shall be retained for at least three years:

(i) copies of notices of violation and any resulting corrective actions. The records of the actions taken to correct violations of primary drinking water regulations must be retained for at least three

years after the last action taken with respect to the particular violation involved;

(ii) copies of any public notice issued by the water system;

(iii) the disinfectant residual monitoring results from the distribution system;

(iv) the calibration records for laboratory equipment, flow meters, rate-of-flow controllers, on-line turbidimeters, and on-line disinfectant residual analyzers;

(v) the records of backflow prevention device programs;

(vi) the raw surface water monitoring results and source water monitoring plans required by §290.111 of this title (relating to Surface Water Treatment) must be retained for three years after bin classification required by §290.111 of this title;

(vii) notification to the executive director that a system will provide 5.5-log *Cryptosporidium* treatment in lieu of raw surface water monitoring;

(viii) except for those specified in subparagraphs (C)(iv) and (E)(i) of this paragraph, the results of all surface water treatment monitoring that are used to demonstrate log inactivation or removal;

(ix) free and total chlorine, monochloramine, ammonia, nitrite, and nitrate monitoring results if chloramines are used in the water system; and

(x) the records of treatment effectiveness monitoring for systems using reverse osmosis or nanofiltration membranes. Treatment effectiveness monitoring includes the parameters for determining when maintenance is required. Examples of parameters to be monitored include conductivity (or total dissolved solids) on each membrane unit, pressure differential across a membrane vessel, flow, flux, and water temperature. At a minimum, systems using reverse osmosis or nanofiltration membranes must monitor the conductivity (or total dissolved solids) of the feed and permeate water once per day.

(C) The following records shall be retained for a period of five years after they are no longer in effect:

(i) the records concerning a variance or exemption granted to the system;

(ii) Concentration Time (CT) studies for surface water treatment plants;

(iii) the Recycling Practices Report form and other records pertaining to site-specific recycle practices for treatment plants that recycle; and

(iv) the turbidity monitoring results and exception reports for individual filters as required by §290.111 of this title.

(D) The following records shall be retained for at least five years:

(i) the results of microbiological analyses;

(ii) the results of inspections (as required in subsection (m)(1) of this section) for all water storage and pressure maintenance facilities;

(iii) the results of inspections (as required by subsection (m)(2) of this section) for all pressure filters;

(iv) documentation of compliance with state approved corrective action plan and schedules required to be completed by groundwater systems that must take corrective actions;

(v) documentation of the reason for an invalidated fecal indicator source sample and documentation of a total coliform-positive sample collected at a location with conditions that could cause such positive samples in a distribution system;

(vi) notification to wholesale system(s) of a distribution coliform positive sample for consecutive systems using groundwater;

(vii) Consumer Confidence Report compliance documentation;

(viii) records of the lowest daily residual disinfectant concentration and records of the date and duration of any failure to maintain the executive director-approved minimum specified disinfectant residual for a period of more than four hours for groundwater systems providing 4-log treatment; and

(ix) records of executive director-specified compliance requirements for membrane filtration, records of parameters specified by the executive director for approved alternative treatment and records of the date and duration of any failure to meet the membrane operating, membrane integrity, or alternative treatment operating requirements for more than four hours for groundwater systems. Membrane filtration can only be used if it is approved by the executive director and if it can be properly validated.

(E) The following records shall be retained for at least ten years:

(i) copies of Monthly Operating Reports and any supporting documentation including turbidity monitoring results of the combined filter effluent;

(ii) the results of chemical analyses;

(iii) any written reports, summaries, or communications relating to sanitary surveys of the system conducted by the system itself, by a private consultant, or by the executive director shall be kept for a period not less than ten years after completion of the survey involved;

(iv) copies of the Customer Service Inspection reports required by subsection (j) of this section;

(v) copy of any Initial Distribution System Evaluation (IDSE) plan, report, approval letters, and other compliance documentation required by §290.115 of this title (relating to Stage 2 Disinfection Byproducts (TTHM and HAA5));

(vi) state notification of any modifications to an IDSE report;

(vii) copy of any 40/30 certification required by §290.115 of this title;

(viii) documentation of corrective actions taken by groundwater systems in accordance with §290.116 of this title (relating to Groundwater Corrective Actions and Treatment Techniques);

(ix) any monitoring plans required by §290.121(b) of this title (relating to Monitoring Plans); and

(x) records of the executive director-approved minimum specified disinfectant residual for groundwater systems providing 4-log treatment, including wholesale, consecutive, and mixed systems, regulated under §290.116(c) of this title.

(F) A public water system shall maintain records relating to lead and copper requirements under §290.117 of this title (relating to Regulation of Lead and Copper) for no less than 12 years. Any system subject to the requirements of §290.117 of this title shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, executive determinations, and any other information required by the executive director under §290.117 of this title. These records include, but are not limited to, the following items: tap water monitoring results including the location of each site and date of collection; certification of the volume and validity of first-draw-tap sample criteria via a copy of the laboratory analysis request form; where residents collected the sample; certification that the water system informed the resident of proper sampling procedures; the analytical results for lead and copper concentrations at each tap sample site; and designation of any substitute site not used in previous monitoring periods.

(G) A public water system shall maintain records relating to special studies and pilot projects, special monitoring, and other system-specific matters as directed by the executive director.

(4) Water systems shall submit routine reports and any additional documentation that the executive director may require to determine compliance with the requirements of this chapter.

(A) The reports must be submitted to the Texas Commission on Environmental Quality, Water Supply Division, MC 155, P.O. Box 13087, Austin, Texas 78711-3087 by the tenth day of the month following the end of the reporting period.

(B) The reports must contain all the information required by the drinking water standards and the results of any special monitoring tests which have been required.

(C) The reports must be completed in ink, typed, or computer-printed and must be signed by the licensed water works operator.

(5) All public water systems that are affected utilities must maintain the following records for as long as they are applicable to the system:

(A) An emergency preparedness plan approved by the executive director and a copy of the approval letter.

(B) All required operating and maintenance records for auxiliary power equipment, including periodic testing of the auxiliary power equipment under load and any associated automatic switch over equipment.

(C) Copies of the manufacturer's specifications for all generators that are part of the approved emergency preparedness plan.

(g) Disinfection of new or repaired facilities. Disinfection by or under the direction of water system personnel must be performed when repairs are made to existing facilities and before new facilities are placed into service. Disinfection must be performed in accordance with American Water Works Association (AWWA) requirements and water samples must be submitted to a laboratory approved by the executive director. The sample results must indicate that the facility is free of microbiological contamination before it is placed into service. When it is necessary to return repaired mains to service as rapidly as possible, doses may be increased to 500 mg/L and the contact time reduced to 1/2 hour.

(h) Calcium hypochlorite. A supply of calcium hypochlorite disinfectant shall be kept on hand for use when making repairs, setting meters, and disinfecting new mains prior to placing them in service.

(i) Plumbing ordinance. Public water systems must adopt an adequate plumbing ordinance, regulations, or service agreement with provisions for proper enforcement to insure that neither cross-connections nor other unacceptable plumbing practices are permitted (See §290.47(b) of this title (relating to Appendices)). Should sanitary control of the distribution system not reside with the purveyor, the entity retaining sanitary control shall be responsible for establishing and enforcing adequate regulations in this regard. The use of pipes and pipe fittings that contain more than 0.25% lead or solders and flux that contain more than 0.2% lead is prohibited for installation or repair of any public water supply and for installation or repair of any plumbing in a residential or nonresidential facility providing water for human consumption and connected to a public drinking water supply system. This requirement may be waived for lead joints that are necessary for repairs to cast iron pipe.

(j) Customer service inspections. A customer service inspection certificate shall be completed prior to providing continuous water service to new construction, on any existing service either when the water purveyor has reason to believe that cross-connections or other potential contaminant hazards exist, or after any material improvement, correction, or addition to the private water distribution facilities. Any customer service inspection certificate form which varies from the format found in commission Form 20699 must be approved by the executive director prior to being placed in use.

(1) Individuals with the following credentials shall be recognized as capable of conducting a customer service inspection certification.

(A) Plumbing Inspectors and Water Supply Protection Specialists licensed by the Texas State Board of Plumbing Examiners (TSBPE).

(B) Customer service inspectors who have completed a commission-approved course, passed an examination administered by the executive director, and hold current professional license as a customer service inspector.

(2) As potential contaminant hazards are discovered, they shall be promptly eliminated to prevent possible contamination of the water supplied by the public water system. The existence of a health hazard, as identified in §290.47(f) of this title, shall be considered sufficient grounds for immediate termination of water service. Service can be restored only when the health hazard no longer exists, or until the health hazard has been isolated from the public water system in accordance with §290.44(h) of this title (relating to Water Distribution).

(3) These customer service inspection requirements are not considered acceptable substitutes for and shall not apply to the sanitary control requirements stated in §290.102(a)(5) of this title (relating to General Applicability).

(4) A customer service inspection is an examination of the private water distribution facilities for the purpose of providing or denying water service. This inspection is limited to the identification and prevention of cross-connections, potential contaminant hazards, and illegal lead materials. The customer service inspector has no authority or obligation beyond the scope of the commission's regulations. A customer service inspection is not a plumbing inspection as defined and regulated by the TSBPE. A customer service inspector is not permitted to perform plumbing inspections. State statutes and TSBPE adopted rules require that TSBPE licensed plumbing inspectors perform plumbing inspections of all new plumbing and alterations or additions to existing plumbing within the municipal limits of all cities, towns, and villages which have passed an ordinance adopting one of the plumbing codes recognized by TSBPE. Such entities may stipulate that the customer service inspection be performed by the

plumbing inspector as a part of the more comprehensive plumbing inspection. Where such entities permit customer service inspectors to perform customer service inspections, the customer service inspector shall report any violations immediately to the local entity's plumbing inspection department.

(k) Interconnection. No physical connection between the distribution system of a public drinking water supply and that of any other water supply shall be permitted unless the other water supply is of a safe, sanitary quality and the interconnection is approved by the executive director.

(l) Flushing of mains. All dead-end mains must be flushed at monthly intervals. Dead-end lines and other mains shall be flushed as needed if water quality complaints are received from water customers or if disinfectant residuals fall below acceptable levels as specified in §290.110 of this title.

(m) Maintenance and housekeeping. The maintenance and housekeeping practices used by a public water system shall ensure the good working condition and general appearance of the system's facilities and equipment. The grounds and facilities shall be maintained in a manner so as to minimize the possibility of the harboring of rodents, insects, and other disease vectors, and in such a way as to prevent other conditions that might cause the contamination of the water.

(1) Each of the system's ground, elevated, and pressure tanks shall be inspected annually by water system personnel or a contracted inspection service.

(A) Ground and elevated storage tank inspections must determine that the vents are in place and properly screened, the roof hatches closed and locked, flap valves and gasketing provide adequate protection against insects, rodents, and other vermin, the interior and exterior coating systems are continuing to provide adequate protection to all metal surfaces, and the tank remains in a watertight condition.

(B) Pressure tank inspections must determine that the pressure release device and pressure gauge are working properly, the air-water ratio is being maintained at the proper level, the exterior coating systems are continuing to provide adequate protection to all metal surfaces, and the tank remains in watertight condition. Pressure tanks provided with an inspection port must have the interior surface inspected every five years.

(C) All tanks shall be inspected annually to determine that instrumentation and controls are working properly.

(2) When pressure filters are used, a visual inspection of the filter media and internal filter surfaces shall be conducted annually to ensure that the filter media is in good condition and the coating materials continue to provide adequate protection to internal surfaces.

(3) When cartridge filters are used, filter cartridges shall be changed at the frequency required by the manufacturer, or more frequently if needed.

(4) All water treatment units, storage and pressure maintenance facilities, distribution system lines, and related appurtenances shall be maintained in a watertight condition and be free of excessive solids.

(5) Basins used for water clarification shall be maintained free of excessive solids to prevent possible carryover of sludge and the formation of tastes and odors.

(6) Pumps, motors, valves, and other mechanical devices shall be maintained in good working condition.

(7) Reverse osmosis or nanofiltration membrane systems shall be cleaned, or replaced, in accordance with the allowable operat-

ing conditions of the manufacturer and shall be based on one or more of the following: increased salt passage, increased or decreased pressure differential, and/or change in normalized permeate flow.

(n) Engineering plans and maps. Plans, specifications, maps, and other pertinent information shall be maintained to facilitate the operation and maintenance of the system's facilities and equipment. The following records shall be maintained on file at the public water system and be available to the executive director upon request.

(1) Accurate and up-to-date detailed as-built plans or record drawings and specifications for each treatment plant, pump station, and storage tank shall be maintained at the public water system until the facility is decommissioned. As-built plans of individual projects may be used to fulfill this requirement if the plans are maintained in an organized manner.

(2) An accurate and up-to-date map of the distribution system shall be available so that valves and mains can be easily located during emergencies.

(3) Copies of well completion data such as well material setting data, geological log, sealing information (pressure cementing and surface protection), disinfection information, microbiological sample results, and a chemical analysis report of a representative sample of water from the well shall be kept on file for as long as the well remains in service.

(o) Filter backwashing at surface water treatment plants. Filters must be backwashed when a loss of head differential of six to ten feet is experienced between the influent and effluent loss of head gauges or when the turbidity level at the effluent of the filter reaches 1.0 nephelometric turbidity unit (NTU).

(p) Data on water system ownership and management. The agency shall be provided with information regarding water system ownership and management.

(1) When a water system changes ownership, a written notice of the transaction must be provided to the executive director. When applicable, notification shall be in accordance with Chapter 291 of this title (relating to Utility Regulations). Those systems not subject to Chapter 291 of this title shall notify the executive director of changes in ownership by providing the name of the current and prospective owner or responsible official, the proposed date of the transaction, and the address and phone number of the new owner or responsible official. The information listed in this paragraph and the system's public drinking water supply identification number, and any other information necessary to identify the transaction shall be provided to the executive director 120 days before the date of the transaction.

(2) On an annual basis, the owner of a public water system shall provide the executive director with a written list of all the operators and operating companies that the public water system employs. The notice shall contain the name, license number, and license class of each employed operator and the name and registration number of each employed operating company (See §290.47(d) of this title).

(q) Special precautions. Special precautions must be instituted by the water system owner or responsible official in the event of low distribution pressures (below 20 pounds per square inch (psi)), water outages, microbiological samples found to contain *Escherichia coli* or fecal coliform organisms, failure to maintain adequate chlorine residuals, elevated finished water turbidity levels, or other conditions which indicate that the potability of the drinking water supply has been compromised.

(1) Boil water notifications must be issued to the customers within 24 hours using the prescribed notification format as specified

in §290.47(c) of this title. A copy of this notice shall be provided to the executive director. Bilingual notification may be appropriate based upon local demographics. Once the boil water notification is no longer in effect, the customers must be notified in a manner similar to the original notice.

(2) The flowchart found in §290.47(e) of this title shall be used to determine if a boil water notification must be issued in the event of a loss of distribution system pressure. If a boil water notice is issued under this section, it shall remain in effect until water distribution pressures in excess of 20 psi can consistently be maintained, a minimum of 0.2 mg/L free chlorine residual or 0.5 mg/L chloramine residual (measured as total chlorine) is present throughout the system, and water samples collected for microbiological analysis are found negative for coliform organisms.

(3) A boil water notification shall be issued if the turbidity of the finished water produced by a surface water treatment plant exceeds 5.0 NTU. The boil water notice shall remain in effect until the water entering the distribution system has a turbidity level below 1.0 NTU, the distribution system has been thoroughly flushed, a minimum of 0.2 mg/L free chlorine residual or 0.5 mg/L chloramine residual (measured as total chlorine) is present throughout the system, and water samples collected for microbiological analysis are found negative for coliform organisms.

(4) Other protective measures may be required at the discretion of the executive director.

(r) Minimum pressures. All public water systems shall be operated to provide a minimum pressure of 35 psi throughout the distribution system under normal operating conditions. The system shall also be operated to maintain a minimum pressure of 20 psi during emergencies such as fire fighting. As soon as safe and practicable following the occurrence of a natural disaster, a public water system that is an affected utility shall maintain a minimum of 35 psi throughout the distribution system during an extended power outage.

(s) Testing equipment. Accurate testing equipment or some other means of monitoring the effectiveness of any chemical treatment or pathogen inactivation or removal processes must be used by the system.

(1) Flow-measuring devices and rate-of-flow controllers that are required by §290.42(b) and (d) of this title (relating to Water Treatment) shall be calibrated at least once every 12 months. Well meters required by §290.41(c)(3)(N) of this title (relating to Water Sources) shall be calibrated at least once every three years.

(2) Laboratory equipment used for compliance testing shall be properly calibrated.

(A) pH meters shall be properly calibrated.

(i) Benchtop pH meters shall be calibrated according to manufacturers specifications at least once each day.

(ii) The calibration of benchtop pH meters shall be checked with at least one buffer each time a series of samples is run, and if necessary, recalibrated according to manufacturers specifications.

(iii) On-line pH meters shall be calibrated according to manufacturer specifications at least once every 30 days.

(iv) The calibration of on-line pH meters shall be checked at least once each week with a primary standard or by comparing the results from the on-line unit with the results from a properly calibrated benchtop unit. If necessary, the on-line unit shall be recalibrated with primary standards.

(B) Turbidimeters shall be properly calibrated.

(i) Benchtop turbidimeters shall be calibrated with primary standards at least once every 90 days. Each time the turbidimeter is calibrated with primary standards, the secondary standards shall be restandardized.

(ii) The calibration of benchtop turbidimeters shall be checked with secondary standards each time a series of samples is tested, and if necessary, recalibrated with primary standards.

(iii) On-line turbidimeters shall be calibrated with primary standards at least once every 90 days.

(iv) The calibration of on-line turbidimeters shall be checked at least once each week with a primary standard, a secondary standard, or the manufacturer's proprietary calibration confirmation device or by comparing the results from the on-line unit with the results from a properly calibrated benchtop unit. If necessary, the on-line unit shall be recalibrated with primary standards.

(C) Chemical disinfectant residual analyzers shall be properly calibrated.

(i) The accuracy of manual disinfectant residual analyzers shall be verified at least once every 90 days using chlorine solutions of known concentrations.

(ii) The accuracy of continuous disinfectant residual analyzers shall be checked at least once every seven days with a chlorine solution of known concentration or by comparing the results from the on-line analyzer with the result of approved benchtop method in accordance with §290.119 of this title (relating to Analytical Procedures).

(iii) If a disinfectant residual analyzer produces a result which is not within 15% of the expected value, the cause of the discrepancy must be determined and corrected and, if necessary, the instrument must be recalibrated.

(D) Analyzers used to determine the effectiveness of chloramination in §290.110(c)(5) of this title shall be properly verified in accordance with the manufacturer's recommendations every 90 days. These analyzers include monochloramine, ammonia, nitrite, and nitrate equipment used by the public water system.

(E) Ultraviolet (UV) light disinfection analyzers shall be properly calibrated.

(i) The accuracy of duty UV sensors shall be verified with a reference UV sensor monthly, according to the UV sensor manufacturer.

(ii) The reference UV sensor shall be calibrated by the UV sensor manufacturer on a yearly basis, or sooner if needed.

(iii) If used, the UV Transmittance (UVT) analyzer shall be calibrated weekly according to the UVT analyzer manufacturer specifications.

(F) Systems must verify the performance of direct integrity testing equipment in a manner and schedule approved by the executive director.

(G) Conductivity (or total dissolved solids) monitors and pressure instruments used for reverse osmosis and nanofiltration membrane systems shall be calibrated at least once every 12 months.

(H) Any temperature monitoring devices used for reverse osmosis and nanofiltration shall be verified and calibrated in accordance with the manufacturer's specifications.

(t) System ownership. All community water systems shall post a legible sign at each of its production, treatment, and storage facilities. The sign shall be located in plain view of the public and shall

provide the name of the water supply and an emergency telephone number where a responsible official can be contacted.

(u) **Abandoned wells.** Abandoned public water supply wells owned by the system must be plugged with cement according to 16 TAC Chapter 76 (relating to Water Well Drillers and Water Well Pump Installers). Wells that are not in use and are non-deteriorated as defined in those rules must be tested every five years or as required by the executive director to prove that they are in a non-deteriorated condition. The test results shall be sent to the executive director for review and approval. Deteriorated wells must be either plugged with cement or repaired to a non-deteriorated condition.

(v) **Electrical wiring.** All water system electrical wiring must be securely installed in compliance with a local or national electrical code.

(w) **Security.** All systems shall maintain internal procedures to notify the executive director by a toll-free reporting phone number immediately of the following events, if the event may negatively impact the production or delivery of safe and adequate drinking water:

- (1) an unusual or unexplained unauthorized entry at property of the public water system;
- (2) an act of terrorism against the public water system;
- (3) an unauthorized attempt to probe for or gain access to proprietary information that supports the key activities of the public water system;
- (4) a theft of property that supports the key activities of the public water system; or
- (5) a natural disaster, accident, or act that results in damage to the public water system.

(x) **Public safety standards.** This subsection only applies to a municipality with a population of 1,000,000 or more, with a public utility within its corporate limits; a municipality with a population of more than 36,000 and less than 41,000 located in two counties, one of which is a county with a population of more than 1.8 million; a municipality, including any industrial district within the municipality or its extraterritorial jurisdiction (ETJ), with a population of more than 7,000 and less than 30,000 located in a county with a population of more than 155,000 and less than 180,000; or a municipality, including any industrial district within the municipality or its ETJ, with a population of more than 11,000 and less than 18,000 located in a county with a population of more than 125,000 and less than 230,000.

(1) In this subsection:

(A) "Regulatory authority" means, in accordance with the context in which it is found, either the commission or the governing body of a municipality.

(B) "Public utility" means any person, corporation, cooperative corporation, affected county, or any combination of these persons or entities, other than a municipal corporation, water supply or sewer service corporation, or a political subdivision of the state, except an affected county, or their lessees, trustees, and receivers, owning or operating for compensation in this state equipment or facilities for the transmission, storage, distribution, sale, or provision of potable water to the public or for the resale of potable water to the public for any use or for the collection, transportation, treatment, or disposal of sewage or other operation of a sewage disposal service for the public, other than equipment or facilities owned and operated for either purpose by a municipality or other political subdivision of this state or a water supply or sewer service corporation, but does not include any person or corporation not otherwise a public utility that furnishes the

services or commodity only to itself or its employees or tenants as an incident of that employee service or tenancy when that service or commodity is not resold to or used by others.

(C) "Residential area" means:

(i) an area designated as a residential zoning district by a governing ordinance or code or an area in which the principal land use is for private residences;

(ii) a subdivision for which a plat is recorded in the real property records of the county and that contains or is bounded by public streets or parts of public streets that are abutted by residential property occupying at least 75% of the front footage along the block face; or

(iii) a subdivision a majority of the lots of which are subject to deed restrictions limiting the lots to residential use.

(D) "Industrial district" has the meaning assigned by Texas Local Government Code, §42.044, and includes an area that is designated by the governing body of a municipality as a zoned industrial area.

(2) When the regulatory authority is a municipality, it shall by ordinance adopt standards for installing fire hydrants in residential areas in the municipality. These standards must, at a minimum, follow current AWWA standards pertaining to fire hydrants and the requirements of §290.44(e)(6) of this title.

(3) When the regulatory authority is a municipality, it shall by ordinance adopt standards for maintaining sufficient water pressure for service to fire hydrants adequate to protect public safety in residential areas in the municipality. The standards specified in paragraph (4) of this subsection are the minimum acceptable standards.

(4) A public utility shall deliver water to any fire hydrant connected to the public utility's water system located in a residential area so that the flow at the fire hydrant is at least 250 gallons per minute for a minimum period of two hours while maintaining a minimum pressure of 20 psi throughout the distribution system during emergencies such as fire fighting. That flow is in addition to the public utility's maximum daily demand for purposes other than fire fighting.

(5) When the regulatory authority is a municipality, it shall adopt the standards required by this subsection within one year of the effective date of this subsection or within one year of the date this subsection first applies to the municipality, whichever occurs later.

(6) A public utility shall comply with the standards established by a municipality under both paragraphs (2) and (3) of this subsection within one year of the date the standards first apply to the public utility. If a municipality has failed to comply with the deadline required by paragraph (5) of this subsection, then a public utility shall comply with the standards specified in paragraphs (2) and (4) of this subsection within two years of the effective date of this subsection or within one year of the date this subsection first applies to the public utility, whichever occurs later.

(y) Fire hydrant flow standards.

(1) In this subsection:

(A) "Municipal utility" means a retail public utility, as defined by Texas Water Code (TWC), §13.002, that is owned by a municipality.

(B) "Residential area" means an area used principally for private residences that is improved with at least 100 single-family homes and has an average density of one home per half acre.

(C) "Utility" includes a "public utility" and "water supply or sewer service corporation" as defined by TWC, §13.002.

(2) The governing body of a municipality by ordinance may adopt standards set by the executive director requiring a utility to maintain a minimum sufficient water flow and pressure to fire hydrants in a residential area located in the municipality or the municipality's ETJ. The municipality must submit a signed copy of the ordinance to the executive director within 60 days of the adoption of an ordinance by its governing body.

(3) In addition to a utility's maximum daily demand, the utility must provide, for purposes of emergency fire suppression:

(A) a minimum sufficient water flow of at least 250 gallons per minute for at least two hours; and

(B) a minimum sufficient water pressure of at least 20 psi.

(4) If a municipality adopts standards for a minimum sufficient water flow and pressure to fire hydrants, the municipality must require a utility to maintain at least the minimum sufficient water flow and pressure described by paragraph (3) of this subsection in fire hydrants in a residential area located within the municipality or the municipality's ETJ. If the municipality adopts a fire flow standard exceeding the minimum standards set in paragraph (3) of this subsection, the standard adopted by the municipality must be based on:

(A) the density of connections;

(B) service demands; and

(C) other relevant factors.

(5) If the municipality owns a municipal utility, it may not require another utility located in the municipality or the municipality's ETJ to provide water flow and pressure in a fire hydrant greater than that provided by the municipal utility as determined by the executive director.

(6) If the municipality does not own a municipal utility, it may not require a utility located in the municipality or the municipality's ETJ to provide a minimum sufficient water flow and pressure greater than the standard established by paragraph (3) of this subsection.

(7) An ordinance under paragraph (2) of this subsection may not require a utility to build, retrofit, or improve infrastructure in existence at the time the ordinance is adopted.

(8) A municipality with a population of less than 1.9 million that adopts standards under paragraph (2) of this subsection or that seeks to use a utility's water for emergency fire suppression shall enter into a written memorandum of understanding with the utility.

(A) The memorandum of understanding must provide for:

(i) the necessary testing of fire hydrants; and

(ii) other relevant issues pertaining to the use of the water and maintenance of the fire hydrants to ensure compliance with this subsection.

(B) The municipality must submit a signed copy of the memorandum of understanding to the executive director within 60 days of the execution of the memorandum of understanding between its governing body and the utility.

(9) A municipality may notify the executive director of a utility's failure to comply with a standard adopted under paragraph (3) of this subsection.

(10) On receiving the notice described by paragraph (9) of this subsection, the executive director shall require a utility in violation of a standard adopted under this subsection to comply within a reasonable time established by the executive director.

(z) Nitrification Action Plan (NAP). Any water system distributing chloraminated water must create a NAP. The system must create a written NAP that:

(1) contains the system-specific plan for monitoring free ammonia, monochloramine, total chlorine, nitrite, and nitrate levels;

(2) contains system-specific action levels of the above monitored chemicals where action must be taken;

(3) contains specific corrective actions to be taken if the action levels are exceeded; and

(4) is maintained as part of the system's monitoring plan in §290.121 of this title.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 10, 2015.

TRD-201502634

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Texas Commission on Environmental Quality

Effective date: July 30, 2015

Proposal publication date: February 6, 2015

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SUBCHAPTER F. DRINKING WATER STANDARDS GOVERNING DRINKING WATER QUALITY AND REPORTING REQUIREMENTS FOR PUBLIC WATER SYSTEMS

30 TAC §§290.110, 290.111, 290.116

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, which establishes the commission's general authority necessary to carry out its jurisdiction; TWC, §5.103, which establishes the commission's general authority to adopt rules; TWC, §5.105, which establishes the commission's authority to set policy by rule; Texas Health and Safety Code (THSC), §341.031, which allows the commission to adopt rules to comply with standards established by the United States Environmental Protection Agency pursuant to the federal Safe Drinking Water Act, 42 United States Code, §§300f to 300j-6; and, THSC, §341.0315, which requires public water systems to comply with commission rules adopted to ensure the supply of safe drinking water.

The adopted amendments implement TWC, §§5.102, 5.103, and 5.105, and THSC, §341.031 and §341.0315.

§290.110. *Disinfectant Residuals.*

(a) Applicability. All public water systems shall properly disinfect water before it is distributed to any customer and shall maintain acceptable disinfectant residuals within the distribution system.

(b) Minimum and maximum acceptable disinfectant concentrations. Public water systems shall provide the minimum levels of

disinfectants in accordance with the provisions of this section. Public water systems shall not exceed the maximum residual disinfectant levels (MRDLs) provided in this section.

(1) The disinfection process used by public water systems must ensure that water has been adequately disinfected before it enters the distribution system.

(A) The disinfection process used by public water systems treating surface water sources or groundwater sources that are under the direct influence of surface water must meet the requirements of §290.111(d) of this title (relating to Surface Water Treatment).

(B) The executive director may require the disinfection process used by public water systems treating groundwater sources that are not under the direct influence of surface water to meet the requirements of §290.116 of this title (relating to Groundwater Corrective Actions and Treatment Techniques).

(C) The disinfection process at other types of treatment plants shall provide the level of disinfection required by the executive director.

(2) The residual disinfectant concentration in the water entering the distribution system shall be at least 0.2 milligram per liter (mg/L) free chlorine or 0.5 mg/L chloramine (measured as total chlorine).

(3) The chlorine dioxide residual of the water entering the distribution system shall not exceed an MRDL of 0.8 mg/L.

(4) The residual disinfectant concentration in the water within the distribution system shall be at least 0.2 mg/L free chlorine or 0.5 mg/L chloramine (measured as total chlorine).

(5) The running annual average of the free chlorine or chloramine residual (measured as total chlorine) of the water within the distribution system shall not exceed an MRDL of 4.0 mg/L.

(c) Monitoring requirements. Public water systems shall monitor the performance of the disinfection facilities to ensure that appropriate disinfectant levels are maintained. All monitoring conducted pursuant to the requirements of this section must be conducted at sites designated in the public water system's monitoring plan.

(1) Entry point compliance monitoring for surface water and groundwater under the direct influence of surface water. Public water systems that treat surface water or groundwater under the direct influence of surface water must verify that they meet the disinfection requirements of subsection (b)(2) of this section.

(A) Public water systems that treat surface water or groundwater under the direct influence of surface water and sell treated water on a wholesale basis or serve more than 3,300 people must continuously monitor and record the disinfectant residual of the water at each entry point. If there is a failure in the continuous monitoring equipment, grab sampling every four hours may be conducted in lieu of continuous monitoring, but for no more than five working days following the failure of the equipment.

(B) Public water systems that treat surface water or groundwater under the direct influence of surface water, serve 3,300 or fewer people and do not sell treated water on a wholesale basis must monitor and record the disinfectant residual of the water at each entry point with either continuous monitors or grab samples.

(i) If a system uses grab samples, the samples must be collected on an ongoing basis at the frequency prescribed in the following table.

Figure: 30 TAC §290.110(c)(1)(B)(i) (No change.)

(ii) The grab samples cannot be taken at the same time and the sampling interval is subject to the executive director's review and approval.

(iii) Treatment plants that use grab samples and fail to detect an appropriate disinfectant residual must repeat the test at four-hour or shorter intervals until compliance has been reestablished.

(C) Continuous monitors must record the disinfectant residual of the water every 30 minutes.

(2) Entry point compliance monitoring for groundwater and purchased water. Public water systems that treat groundwater or that purchase and resell treated water must, upon the request of the executive director, verify that they meet the disinfection requirements of subsection (b)(2) of this section.

(A) A system that uses free chlorine must measure free chlorine.

(B) A system that has a chloramine residual must measure total chlorine.

(3) Chlorine dioxide compliance monitoring. Each treatment plant using chlorine dioxide must monitor and record the chlorine dioxide residual of the water entering the distribution system at least once each day. If the chlorine dioxide residual in the water entering the distribution system exceeds the MRDL contained in subsection (b)(3) of this section, the treatment plant must conduct additional tests.

(A) If the public water system does not have additional chlorination facilities in the distribution system, it must conduct three additional tests at the service connection nearest the treatment plant where an elevated chlorine dioxide residual was detected. The first additional test must be conducted within two hours after detecting an elevated chlorine dioxide residual at the entry point to the distribution system. The two subsequent tests must be conducted at six-hour to eight-hour intervals thereafter.

(B) If the public water system has additional chlorination facilities in the distribution system, it must conduct an additional test at the service connection nearest the treatment plant where an elevated chlorine dioxide residual was detected, an additional test at the first service connection after the point where the water is rechlorinated, and an additional test at a location in the far reaches of the distribution system. The additional test at the location nearest the treatment plant must be conducted within two hours after detecting an elevated chlorine dioxide residual at the entry point to the distribution system. The two other tests must be conducted at six-hour to eight-hour intervals thereafter.

(4) Distribution system compliance monitoring. Public water systems shall monitor the disinfectant residual at various locations throughout the distribution system.

(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 once every seven days.

(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.

(C) Public water systems using surface water sources or groundwater under the direct influence of surface water must monitor the disinfectant residual tests at least once per day at representative locations in the distribution system.

(D) All public water systems must monitor the residual disinfectant concentration each time that a bacteriological sample is collected, as specified in §290.109 of this title (relating to Microbial Contaminants).

(E) All public water systems with a chloramine residual must monitor the total chlorine residual downstream of any chlorine and ammonia injection points, in conjunction with the chloramine effectiveness sampling in paragraph (5)(C) of this subsection, in the distribution system weekly and whenever the chemical dose is changed.

(5) Chloramine effectiveness sampling. Public water systems with a chloramine residual shall monitor to ensure that monochloramine is the prevailing chloramine species and that nitrification is controlled. Sample sites and procedures used for chloramine effectiveness sampling must be documented in the system's nitrification action plan (NAP) required by §290.46(z) of this title (relating to Minimum Acceptable Operating Practices for Public Drinking Water Systems). Sample results determined by monitoring required under this paragraph will not be used to determine compliance with the maximum contaminant levels, MRDLs, action levels, or treatment techniques of this subchapter.

(A) Source water. Public water systems must monitor source water (including raw and treated purchased water) to establish baseline ammonia, nitrite, and nitrate levels (all as nitrogen) at least once to determine the availability of ammonia for chloramine formation and to provide a reference for downstream nitrite and nitrate levels that may indicate nitrification. If any source has more than 0.5 mg/L free ammonia (as nitrogen) in the initial sample, then raw water ammonia (as nitrogen) shall be monitored monthly for six months to determine the baseline free ammonia level.

(B) Water entering distribution system. Public water systems that have chloramines present shall perform sampling to represent the water entering the distribution system.

(i) Total chlorine, free ammonia (as nitrogen) and monochloramine shall be monitored weekly at all entry points to the distribution system or at a location before the first customer.

(ii) Nitrite and nitrate (as nitrogen) levels at the first customer shall be monitored monthly for at least six months to determine baseline nitrite and nitrate levels in the water prior to consumption. Nitrite and nitrate samples collected at the first customer will not be used for compliance with §290.106 of this title (relating to Inorganic Contaminants).

(iii) Nitrite and nitrate (as nitrogen) shall be monitored quarterly at the first customer after establishing the baseline. Nitrite and nitrate samples collected at entry points for compliance with §290.106 of this title may be used for these quarterly samples.

(C) Treatment sampling. Public water systems that inject chlorine at any location to form chloramines or to convert from chloramines to free chlorine must monitor to ensure that chemical addition is effective and the proper chlorine to ammonia (as nitrogen) ratio is achieved. Samples must be collected and analyzed weekly and whenever the chemical dosage is changed.

(i) Sampling must be performed upstream of the chlorine or ammonia chemical injection point, whichever is furthest upstream.

(ii) Sampling must be performed downstream of all the chlorine and ammonia chemical injection points.

(iii) The residual of the chemical injected upstream must be determined to properly dose the downstream chemical where

sample taps are present or required under §290.42(e)(7)(C)(ii) of this title (relating to Water Treatment).

(iv) The total chlorine, ammonia (as nitrogen), and monochloramine residuals must all be monitored if the treatment occurs before the entry point.

(v) The ammonia (as nitrogen) and monochloramine residuals must all be monitored if the treatment occurs in the distribution system. The monitoring must occur at the same time as a compliance sampling required under paragraph (4)(E) of this subsection.

(D) Distribution system. Public water systems that distribute water and have a chloramine residual must ensure the efficacy of disinfection within the distribution system.

(i) Monochloramine and free ammonia (as nitrogen) must be monitored weekly at the same time as a compliance sample required under paragraph (4) of this subsection.

(ii) Nitrite and nitrate (as nitrogen) must be monitored quarterly.

(d) Analytical requirements. All monitoring required by paragraphs (1) and (2) of this subsection must be conducted at a facility approved by the executive director and using methods that conform to the requirements of §290.119 of this title (relating to Analytical Procedures). All monitoring for chloramine effectiveness required by paragraphs (3) - (6) of this subsection must be analyzed to the accuracy provided therein.

(1) The free chlorine or chloramine residual (measured as total chlorine) must be measured to a minimum accuracy of plus or minus 0.1 mg/L. Color comparators may be used for distribution system samples only. When used, a color comparator must have current reagents, an unfaded and clear color comparator, a sample cell that is not discolored or stained, and must be properly stored in a cool, dark location where it is not subjected to conditions that would result in staining. The color comparator must be used in the correct range. If a sample reads at the top of the range, the sample must be diluted with chlorine-free water, then a reading taken and the resulting residual calculated.

(2) The chlorine dioxide residual must be measured to a minimum accuracy of plus or minus 0.05 mg/L using one of the following methods:

(A) the amperometric titration method using a titrator with platinum-platinum electrodes;

(B) the spectrophotometric Lissamine Green B method;

or
(C) with the written permission of the executive director, the DPD-glycine method using a colorimeter or spectrophotometer.

(3) The free ammonia level must be measured to a minimum accuracy of plus or minus 0.1 mg/L.

(4) The monochloramine level must be measured to a minimum accuracy of plus or minus 0.15 mg/L using a procedure that has the ability to distinguish between monochloramine and other forms of chloramine.

(5) The nitrate (as nitrogen) level must be measured to a minimum accuracy of plus or minus 0.1 mg/L.

(6) the nitrite (as nitrogen) level must be measured to a minimum accuracy of plus or minus 0.01 mg/L.

(e) Reporting requirements. Any owner or operator of a public water system subject to the provisions of this section is required to

report to the executive director the results of any test, measurement, or analysis required by this section.

(1) Systems exceeding the MRDL for chlorine dioxide in subsection (b)(3) of this section must report the exceedance to the executive director within 24 hours of the event.

(2) Public water systems that use surface water sources or groundwater sources under the direct influence of surface water must submit a Surface Water Monthly Operating Report (commission Form 0102C), a Surface Water Monthly Operating Report (commission Form 0102D) for alternative technologies, or a Surface Water Monthly Operational Report for Plants That Do Not Have a Turbidimeter on Each Filter (commission Form 0103) each month.

(3) Public water systems that use chlorine dioxide must submit a Chlorine Dioxide Monthly Operating Report (commission Form 0690) each month.

(4) Public water systems that use purchased water or groundwater sources only must complete a Disinfection Level Quarterly Operating Report (commission Form 20067) each quarter.

(A) Community and nontransient noncommunity public water systems must submit the Disinfection Level Quarterly Operating Report each quarter, by the tenth day of the month following the end of the quarter.

(B) Transient noncommunity public water systems must retain the Disinfection Level Quarterly Operating Reports and must provide a copy if requested by the executive director.

(5) Systems that use chloramines must retain their NAP required under §290.46(z) of this title and must provide a copy upon request by the executive director.

(6) Monthly and quarterly reports required by this section must be submitted to the Water Supply Division, MC 155, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087 by the tenth day of the month following the end of the reporting period.

(f) Compliance determinations. Compliance with the requirements of this section shall be determined using the following criteria.

(1) All samples used for compliance must be obtained at sampling sites designated in the monitoring plan.

(A) All samples collected at sites designated in the monitoring plan as microbiological and disinfectant residual monitoring sites shall be included in the compliance determination calculations.

(B) Samples collected at sites in the distribution system not designated in the monitoring plan shall not be included in the compliance determination calculations.

(2) A public water system that fails to conduct the monitoring tests required by this section commits a monitoring violation.

(3) A public water system that fails to report the results of the monitoring tests required by this section commits a reporting violation.

(4) A public water system that uses surface water sources or groundwater sources under the direct influence of surface water and fails to meet the requirements of subsection (b)(2) of this section for a period longer than four consecutive hours commits a nonacute treatment technique violation. A public water system that fails to conduct the additional testing required by subsection (c)(1)(B)(iii) of this section also commits a nonacute treatment technique violation.

(5) A public water system that uses chlorine dioxide and exceeds the level specified in subsection (b)(3) of this section violates the MRDL for chlorine dioxide.

(A) If a public water system violates the MRDL for chlorine dioxide and any of the three additional distribution samples exceeds the MRDL, the system commits an acute MRDL violation for chlorine dioxide.

(B) If a public water system violates the MRDL for chlorine dioxide and fails to collect each of the three additional distribution samples required by subsection (c)(3) of this section, the system commits an acute MRDL violation for chlorine dioxide.

(C) If a public water system violates the MRDL for chlorine dioxide but none of the three additional distribution samples violates the MRDL, the system commits a nonacute MRDL violation for chlorine dioxide.

(6) A public water system that fails to meet the requirements of subsection (b)(4) of this section, in more than 5.0% of the samples collected each month, for any two consecutive months, commits a nonacute treatment technique violation. Specifically, the system commits a nonacute violation if the value "V" in the following formula exceeds 5.0% per month for any two consecutive months:
Figure: 30 TAC §290.110(f)(6)

(7) A public water system violates the MRDL for chlorine or chloramine (measured as total chlorine) if, at the end of any quarter, the running annual average of monthly averages exceeds the level specified in subsection (b)(5) of this section.

(8) Notwithstanding the MRDLs listed in subsection (b) of this section, operators shall increase residual disinfectant levels of chlorine or chloramines, measured as total chlorine, (but not chlorine dioxide) in the distribution system to a level and for a time necessary to protect public health to address specific microbiological contamination problems caused by circumstances such as distribution line breaks, storm runoff events, source water contamination, or cross-connections.

(9) If a public water system's failure to monitor makes it impossible to determine compliance with the MRDL for chlorine or chloramines (measured as total chlorine), the system commits an MRDL violation for the entire period covered by the annual average.

(10) A public water system that fails to issue a required public notice or certify that it has issued that notice commits a violation.

(g) Public notification requirements. The owner or operator of a public water system that violates the requirements of this section must notify the executive director and the people served by the system.

(1) A public water system that fails to meet the requirements of subsection (b)(3) of this section, shall notify the executive director within 24 hours of the event and the customers in accordance with the requirements of §290.122 of this title (relating to Public Notification).

(A) A public water system that has an acute violation of the MRDL for chlorine dioxide must notify the customers in accordance with the requirements of §290.122(a) of this title.

(B) A public water system that has a non-acute violation of the MRDL for chlorine dioxide must notify the customers in accordance with the requirements of §290.122(b) of this title.

(2) A public water system that uses surface water sources or groundwater sources under the direct influence of surface water and fails to meet the minimum disinfection requirements of subsection (b)(2) of this section shall notify the executive director by the end

of the next business day and the customers in accordance with the requirements of §290.122(b) of this title.

(3) A public water system that fails to meet the requirements of subsection (b)(4) of this section in more than 5.0% of the samples collected each month for two consecutive months must notify its customers.

(A) A public water system that uses surface water or groundwater under the direct influence of surface water must notify its customers in accordance with the requirements of §290.122(b) of this title.

(B) A public water system that uses only groundwater or purchased water must notify its customers when it issues its annual consumer confidence report.

(4) A public water system that fails to meet the requirements of subsection (b)(5) of this section shall notify the executive director by the end of the next business day and the customers in accordance with the requirements of §290.122(b) of this title.

(5) A public water system which fails to conduct the monitoring required by subsection (c)(1) - (4) of this section must notify its customers of the violation in accordance with the requirements of §290.122(c) of this title.

(6) A public water system that uses chloramines shall notify their retail and wholesale customers of the use of chloramines.

(A) This notification must contain the exact wording included in Appendix H of §290.47 of this title (relating to Appendices).

(B) Prior to initially providing the chloraminated water to its existing customers, the water system must provide notification by mail or direct delivery at least 14 days before the change.

(C) Additionally, the notification must be provided to the news media, hospitals, renal disease facilities, dialysis clinics, physicians, local health departments, and entities which maintain live fish directly by letter, e-mail, or hand delivery.

(D) New customers must also be notified before they begin receiving water from the water system.

(E) Where appropriate, the notice must be multilingual.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 10, 2015.

TRD-201502636

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Texas Commission on Environmental Quality

Effective date: July 30, 2015

Proposal publication date: February 6, 2015

For further information, please call: (512) 239-2613



TITLE 40. SOCIAL SERVICES AND ASSISTANCE

PART 2. DEPARTMENT OF ASSISTIVE AND REHABILITATIVE SERVICES

CHAPTER 101. ADMINISTRATIVE RULES AND PROCEDURES

SUBCHAPTER C. COUNCILS, BOARD, AND COMMITTEES

The Texas Health and Human Services Commission (HHSC), on behalf of the Department of Assistive and Rehabilitative Services (DARS), adopts the repeal of §101.313, concerning Duration of RCT; §101.411, concerning Duration of SILC; and §101.517, concerning Duration without changes to the proposed text as published in the February 20, 2015, issue of the *Texas Register* (40 TexReg 802). DARS also adopts new §101.609, concerning Duration of BEI Advisory Board without changes to the proposed text as published in the February 20, 2015, issue of the *Texas Register* (40 TexReg 802). The text will not be republished.

BACKGROUND AND JUSTIFICATION

According to its administrative rules, DARS has three advisory bodies that will expire on August 31, 2015. They are the Rehabilitation Council of Texas (RCT), the State Independent Living Council (SILC), and the Early Childhood Intervention (ECI) Advisory Committee. DARS adopts the repeal of the state administrative rules that call for abolishing the advisory bodies on August 31, 2015, because the existence and duration of the advisory bodies is already provided for in federal law.

Texas Government Code, Chapter 2110, State Agency Advisory Committees, contains provisions on the duration or abolition of advisory bodies. Section 2110.008(a) holds that a state agency may create an advisory committee that is automatically abolished by a fixed date, and that if the agency does so, it must do so by rule; however, §2110.0011(2)(B) excepts the application of this state law to an advisory committee "if a federal law or regulation imposes a condition on the state's eligibility to receive money from the federal government that irreconcilably conflicts with this chapter." Since federal law imposes the condition of the existence of the RCT, the SILC, and the ECI Advisory Committee on the state's eligibility to receive money from the federal government, these advisory bodies fall under the exception cited above. DARS adopts the repeal of each advisory body's administrative rule calling for abolition on August 31, 2015, because their existence and duration are provided for in federal law.

DARS' Board for Evaluation of Interpreters (BEI) Advisory Board is established by state law in Texas Human Resources Code, §81.007(b); however, DARS administrative rules do not contain language about its duration. Section 2110.008(a), Texas Government Code, holds that an agency may designate a date for abolishment and that, if DARS does not designate a date, §2110.008(b) sets out conditions for automatic abolishment.

DARS adopts a new rule with general language about the duration of the BEI, to comply with Chapter 2110. By proposing that general language on duration be added to the BEI rules in place of date-specific language, DARS avoids the need to amend its rules on the BEI's expiration in the future. In addition, the proposed new rule ensures that DARS' administrative rules address the continuation of this state advisory body.

SECTION-BY-SECTION SUMMARY

DARS adopts the repeal of §101.313, Duration of RCT, because the RCT's existence and duration are provided for in federal law. The RCT will continue for as long as it is authorized and required by federal law and for as long as failure to continue it will pro-

hibit the state from receiving federal financial assistance for vocational programs.

DARS adopts the repeal of §101.411, Duration of SILC, because the SILC's existence and duration are provided for in federal law. The SILC will continue for as long as it is authorized and required by federal law and for as long as failure to continue it will prohibit the state from receiving federal financial assistance for the SILC.

DARS adopts the repeal of §101.517, Duration (of the ECI Advisory Committee), because the ECI Advisory Committee's existence and duration are provided for in federal law. The ECI Advisory Committee will continue for as long as it is authorized and required by federal law and for as long as failure to continue it will prohibit the state from receiving federal financial assistance for the ECI.

DARS adopts new §101.609, Duration of BEI Advisory Board. The BEI will continue to exist for as long as the BEI's interpreter certification programs, for which the board serves as an advisory body, continue to exist and the board is authorized by state law.

PUBLIC COMMENT

One stakeholder group submitted a comment with regard to these proposed rules.

Comment: The commenter concurred that these state advisory committees are required by federal laws that authorize and fund significant programs and services provided by and through DARS. The commenter further agreed that the repeal of the specified rules is appropriate to ensure that our state maintains its compliance with regard to federal requirements.

Response: DARS acknowledged receipt of the communication and thanked the commenter for writing to the agency about this proposal.

DIVISION 1. REHABILITATION COUNCIL OF TEXAS

40 TAC §101.313

STATUTORY AUTHORITY

The repeal is adopted under the authority of the Texas Human Resources Code, Chapter 117. They are adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the executive commissioner of HHSC with the authority to promulgate rules for the operation and provision of health and human services by the health and human services agencies.

No other law, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502638

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: February 20, 2015

For further information, please call: (512) 424-4050



DIVISION 2. STATE INDEPENDENT LIVING COUNCIL

40 TAC §101.411

The repeal is adopted under the authority of the Texas Human Resources Code, Chapter 117. They are adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the executive commissioner of HHSC with the authority to promulgate rules for the operation and provision of health and human services by the health and human services agencies.

No other law, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502639

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Effective date: August 2, 2015

Proposal publication date: February 20, 2015

For further information, please call: (512) 424-4050



DIVISION 3. EARLY CHILDHOOD INTERVENTION ADVISORY COMMITTEE

40 TAC §101.517

The repeal is adopted under the authority of the Texas Human Resources Code, Chapter 117. They are adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the executive commissioner of HHSC with the authority to promulgate rules for the operation and provision of health and human services by the health and human services agencies.

No other law, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502640

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: February 20, 2015

For further information, please call: (512) 424-4050



DIVISION 4. BOARD FOR EVALUATION OF INTERPRETERS ADVISORY BOARD

40 TAC §101.609

The new rule is adopted under the authority of the Texas Human Resources Code, Chapter 117. They are adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the executive commissioner of HHSC with the authority to promulgate rules for the operation and provision of health and human services by the health and human services agencies.

No other law, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502641

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: February 20, 2015

For further information, please call: (512) 424-4050



CHAPTER 102. PURCHASE OF GOODS AND SERVICES BY THE DEPARTMENT OF ASSISTIVE AND REHABILITATIVE SERVICES

The Texas Health and Human Services Commission (HHSC), on behalf of the Texas Department of Assistive and Rehabilitative Services (DARS) adopts the repeal of 40 Texas Administrative Code (TAC) Chapter 102, concerning the Purchase of Goods and Services by DARS, without changes to the proposed text as published in the April 17, 2015, issue of the *Texas Register* (40 TexReg 2175). The text will not be republished. Chapter 102 includes Subchapter A, Purchase of Goods and Services, §§102.201, 102.203, 102.205, 102.207, 102.209, 102.211, 102.213, 102.215, 102.217, 102.219, and 102.221, and Subchapter B, Protest Procedures, 102.307.

BACKGROUND AND JUSTIFICATION

In 2003, the 78th Texas Legislature, regular session, enacted House Bill (H.B.) 2292, which established the Health and Human Services (HHS) system in its current configuration. In October 2014, the Sunset Advisory Commission (Sunset) issued a report with a key finding that the vision of H.B. 2292 was incomplete. Sunset made a recommendation related to contract and procurement, advising "HHSC to better define and strengthen its role in both procurement and contract monitoring by completing and maintaining certain statutorily required elements..."

Accordingly, in April 2015, the HHSC proposed new 1 TAC Chapter 391, Purchase of Goods and Services by the Texas Health and Human Services Commission, as the chapter on general contract rules for all HHS agencies. HHSC's new rules ensure that the procurement of goods and services effectively supports the mission, operations, and programs of the HHS system. Exceptions to the general rules are contained in HHSC's new 1 TAC Chapter 392, Purchase of Goods and Services for Specific Health and Human Services Commission Programs. The exceptions in new Chapter 392 are comprised largely of HHS programs that do not fit into the general framework of Chapter 391.

To minimize confusion and increase efficiency and consistency throughout the HHS system, DARS, along with other HHS agencies, proposed to repeal rules concerning contracting and procurement and consolidate the substance of those rules into two chapters. The substance of the repealed contracting and procurement rules that are applicable to all HHS system agencies is now included in new rules located in 1 TAC Chapter 391. The substance of the repealed contracting and procurement rules that are DARS-specific is now included in new rules located in 1 TAC Chapter 392.

SECTION BY SECTION SUMMARY

All sections of Chapter 102 that are referenced in this preamble are repealed.

PUBLIC COMMENT

DARS received no public comment with regard to the repeal of 40 TAC Chapter 102.

SUBCHAPTER A. PURCHASE OF GOODS AND SERVICES

40 TAC §§102.201, 102.203, 102.205, 102.207, 102.209, 102.211, 102.213, 102.215, 102.217, 102.219, 102.221

STATUTORY AUTHORITY

The repeals are adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502642

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: April 17, 2015

For further information, please call: (512) 424-4050



SUBCHAPTER B. PROTEST PROCEDURES

40 TAC §102.307

The repeal is adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502643

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: April 17, 2015

For further information, please call: (512) 424-4050



CHAPTER 103. GENERAL CONTRACTING RULES

The Texas Health and Human Services Commission (HHSC), on behalf of the Texas Department of Assistive and Rehabilitative Services (DARS) adopts the repeal of 40 Texas Administrative Code (TAC) Chapter 103, concerning General Contracting Rules, without changes to the proposed text as published in the April 17, 2015, issue of the *Texas Register* (40 TexReg 2177). The text will not be republished. Chapter 103 includes Subchapter A, General Contracting Information, §§103.101, 103.103, and 103.105; Subchapter B, Contractor Requirements, §§103.207, 103.209, 103.211, 103.213, and 103.215; Subchapter C, Records, §103.307; Subchapter D, Audits, Monitoring, and Reviews, §§103.407, 103.409, 103.411, 103.413; Subchapter E, Adverse Actions, §§103.507, 103.509, 103.511, 103.513, 103.515, 103.517, 103.519, and 103.521; Subchapter F, Claims for Breach of Contract, §§103.603, 103.605, 103.607, 103.609, 103.611, 103.613, 103.615, 103.617, 103.619, 103.621, 103.623, 103.625, 103.627, 103.629; and Subchapter G, Contract Termination, §103.707.

BACKGROUND AND JUSTIFICATION

In 2003, the 78th Texas Legislature, regular session, enacted House Bill (H.B.) 2292, which established the Health and Human Services (HHS) system in its current configuration. In October 2014, the Sunset Advisory Commission (Sunset) issued a report with a key finding that the vision of H.B. 2292 was incomplete. Sunset made a recommendation related to contract and procurement, advising "HHSC to better define and strengthen its role in both procurement and contract monitoring by completing and maintaining certain statutorily required elements..."

Accordingly, in April 2015, HHSC proposed new 1 TAC Chapter 391, Purchase of Goods and Services by the Texas Health and Human Services Commission, as the chapter on general contract rules for all HHS agencies. HHSC's new rules ensure that the procurement of goods and services effectively supports the mission, operations, and programs of the HHS system. Exceptions to the general rules are contained in HHSC's new 1 TAC Chapter 392, Purchase of Goods and Services for Specific Health and Human Services Commission Programs. The exceptions in new Chapter 392 are comprised largely of HHS programs that do not fit into the general framework of Chapter 391.

To minimize confusion and increase efficiency and consistency throughout the HHS system, DARS, along with other HHS agencies, proposed to repeal rules concerning contracting and procurement and consolidate the substance of those rules into two chapters. The substance of the repealed contracting and procurement rules that are applicable to all HHS system agencies

is now included in new rules located in 1 TAC Chapter 391. The substance of the repealed contracting and procurement rules that are DARS-specific is now included in new rules located in 1 TAC Chapter 392.

SECTION BY SECTION SUMMARY

All sections referenced in this preamble are repealed.

PUBLIC COMMENT

DARS received no public comment with regard to the repeal of 40 TAC Chapter 103.

SUBCHAPTER A. GENERAL CONTRACTING INFORMATION

40 TAC §§103.101, 103.103, 103.105

STATUTORY AUTHORITY

The repeals are adopted pursuant to HHSC's statutory rule-making authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502644

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: April 17, 2015

For further information, please call: (512) 424-4050



SUBCHAPTER B. CONTRACTOR REQUIREMENTS

40 TAC §§103.207, 103.209, 103.211, 103.213, 103.215

The repeals are adopted pursuant to HHSC's statutory rule-making authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502645

Sylvia F. Hardman
General Counsel
Department of Assistive and Rehabilitative Services
Effective date: August 2, 2015
Proposal publication date: April 17, 2015
For further information, please call: (512) 424-4050



SUBCHAPTER C. RECORDS

40 TAC §103.307

The repeal is adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502646
Sylvia F. Hardman
General Counsel
Department of Assistive and Rehabilitative Services
Effective date: August 2, 2015
Proposal publication date: April 17, 2015
For further information, please call: (512) 424-4050



SUBCHAPTER D. AUDITS, MONITORING, AND REVIEWS

40 TAC §§103.407, 103.409, 103.411, 103.413

The repeals are adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502647
Sylvia F. Hardman
General Counsel
Department of Assistive and Rehabilitative Services
Effective date: August 2, 2015
Proposal publication date: April 17, 2015
For further information, please call: (512) 424-4050



SUBCHAPTER E. ADVERSE ACTIONS

40 TAC §§103.507, 103.509, 103.511, 103.513, 103.515, 103.517, 103.519, 103.521

The repeals are adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502648
Sylvia F. Hardman
General Counsel
Department of Assistive and Rehabilitative Services
Effective date: August 2, 2015
Proposal publication date: April 17, 2015
For further information, please call: (512) 424-4050



SUBCHAPTER F. CLAIMS FOR BREACH OF CONTRACT

40 TAC §§103.603, 103.605, 103.607, 103.609, 103.611, 103.613, 103.615, 103.617, 103.619, 103.621, 103.623, 103.625, 103.627, 103.629

The repeals are adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502649
Sylvia F. Hardman
General Counsel
Department of Assistive and Rehabilitative Services
Effective date: August 2, 2015
Proposal publication date: April 17, 2015
For further information, please call: (512) 424-4050



SUBCHAPTER G. CONTRACT TERMINA- TION

40 TAC §103.707

The repeal is adopted pursuant to HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531,

§531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502650

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: April 17, 2015

For further information, please call: (512) 424-4050



CHAPTER 105. AUTISM PROGRAM SUBCHAPTER G. PROGRAM REQUIREMENTS

40 TAC §§105.707, 105.709, 105.711, 105.713, 105.715

The Texas Health and Human Services Commission (HHSC), on behalf of the Texas Department of Assistive and Rehabilitative Services (DARS) adopts the repeal of 40 Texas Administrative Code (TAC) Chapter 105, Autism Program, Subchapter G, Contractor Requirements, §§105.707, 105.709, 105.711, 105.713, and 105.715 without changes to the proposed text as published in the April 17, 2015, issue of the *Texas Register* (40 TexReg 2180). The text will not be republished.

BACKGROUND AND JUSTIFICATION

In 2003, the 78th Texas Legislature, regular session, enacted House Bill (H.B.) 2292, which established the Health and Human Services (HHS) system in its current configuration. In October 2014, the Sunset Advisory Commission (Sunset) issued a report with a key finding that the vision of H.B. 2292 was incomplete. Sunset made a recommendation related to contract and procurement, advising "HHSC to better define and strengthen its role in both procurement and contract monitoring by completing and maintaining certain statutorily required elements..."

Accordingly, in April 2015, HHSC proposed new 1 TAC Chapter 391, Purchase of Goods and Services by the Texas Health and Human Services Commission, as the chapter on general contract rules for all HHS agencies. HHSC's new rules ensure that the procurement of goods and services effectively supports the mission, operations, and programs of the HHS system. Exceptions to the general rules are contained in HHSC's new 1 TAC Chapter 392, Purchase of Goods and Services for Specific Health and Human Services Commission Programs. The exceptions in new Chapter 392 are comprised largely of HHS programs that do not fit into the general framework of Chapter 391.

To minimize confusion and increase efficiency and consistency throughout the HHS system, DARS, along with other HHS agencies, proposed to repeal rules concerning contracting and procurement and consolidate the substance of those rules into two chapters. The substance of the repealed contracting and procurement rules that are applicable to all HHS system agencies

is now included in new rules located in 1 TAC Chapter 391. The substance of the repealed contracting and procurement rules that are DARS-specific is now included in new rules located in 1 TAC Chapter 392.

SECTION BY SECTION SUMMARY

All sections referenced in this preamble are repealed.

PUBLIC COMMENT

DARS received no public comment with regard to the repeal of Chapter 105, Subchapter G, §§105.707, 105.709, 105.711, 105.713, and 105.715.

STATUTORY AUTHORITY

The repeals are adopted pursuant to HHSC's statutory rule-making authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502651

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: April 17, 2015

For further information, please call: (512) 424-4050



CHAPTER 108. DIVISION FOR EARLY CHILDHOOD INTERVENTION SERVICES SUBCHAPTER P. CONTRACT REQUIREMENTS

40 TAC §§108.1601, 108.1603, 108.1605, 108.1607, 108.1609, 108.1611, 108.1613, 108.1615, 108.1617, 108.1619, 108.1621, 108.1623, 108.1625

The Texas Health and Human Services Commission (HHSC), on behalf of the Texas Department of Assistive and Rehabilitative Services (DARS), adopts the repeal of 40 Texas Administrative Code (TAC) Chapter 108, Subchapter P, concerning Contract Requirements, §§108.1601, 108.1603, 108.1605, 108.1607, 108.1609, 108.1611, 108.1613, 108.1615, 108.1617, 108.1619, 108.1621, 108.1623, and 108.1625 without changes to the proposed text as published in the April 17, 2015, issue of the *Texas Register* (40 TexReg 2181). The text will not be republished.

BACKGROUND AND JUSTIFICATION

In 2003, the 78th Texas Legislature, regular session, enacted House Bill (H.B.) 2292, which established the Health and Human Services (HHS) system in its current configuration. In October 2014, the Sunset Advisory Commission (Sunset) issued a report with a key finding that the vision of H.B. 2292 was incomplete. Sunset made a recommendation related to contract and

procurement, advising "HHSC to better define and strengthen its role in both procurement and contract monitoring by completing and maintaining certain statutorily required elements..."

Accordingly, in April 2015, HHSC proposed new 1 TAC Chapter 391, Purchase of Goods and Services by the Texas Health and Human Services Commission, as the chapter on general contract rules for all HHS agencies. HHSC's new rules ensure that the procurement of goods and services effectively supports the mission, operations, and programs of the HHS system. Exceptions to the general rules are contained in HHSC's new 1 TAC Chapter 392, Purchase of Goods and Services for Specific Health and Human Services Commission Programs. The exceptions in new Chapter 392 are comprised largely of HHS programs that do not fit into the general framework of Chapter 391.

To minimize confusion and increase efficiency and consistency throughout the HHS system, DARS, along with other HHS agencies, proposed to repeal rules concerning contracting and procurement and consolidate the substance of those rules into two chapters. The substance of the repealed contracting and procurement rules that are applicable to all HHS system agencies is now included in new rules located in 1 TAC Chapter 391. The substance of the repealed contracting and procurement rules that are DARS-specific is now included in new rules located in 1 TAC Chapter 392.

SECTION BY SECTION SUMMARY

All sections referenced in this preamble are repealed.

PUBLIC COMMENT

DARS received no public comment with regard to the repeal of 40 TAC Chapter 108, Subchapter P.

STATUTORY AUTHORITY

The repeals are adopted pursuant to HHSC's statutory rule-making authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of HHSC with the authority to promulgate rules for the operation of and provision of health and human services by the health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502652

Sylvia F. Hardman

General Counsel

Department of Assistive and Rehabilitative Services

Effective date: August 2, 2015

Proposal publication date: April 17, 2015

For further information, please call: (512) 424-4050



CHAPTER 109. OFFICE FOR DEAF AND HARD OF HEARING SERVICES SUBCHAPTER B. BOARD FOR EVALUATION OF INTERPRETERS

The Texas Health and Human Services Commission (HHSC) on behalf of the Department of Assistive and Rehabilitative Services (DARS) adopts amendments to §§109.231, 109.315 and 109.317, concerning Chapter 109, Office for Deaf and Hard of Hearing Services, Subchapter B, Board for Evaluation of Interpreters (BEI), Division 1, BEI Interpreter Certification, and Division 2, BEI Court Interpreter Certification. DARS adopts these rules without changes to the proposed text as published in the May 15, 2015, issue of the *Texas Register* (40 TexReg 2655). The text will not be republished.

BACKGROUND AND JUSTIFICATION

During the 83rd Legislature, Regular Session, 2013, an exceptional item was funded allowing for the development of a court interpreter performance test for DARS' BEI program. The new court interpreter performance test was designed for hearing interpreters wanting to become court certified. Current practice requires hearing interpreter candidates to receive 120 hours of instruction or mentoring in courtroom interpretation knowledge and skills and to have passed the DARS DHHS-approved court interpreter written test. BEI rules are being revised to require hearing interpreter candidates to pass the court performance test along with the written test and to eliminate the courtroom interpretation instruction requirement. The performance test now replaces the courtroom interpretation requirement for hearing interpreters. Interpreters who are deaf are exempt from taking the performance test; however, they still must meet current requirements for courtroom interpretation instruction. The BEI rules are being revised to incorporate initial and renewal fees for the new court interpreter performance test. This will defray the costs of test development, rating, and test administration.

SECTION-BY-SECTION SUMMARY

Section 109.231, Schedule of Fees, establishes a fee for persons taking the court performance test and increases the annual renewal fees associated with this test.

Section 109.315, Qualifications and Requirements for Court Certificate, is amended to require hearing interpreters to pass the court interpreter performance test in order to become court certified. Current rule requires interpreter candidates to receive 120 hours of instruction in courtroom interpretation and to take and pass a court interpreter written test. Hearing interpreter candidates will no longer be required to receive the 120 hours of courtroom interpretation instruction, but will be required to pass the written and performance court interpreter tests to become certified. Interpreters who are deaf will still be required to pass the written test and to have received the 120 hours of courtroom interpretation instruction to become certified; they are exempt from the court performance test.

Section 109.317, Training Programs for Certified Court Interpreters Managed by DARS or by Public or Private Educational Institutions, is amended with regard to persons intending to be DARS DHHS-approved mentors. Among other requirements, a person intending to be a mentor must pass a written test on legal and court procedure skills. This rule amendment clarifies that the examination is the written court interpreter test.

PUBLIC COMMENT

DARS received no public comment.

DIVISION 1. BEI INTERPRETER CERTIFICATION

40 TAC §109.231

STATUTORY AUTHORITY

The adopted amendments are authorized under Texas Human Resources Code, Chapters 81 and 117, and adopted in accordance with HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of the Texas Health and Human Services Commission with the authority to promulgate rules for the operation and provision of health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502653
Sylvia F. Hardman
General Counsel
Department of Assistive and Rehabilitative Services
Effective date: August 2, 2015
Proposal publication date: May 15, 2015
For further information, please call: (512) 424-4050



DIVISION 2. BEI COURT INTERPRETER
CERTIFICATION

40 TAC §109.315, §109.317

STATUTORY AUTHORITY

The adopted amendments are authorized under Texas Human Resources Code, Chapters 81 and 117, and adopted in accordance with HHSC's statutory rulemaking authority under Texas Government Code, Chapter 531, §531.0055(e), which provides the Executive Commissioner of the Texas Health and Human Services Commission with the authority to promulgate rules for the operation and provision of health and human services agencies.

No other statute, article, or code is affected by this adoption.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on July 13, 2015.

TRD-201502654
Sylvia F. Hardman
General Counsel
Department of Assistive and Rehabilitative Services
Effective date: August 2, 2015
Proposal publication date: May 15, 2015
For further information, please call: (512) 424-4050



REVIEW OF AGENCY RULES

This section contains notices of state agency rules review as directed by the Texas Government Code, §2001.039. Included here are (1) notices of *plan to review*; (2)

notices of *intention to review*, which invite public comment to specified rules; and (3) notices of *readoption*, which summarize public comment to specified rules. The complete text of an agency's *plan to review* is available after it is filed with the Secretary of State on the Secretary of State's web site (<http://www.sos.state.tx.us/texreg>). The complete text of an agency's rule being reviewed and considered for *readoption* is available in the *Texas Administrative Code* on the web site (<http://www.sos.state.tx.us/tac>).

For questions about the content and subject matter of rules, please contact the state agency that is reviewing the rules. Questions about the web site and printed copies of these notices may be directed to the *Texas Register* office.

Proposed Rule Reviews

Texas Education Agency

Title 19, Part 2

The Texas Education Agency (TEA) proposes the review of 19 TAC Chapter 97, Planning and Accountability, pursuant to the Texas Government Code, §2001.039. The rules being reviewed by the TEA in 19 TAC Chapter 97 are organized under the following subchapters: Subchapter AA, Accountability and Performance Monitoring; Subchapter BB, Memoranda of Understanding; Subchapter EE, Accreditation Status, Standards, and Sanctions; and Subchapter FF, Commissioner's Rules Concerning the Job Corps Diploma Program.

As required by the Texas Government Code, §2001.039, the TEA will accept comments as to whether the reasons for adopting 19 TAC Chapter 97, Subchapters AA, BB, EE, and FF continue to exist.

The public comment period on the review of 19 TAC Chapter 97, Subchapters AA, BB, EE, and FF begins July 24, 2015, and ends August 24, 2015. Comments or questions regarding this rule review may be submitted to Cristina De La Fuente-Valadez, Rulemaking, Texas Education Agency, 1701 North Congress Avenue, Austin, Texas 78701-1494, (512) 475-1497. Comments may also be submitted electronically to rules@tea.state.tx.us or faxed to (512) 463-5337.

TRD-201502659

Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

Filed: July 13, 2015



*Kaitlyn Garcia
3rd Grade*



TABLES & GRAPHICS

Graphic images included in rules are published separately in this tables and graphics section. Graphic images are arranged in this section in the following order: Title Number, Part Number, Chapter Number and Section Number.

Graphic images are indicated in the text of the emergency, proposed, and adopted rules by the following tag: the word “Figure” followed by the TAC citation, rule number, and the appropriate subsection, paragraph, subparagraph, and so on.

Figure: 30 TAC Chapter 290 -- Preamble

	At or After the Entry Point(s)	In the Distribution System	Downstream of Any Chlorine or Ammonia Injection Points
Free Ammonia	Weekly.	At least weekly. ^a	Weekly and before and after adjusting the chlorine or ammonia feed rate.
Mono-chloramine	Weekly.	At least weekly. ^a	Weekly and before and after adjusting the chlorine or ammonia feed rate.
Total Chlorine	Weekly.	Daily/weekly. ^b	Weekly and before and after adjusting the chlorine or ammonia feed rate.
Nitrite and Nitrate	As needed to set baseline, then quarterly.	At least quarterly, and in response to action level triggers.	Routine sampling not required.

^a *When collecting a routine sample such as a bacteriological or disinfectant residual sample, the free ammonia and monochloramine should be measured at the same time.*

^b *Total chlorine must be collected weekly or daily, based on the system size, at locations representing the entire distribution system in accordance with §290.110.*

Figure: 30 TAC §290.110(f)(6)

$$V = \frac{b \times 100}{a}$$

Where:

a = number of instances where the residual disinfectant concentration is measured during the month; and

b = number of instances during the month where the residual disinfectant concentration is measured but is detected at less than 0.2 milligrams per liter (mg/L) free chlorine or less than 0.5 mg/L chloramine (measured as total chlorine).

IN ADDITION

The *Texas Register* is required by statute to publish certain documents, including applications to purchase control of state banks, notices of rate ceilings issued by the Office of Consumer Credit Commissioner, and consultant proposal requests and awards. State agencies also may publish other notices of general interest as space permits.

Cancer Prevention and Research Institute of Texas

Request for Applications R-16-CFSA-2

Core Facilities Support Awards

The Cancer Prevention and Research Institute of Texas (CPRIT) seeks applications from eligible organizations for Core Facility Support Awards (CFSA) to establish or enhance core facilities (laboratory, clinical, population-based, or computer-based) that will directly support cancer research programs to advance knowledge of the causes, prevention, and/or treatment of cancer or improve quality of life for cancer patients and survivors. CPRIT expects outcomes of supported activities to directly and indirectly benefit subsequent cancer research efforts, cancer public health policy, or the continuum of cancer care - from prevention to survivorship. To fulfill this vision, applications may address any topic or issue related to cancer biology, causation, prevention, detection or screening, treatment, cure, or quality of life. This award provides cancer researchers access to appropriate research infrastructure, instrumentation, and technical expertise necessary to achieve their research objectives. A wide variety of facilities can be supported, including, but not limited to, chemistry, high-throughput screening, biomedical imaging, proteomics, protein structure, molecular biology, genomics, metabolomics, animal physiology/metabolism, cell sorting, bioengineering, clinical research support, bioinformatics, and the like. Funds may be requested to develop a new facility or to enhance the capabilities of an existing facility that will directly support and impact cancer research programs at the institution and in the region.

The maximum duration for this award mechanism is 5 years. Applicants may request a maximum of \$3,000,000 in total costs for the first 2 years and up to \$1,000,000 in total costs for each subsequent year, inclusive of both direct and indirect costs.

Applications will be accepted beginning at 7:00 a.m. Central Time on Tuesday, August 11, 2015, through 3:00 p.m. Central Time on Tuesday, October 13, 2015. Only applications submitted via the CPRIT Application Receipt System (www.CPRITGrants.org) portal will be considered eligible for evaluation. CPRIT will not accept late applications or applications that are not submitted via the portal. A detailed Request for Applications (RFA) is available online at www.cprit.state.tx.us.

TRD-201502662

Heidi McConnell

Chief Operating Officer

Cancer Prevention and Research Institute of Texas

Filed: July 14, 2015



Request for Applications R-16-HIHR-2

High Impact/High-Risk Research Awards

The Cancer Prevention and Research Institute of Texas (CPRIT) seeks applications from eligible organizations for the High-Impact, High-Risk (HIHR) Research Awards grant mechanism to provide short-term funding to explore the feasibility of high-risk projects that, if success-

ful, would contribute major new insights into the etiology, diagnosis, treatment, or prevention of cancers. Using this mechanism, CPRIT intends to support innovative, developmental projects that focus on exceptionally promising topics that are not yet sufficiently mature to compete successfully for more conventional funding. The HIHR Research Awards are expected to provide the foundation for individual or multiple investigator awards upon completion. Applicants must explain why more conventional sources of support are not available for the proposed research and how short-term funding will lead to strong applications for additional support. The goal of this award mechanism is to fund uncommonly great ideas that merit the opportunity to acquire preliminary data. There should be reasons for the idea to be plausible, but CPRIT acknowledges that most of the selected projects will ultimately fail to meet their primary goals. The rare proposals that succeed will be of sufficient importance to justify this program. Applications may address any research topic related to cancer biology, causation, prevention, detection, screening, or treatment.

Applicants may request a total of \$200,000 for a period of up to 24 months (2 years), inclusive of both direct and indirect costs.

Applications will be accepted beginning at 7:00 a.m. Central Time on Tuesday, August 11, 2015, through 3:00 p.m. Central Time on Tuesday, October 13, 2015. Only applications submitted via the CPRIT Application Receipt System (www.CPRITGrants.org) portal will be considered eligible for evaluation. CPRIT will not accept late applications or applications that are not submitted via the portal. A detailed Request for Applications (RFA) is available online at www.cprit.state.tx.us.

TRD-201502660

Heidi McConnell

Chief Operating Officer

Cancer Prevention and Research Institute of Texas

Filed: July 14, 2015



Request for Applications R-16-MIRA-2

Multi-Investigator Research Awards

The Cancer Prevention and Research Institute of Texas (CPRIT) seeks applications from eligible organizations for Multi-Investigator Research Awards (MIRA) for integrated programs of collaborative and cross-disciplinary research among multiple investigators and will focus on critical research areas that will contribute meaningfully to advancing knowledge of the causes, prevention, and/or treatment of cancer. CPRIT encourages applicants who seek to develop or apply state-of-the-art technologies, tools, and/or resources for cancer research, including those with projects having potential commercialization opportunities. CPRIT expects outcomes of supported activities to directly and indirectly benefit subsequent cancer research efforts, cancer public health policy, or the continuum of cancer care - from prevention to treatment and survivorship. To fulfill this vision, applications may address any research topic or issue related to cancer biology, causation, prevention, detection or screening, treatment, or quality of life. Because Multi-Investigator Research Awards, by definition, support collaborative research projects, this award mechanism will accommodate applications that encompass a wide variety of activities

and administrative structures. Applicants may propose collaborative programs that are modest in size or those that are larger and more complex. CPRIT encourages cancer investigators from Texas to bring their best ideas forward for consideration. Creative, collaborative projects that address critical questions should leverage cancer research taking place in Texas into a leadership position from both national and international perspectives.

Multi-Investigator Research Awards are intended to support the creation of integrated programs of collaborative and cross-disciplinary research among multiple investigators. These should be equivalent to program projects, research centers, NCI SPOREs, multi-institutional clinical trial networks, or other types of collaborative interactions. Teams will focus on critical areas of cancer research, especially those that have been inadequately addressed by research up to this point or for which there may be an absence of an established paradigm or technical framework. Laboratory research, translational studies, clinical, and population-based investigations may be supported. Awards are expected to promote a cooperative environment that fosters intensive interaction among members in all aspects of the research program. This approach is expected to transform the research process through the integration of basic and/or clinical disciplines, leading to the aggressive translation of scientific discoveries into tools and applications that have the potential to make a significant impact on cancer incidence, detection, treatment, and/or survivorship.

Applicants may request a maximum of \$7,500,000 in total costs for a maximum period of 5 years.

Applications will be accepted beginning at 7:00 a.m. Central Time on Tuesday, August 11, 2015, through 3:00 p.m. Central Time on Tuesday, October 13, 2015. Only applications submitted via the CPRIT Application Receipt System (www.CPRITGrants.org) portal will be considered eligible for evaluation. CPRIT will not accept late applications or applications that are not submitted via the portal. A detailed Request for Applications (RFA) is available online at www.cprit.state.tx.us.

TRD-201502661

Heidi McConnell

Chief Operating Officer

Cancer Prevention and Research Institute of Texas

Filed: July 14, 2015



Request for Applications R-17-CFSA-1

Core Facilities Support Awards - Competitive Renewal

The Cancer Prevention and Research Institute of Texas (CPRIT) seeks applications from eligible organizations for Core Facility Support Awards (CFSA) to continue funding for existing core facilities that will directly support cancer research programs to advance knowledge of the causes, prevention, and/or treatment of cancer or improve quality of life for patients with and survivors of cancer. CPRIT expects outcomes of supported activities to directly and indirectly benefit subsequent cancer research efforts, cancer public health policy, or the continuum of cancer care - from prevention to survivorship. To fulfill this vision, applications may address any topic or issue related to cancer biology, causation, prevention, detection or screening, treatment, cure, or quality of life. This award provides cancer researchers access to appropriate research infrastructure, instrumentation, and technical expertise necessary to achieve their research objectives. Funds may be requested to continue activities of an existing facility that directly supports and impacts cancer research programs at the institution and in the region.

This competitive renewal RFA is open only to projects that were funded in 2012 pursuant to RFA R-12-CFSA-1 with an original contract end date of November 30, 2016.

The maximum duration for this award mechanism is 5 years. Eligible applicants may request up to the total amount that was originally awarded not to exceed \$5,000,000 in total costs.

Applications will be accepted beginning at 7:00 a.m. Central Time on Tuesday, August 11, 2015, through 3:00 p.m. Central Time on Tuesday, October 13, 2015. Only applications submitted via the CPRIT Application Receipt System (www.CPRITGrants.org) portal will be considered eligible for evaluation. CPRIT will not accept late applications or applications that are not submitted via the portal. A detailed Request for Applications (RFA) is available online at www.cprit.state.tx.us.

TRD-201502663

Heidi McConnell

Chief Operating Officer

Cancer Prevention and Research Institute of Texas

Filed: July 14, 2015



Comptroller of Public Accounts

Certification of the Average Closing Price of Gas and Oil - June 2015

The Comptroller of Public Accounts, administering agency for the collection of the Crude Oil Production Tax, has determined, as required by Tax Code, §202.058, that the average taxable price of crude oil for reporting period June 2015 is \$39.88 per barrel for the three-month period beginning on March 1, 2015, and ending May 31, 2015. Therefore, pursuant to Tax Code, §202.058, crude oil produced during the month of June 2015 from a qualified low-producing oil lease is not eligible for a credit on the crude oil production tax imposed by Tax Code, Chapter 202.

The Comptroller of Public Accounts, administering agency for the collection of the Natural Gas Production Tax, has determined, as required by Tax Code, §201.059, that the average taxable price of gas for reporting period June 2015 is \$1.89 per mcf for the three-month period beginning on March 1, 2015, and ending May 31, 2015. Therefore, pursuant to Tax Code, §201.059, gas produced during the month of June 2015 from a qualified low-producing well is eligible for a 100% credit on the natural gas production tax imposed by Tax Code, Chapter 201.

The Comptroller of Public Accounts, administering agency for the collection of the Franchise Tax, has determined, as required by Tax Code, §171.1011(s), that the average closing price of West Texas Intermediate crude oil for the month of June 2015 is \$59.83 per barrel. Therefore, pursuant to Tax Code, §171.1011(r), a taxable entity shall not exclude total revenue received from oil produced during the month of June 2015 from a qualified low-producing oil well.

The Comptroller of Public Accounts, administering agency for the collection of the Franchise Tax, has determined, as required by Tax Code, §171.1011(s), that the average closing price of gas for the month of June 2015 is \$2.77 per MMBtu. Therefore, pursuant to Tax Code, §171.1011(r), a taxable entity shall exclude total revenue received from gas produced during the month of June 2015 from a qualified low-producing gas well.

Inquiries should be submitted to Teresa G. Bostick, Director, Tax Policy Division, P.O. Box 13528, Austin, Texas 78711-3528.

TRD-201502657



Public Notice of Court Costs and Fees

Government Code, §51.607, requires the comptroller to publish a list of all court costs and fees imposed or changed during the most recent regular session of the legislature. This section also provides that, notwithstanding the effective date of the law imposing or changing the amount of a court cost or fee, the imposition or change does not take effect until January 1, following the effective date of the law.

The listing of court costs and fees to be identified and published as required by Government Code, §51.607 are as follows:

House Bill 941

DNA Database System

Effective September 1, 2015. House Bill 941 relates to the creation of DNA records for the DNA database system.

The bill adds the \$50 court cost for DNA testing in certain cases and eliminates it in other cases by amending Code of Criminal Procedure, Article 102.020(a) to apply the \$50 fee to offenses described by, rather than listed in, Government Code, §411.1471(a)(3), and by amending Government Code, §102.021(14), to apply to certain misdemeanors and felonies, and by amending Government Code, §411.1471(a)(3) to apply to (a) an offense under Penal Code, Title 5, other than an offense described by Government Code, §411.1471(a)(1), that is punishable as a Class A misdemeanor or any higher category of offense, except for an offense punishable as a Class A misdemeanor under Penal Code, §§20.02, 22.01, or 22.05, or (b) under Penal Code, §§21.08, 25.04, 43.03, or 43.24, and to exclude Penal Code, §21.07.

House Bill 1062

Fee For County Records Technology and Infrastructure In Certain Counties

Effective September 1, 2015. House Bill 1062 relates to authorizing a fee for county records technology and infrastructure costs in counties that border the United Mexican States and the Gulf of Mexico.

The bill amends Local Government Code, Chapter 118, Subchapter C, by adding §118.069 requiring the clerk of a county court, if adopted by the commissioners court under §118.026, to collect the records technology and infrastructure fee at the time a person pays a fee under §118.0546 or §118.0645 and to deposit the fee in the records technology and infrastructure account under §118.026(c).

The bill amends Local Government Code, Chapter 118, Subchapter D, by adding §118.102, requiring the county judge collect the records technology and infrastructure fee, if adopted by the commissioners court under §118.026, at the time a person pays a fee for probate matters under §118.101 and requires the county judge to deposit the fee in the records technology and infrastructure account under §118.026(c).

House Bill 1888

Commercial Driver's License

Effective January 1, 2016, with the exception of Section 35 which takes effect January 30, 2016. House Bill 1888 relates to commercial driver's licenses and commercial learner's permits and the operation of commercial motor vehicles; authorizing a fee; increasing a penalty.

The bill adds Transportation Code, §522.011(f), which authorizes a court to assess a \$10 fee for a case dismissed under §522.011(e).

The bill adds Transportation Code, §548.605(e), which authorizes a court to assess a \$20 fee for a case dismissed under that subsection.

House Bill 2182

Fees and Deposits by a County Clerk or District Clerk

Effective September 1, 2015. House Bill 2182 relates to the collection and refunding of certain fees and deposits by a county clerk or district clerk; increasing certain fees.

The bill amends, Code of Criminal Procedures, §102.004(a), requiring a defendant convicted by a jury in a county court, a county court at law, or a district court to pay a jury fee of \$40, rather than a fee of \$20.

The bill amends, Government Code, §51.305(b), authorizing the commissioners court of a county to adopt a district court records archive fee of not more than \$10 for the filing of a suit, including an appeal from an inferior court, or a cross-action, counterclaim, intervention, contempt action, motion for new trial, or third-party petition, in any court in the county for which the district clerk accepts filing as part of the county's annual budget, rather than in a district court in the county as part of the county's annual budget.

The bill amends, Government Code, §51.305(b), as effective September 1, 2019, authorizing the commissioners court of a county to adopt a district court records archive fee of not more than \$5.00 for the filing of a suit, including an appeal from an inferior court, or a cross-action, counterclaim, intervention, contempt action, motion for new trial, or third-party petition, in any court in the county for which the district clerk accepts filing as part of the county's annual budget, rather than in a district court in the county as part of the county's annual budget.

The bill amends, Government Code, §51.319, requiring the district clerk to collect fees for services performed by the clerk for performing services related to a matter filed in a statutory county court, the same fees allowed the district clerk for those services in the district court.

The bill amends, Government Code, §51.604(a), by requiring the district clerk to collect a \$40 jury fee, rather than a \$30 jury fee, for each civil case in which a person applies for a jury trial and requires the clerk of a county court, or statutory county court to collect a \$40 jury fee, rather than a \$22 jury fee, for each civil case in which a person applies for a jury trial.

The bill amends, Local Government Code, §118.052, requiring each clerk of a county court to collect fees for services rendered to any person Claim Against Estate (§118.058) in the amount of \$10, rather than \$2.

House Bill 2398

Court Jurisdictions and Procedures Relating to Truancy

Effective September 1, 2015. House Bill 2398 relates to court jurisdiction and procedures relating to truancy; establishing judicial donation trust fund; providing criminal penalties; imposing a court cost.

The bill amends, Family Code by adding Title 3A, §65.107 (Court Cost), requiring that (a) if a child is found to have engaged in truant conduct, the truancy court, after giving the child, parent, or other person responsible for the child's support a reasonable opportunity to be heard, shall order the child, parent, or other person, if financially able to do so, to pay a court cost of \$50 to the clerk of the court; (b) The court's order to pay the \$50 court cost is not effective unless the order is reduced to writing and signed by the judge. The written order to pay the court cost may be part of the court's order detailing the remedial actions in the case; (c) The clerk of the court shall keep a record of the

court costs collected under this section and shall forward the funds to the county treasurer, municipal treasurer, or person fulfilling the role of a county treasurer or municipal treasurer, as appropriate; (d) The court costs collected under this section shall be deposited in a special account that can be used only to offset the cost of the operations of the truancy court.

The bill amends, Government Code, §103.021, by deleting existing Subdivision (20 - b) requiring an accused or defendant, or a party to a civil suit, as applicable, to pay certain fees and costs under the Code of Criminal Procedures if ordered by the court or otherwise required, including a fee to defray the cost of notifying state agencies of orders of expunction (Code of Criminal Procedure, Article 45.055) in the amount of \$30 per application.

Senate Bill 287

Elimination of Certain Court Fees and Costs

Effective immediately. Senate Bill 287 relates to the elimination of certain court fees and costs and to the bill of costs provided to a defendant.

The bill amends Government Code, §102.101 by eliminating the fee described by §102.101(8) and Code of Criminal Procedure, Article 102.009, described as a court cost on conviction of a Class C misdemeanor in a county with a population of 3.3 million or more, if authorized by the county commissioners court (Code of Criminal Procedure, Article 102.009) not to exceed \$7.00.

The bill repeals Government Code, §101.6017 and amends Tax Code, §42.221(b) by eliminating the \$5.00 fee for filing an additional petition for appeal or review of an appraisal review order relating to certain regulated property running through or operating in more than one county after the first petition for review relating to the same property is filed for a tax year.

The bill eliminates the \$2 fee collected by a county judge for hearing an application to secure a pension by repealing Government Code, §101.122(b) and Article 6219, Revised Statutes.

The bill eliminates the \$10 fee that is taxed as costs for county attorneys for suits maintained under Transportation Code, §112.059 by repealing Government Code, §101.817, and §101.1216, and Transportation Code, §112.059(e).

Senate Bill 740

Multiple Offenses or Multiple Counts of the Same Offense on Conviction

Effective September 1, 2015. Senate Bill 740 relates to the assessment of court costs and fees on conviction of multiple offenses or conviction of multiple counts of the same offense.

The bill amends Code of Criminal Procedure, Chapter 102, Subchapter C, by adding Article 102.073, authorizing a court, in a single criminal action in which a defendant is convicted of two or more offenses or of multiple counts of the same offense, to assess each court cost or fee only once against the defendant. The court cost or fee, the amount of which is determined according to the category of offense, must be assessed using the highest category of offense that is possible based on the defendant's convictions. The article does not apply to a single criminal action alleging only the commission of two or more offenses punishable by fine only.

Senate Bill 1964

Fees for Filing Civil Cases in Hidalgo County and Cameron County

Effective Immediately. Senate Bill 1964 relates to the imposition of additional fees for filing civil cases and for recording certain documents in Hidalgo County and Cameron County.

The bill amends Government Code, Chapter 51, Subchapter H, by adding §51.711, authorizing district courts, statutory probate courts, and county courts at law in Hidalgo County and Cameron County to collect a filing fee of not more than \$20 in each civil case filed in the court to be used for the construction, renovation, or improvement of the facilities that house the Hidalgo County or Cameron County civil courts. Requiring court fees due under this section shall be collected in the same manner as other fees, fines, or costs are collected in the case and requires the clerk to send the collected fees to the county treasurer of the county in which the court is located or to any other official who discharges the duties commonly assigned to the county treasurer at least as frequently as monthly. Requiring the treasurer or other official to deposit the fees in a special account in the county treasury dedicated to the construction, renovation, or improvement of the facilities that house the courts in the county collecting the fee.

This section applies only to fees for a 12-month period beginning October 1, if the commissioners court of the county collecting the fee: (1) adopts a resolution authorizing a fee of not more than \$20; (2) adopts a resolution requiring the county to spend one dollar for each construction, renovation, or improvement of the court facilities for each dollar spent from the special account dedicated to that purpose; and (3) files the resolutions with the county treasurer or with other official who discharges the duties commonly assigned to the county treasurer not later than September 1 immediately preceding the first 12-month period during which the fees are to be collected. Authorizing the commissioners court of the county collecting the fee may rescind a resolution adopted under Subsection (e) by adopting a resolution rescinding the resolution and submitting the rescission resolution to the county treasurer or to any other official who discharges the duties commonly assigned to the county treasurer not later than September 1 preceding the beginning of the first day of the county fiscal year. The commissioners court may adopt an additional resolution in the manner provided by Subsection (e) after rescinding a previous resolution. A fee established under a particular resolution is abolished on the earlier of: (1) the date a resolution adopted under Subsection (e) is rescinded as provided by Subsection (g); or (2) October 1, 2030.

TRD-201502673

Lita Gonzalez

General Counsel

Comptroller of Public Accounts

Filed: July 15, 2015

Office of Consumer Credit Commissioner

Notice of Rate Ceilings

The Consumer Credit Commissioner of Texas has ascertained the following rate ceilings by use of the formulas and methods described in §303.003 and §303.009, Texas Finance Code.

The weekly ceiling as prescribed by §303.003 and §303.009 for the period of 07/20/15 - 07/26/15 is 18% for Consumer¹/Agricultural/Commercial² credit through \$250,000.

The weekly ceiling as prescribed by §303.003 and §303.009 for the period of 07/20/15 - 07/26/15 is 18% for Commercial over \$250,000.

¹ Credit for personal, family or household use.

² Credit for business, commercial, investment or other similar purpose.

TRD-201502665

Leslie Pettijohn
Commissioner
Office of Consumer Credit Commissioner
Filed: July 14, 2015

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Credit Union Department

Applications to Expand Field of Membership

Notice is given that the following applications have been filed with the Credit Union Department (Department) and are under consideration:

An application was received from West Texas Educators Credit Union, Odessa, Texas to expand its field of membership. The proposal would permit persons who live, work, worship or attend school in Pecos County, Texas, to be eligible for membership in the credit union.

An application was received from Neighborhood Credit Union, Dallas, Texas to expand its field of membership. The proposal would permit persons who work, reside, worship or attend school within a 10-mile radius of Neighborhood Credit Union's Highland Village branch at 2710 North Justin Road, Highland Village, Texas 75077, to be eligible for membership in the credit union.

An application was received from Scott & White Employees Credit Union, Temple, Texas to expand its field of membership. The proposal would permit employees of Baylor Scott & White Health and its majority owned subsidiaries, including employees of any successors in interest, and on-site contractors who have a business relationship with Baylor Scott & White Health and who are supervised from Baylor Scott & White Headquarters, Bell County, Texas, to be eligible for membership in the credit union.

An application was received from InTouch Credit Union, Plano, Texas to expand its field of membership. The proposal would permit employees of Goodman Networks and its majority owned subsidiaries, including employees of any successors(s) in interest, on-site contractors/vendors who have a business relationship with Goodman Networks and regularly work on Goodman Networks facilities at one or more Goodman Networks locations throughout the United States, and members of the family of such persons, except foreign nationals at foreign locations, to be eligible for membership in the credit union.

Comments or a request for a meeting by any interested party relating to an application must be submitted in writing within 30 days from the date of this publication. Credit unions that wish to comment on any application must also complete a Notice of Protest form. The form may be obtained by contacting the Department at (512) 837-9236 or downloading the form at <http://www.cud.texas.gov/page/bylaw-charter-applications>. Any written comments must provide all information that the interested party wishes the Department to consider in evaluating the application. All information received will be weighed during consideration of the merits of an application. Comments or a request for a meeting should be addressed to the Credit Union Department, 914 East Anderson Lane, Austin, Texas 78752-1699.

TRD-201502670
Harold E. Feeney
Commissioner
Credit Union Department
Filed: July 15, 2015

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Notice of Final Action Taken

In accordance with the provisions of 7 TAC §91.103, the Credit Union Department provides notice of the final action taken on the following applications:

Application to Expand Field of Membership - Approved

Energy Capital Credit Union, Houston, Texas (#1) - See *Texas Register* issue dated June 27, 2014.

Energy Capital Credit Union, Houston, Texas (#2) - See *Texas Register* issue dated June 27, 2014.

First Service Credit Union (#1), Houston, Texas - See *Texas Register* issue dated April 24, 2015.

First Service Credit Union (#2), Houston, Texas - See *Texas Register* issue dated April 24, 2015.

Public Employees Credit Union (#1), Austin, Texas - See *Texas Register* issue dated April 24, 2015.

United Credit Union, Tyler, Texas (Amended) - Persons who live, work, worship or attend school in Wood or Van Zandt Counties, Texas that are serviced by United States Postal Zip Codes 75103, 75124, 75140, 75752, 75754, 75765, 75773, or 75790.

Application to Amend Articles of Incorporation - Approved

Texas Bay Area Credit Union, Houston, Texas - See *Texas Register* issue dated May 29, 2015.

Application for a Merger or Consolidation - Approved

TCC Credit Union (Dallas) and Texas Dow Employees Credit Union (Lake Jackson) - See *Texas Register* issue dated March 27, 2015.

Articles of Incorporation - 50 Years to Perpetuity - Approved

First Basin Credit Union, Odessa, Texas.

TRD-201502671
Harold E. Feeney
Commissioner
Credit Union Department
Filed: July 15, 2015

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Texas Commission on Environmental Quality

Agreed Orders

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) staff is providing an opportunity for written public comment on the listed Agreed Orders (AOs) in accordance with Texas Water Code (TWC), §7.075. TWC, §7.075 requires that before the commission may approve the AOs, the commission shall allow the public an opportunity to submit written comments on the proposed AOs. TWC, §7.075 requires that notice of the proposed orders and the opportunity to comment must be published in the *Texas Register* no later than the 30th day before the date on which the public comment period closes, which in this case is August 24, 2015. TWC, §7.075 also requires that the commission promptly consider any written comments received and that the commission may withdraw or withhold approval of an AO if a comment discloses facts or considerations that indicate that consent is inappropriate, improper, inadequate, or inconsistent with the requirements of the statutes and rules within the commission's jurisdiction or the commission's orders and permits issued in accordance with the commission's regulatory authority. Additional notice of changes to a proposed AO is not required to be published if those changes are made in response to written comments.

A copy of each proposed AO is available for public inspection at both the commission's central office, located at 12100 Park 35 Circle, Building C, 1st Floor, Austin, Texas 78753, (512) 239-2545 and at the applicable regional office listed as follows. Written comments about an AO should be sent to the enforcement coordinator designated for each AO at the commission's central office at P.O. Box 13087, Austin, Texas 78711-3087 and must be received by 5:00 p.m. on August 24, 2015. Written comments may also be sent by facsimile machine to the enforcement coordinator at (512) 239-2550. The commission enforcement coordinators are available to discuss the AOs and/or the comment procedure at the listed phone numbers; however, TWC, §7.075 provides that comments on the AOs shall be submitted to the commission in writing.

(1) COMPANY: Aurora Povlich; DOCKET NUMBER: 2015-0448-MSW-E; IDENTIFIER: RN107712507; LOCATION: El Paso, El Paso County; TYPE OF FACILITY: unauthorized waste disposal site; RULES VIOLATED: 30 TAC §330.15(c), by failing to not cause, suffer, allow, or permit the unauthorized disposal of municipal solid waste; PENALTY: \$1,312; ENFORCEMENT COORDINATOR: Holly Kneisley, (817) 588-5856; REGIONAL OFFICE: 401 East Franklin Avenue, Suite 560, El Paso, Texas 79901-1206, (915) 834-4949.

(2) COMPANY: AZA AND IZA INCORPORATED dba Hobby Food Mart; DOCKET NUMBER: 2015-0614-PST-E; IDENTIFIER: RN102971009; LOCATION: Houston, Harris County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.50(b)(1)(A) and TWC, §26.3475(c)(1), by failing to monitor the underground storage tanks for releases at a frequency of at least once every month; PENALTY: \$4,500; ENFORCEMENT COORDINATOR: John Fennell, (512) 239-2616; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(3) COMPANY: City of Elkhart; DOCKET NUMBER: 2015-0568-PWS-E; IDENTIFIER: RN101400877; LOCATION: Elkhart, Anderson County; TYPE OF FACILITY: public water supply; RULES VIOLATED: 30 TAC §290.39(j)(1)(A) and Texas Health and Safety Code (THSC), §341.0351, by failing to notify the executive director prior to making any significant change to the facility's production, treatment, storage, or pressure maintenance facilities or distribution system; 30 TAC §290.43(c)(8), by failing to ensure that all clearwells, ground storage tanks, standpipes, and elevated tanks are painted, disinfected, and maintained in strict accordance with current American Water Works Association standards; 30 TAC §290.45(b)(1)(D)(i) and THSC, §341.0315(c), by failing to provide two or more wells having a total capacity of 0.6 gallons per minute per connection; and 30 TAC §290.46(u), by failing to plug and seal abandoned public water supply wells in accordance with 16 TAC Chapter 76 or submit the test results proving that the wells are in a non-deteriorated condition; PENALTY: \$500; ENFORCEMENT COORDINATOR: Ryan Byer, (512) 239-2571; REGIONAL OFFICE: 2916 Teague Drive, Tyler, Texas 75701-3734, (903) 535-5100.

(4) COMPANY: City of Gorman; DOCKET NUMBER: 2015-0732-PWS-E; IDENTIFIER: RN101198794; LOCATION: Gorman, Eastland County; TYPE OF FACILITY: public water supply; RULES VIOLATED: 30 TAC §290.115(f)(1) and Texas Health and Safety Code, §341.0315(c), by failing to comply with the maximum contaminant level of 0.080 milligrams per liter for total trihalomethanes, based on the locational running annual average; PENALTY: \$175; ENFORCEMENT COORDINATOR: Jim Fisher, (512) 239-2537; REGIONAL OFFICE: 1977 Industrial Boulevard, Abilene, Texas 79602-7833, (325) 698-9674.

(5) COMPANY: City of Grapeland; DOCKET NUMBER: 2015-0578-PWS-E; IDENTIFIER: RN101400273; LOCATION: Grapeland, Houston County; TYPE OF FACILITY: public water supply; RULES VIOLATED: 30 TAC §290.46(e) and Texas Health and Safety Code, §341.033(a), by failing to operate the water system under the direct supervision of a water works operator who holds a Class C or higher license; 30 TAC §290.46(p)(2), by failing to provide the executive director with a written list of all the operators and operating companies that the public water system employs on an annual basis; 30 TAC §290.46(f)(2), (3)(A)(iii), and (B)(v), by failing to properly maintain water works operation and maintenance records and make them readily available for review by commission personnel upon request; 30 TAC §290.121(a) and (b), by failing to develop and maintain an up-to-date chemical and microbiological monitoring plan that identifies all sampling locations, describes the sampling frequency, and specifies the analytical procedures and laboratories that the public water system will use to comply with the monitoring requirements; and 30 TAC §290.46(m)(6), by failing to maintain pumps, motors, valves, and other mechanical devices in good working condition; PENALTY: \$250; ENFORCEMENT COORDINATOR: Yuliya Dunaway, (210) 403-4077; REGIONAL OFFICE: 3870 Eastex Freeway, Beaumont, Texas 77703-1892, (409) 898-3838.

(6) COMPANY: City of Wortham; DOCKET NUMBER: 2015-0558-MWD-E; IDENTIFIER: RN102844362; LOCATION: Wortham, Free-stone County; TYPE OF FACILITY: wastewater treatment facility; RULES VIOLATED: TWC, §26.121(a)(1) and 30 TAC §305.65 and §305.125(2), by failing to maintain authorization for the discharge of wastewater; PENALTY: \$2,550; ENFORCEMENT COORDINATOR: Christopher Bost, (512) 239-4575; REGIONAL OFFICE: 6801 Sanger Avenue, Suite 2500, Waco, Texas 76710-7826, (254) 751-0335.

(7) COMPANY: CSA Materials, Incorporated; DOCKET NUMBER: 2015-0524-WQ-E; IDENTIFIER: RN105130231; LOCATION: Carlsbad, Tom Green County; TYPE OF FACILITY: aggregate production operation (APO); RULES VIOLATED: 30 TAC §342.25(d), by failing to renew the APO registration annually as regulated activities continued; PENALTY: \$5,000; ENFORCEMENT COORDINATOR: Jason Fraley, (512) 239-2552; REGIONAL OFFICE: 622 South Oakes, Suite K, San Angelo, Texas 76903-7035, (325) 655-9479.

(8) COMPANY: Equistar Chemicals, LP; DOCKET NUMBER: 2015-0492-AIR-E; IDENTIFIER: RN100542281; LOCATION: Channelview, Harris County; TYPE OF FACILITY: chemical manufacturing plant; RULES VIOLATED: 30 TAC §116.115(c) and §122.143(4), Texas Health and Safety Code, §382.085(b), Federal Operating Permit Number O1426, Special Terms and Conditions Number 1, and New Source Review Permit Number 2128, Special Conditions Number 1, by failing to prevent unauthorized emissions; PENALTY: \$6,563; ENFORCEMENT COORDINATOR: Jennifer Nguyen, (512) 239-6160; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(9) COMPANY: ET AND T INVESTMENTS, INCORPORATED dba 925 Food Store; DOCKET NUMBER: 2015-0538-PST-E; IDENTIFIER: RN102449337; LOCATION: Houston, Harris County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.50(b)(1)(A) and TWC, §26.3475(c)(1), by failing to monitor the underground storage tanks for releases at a frequency of at least once every month (not to exceed 35 days between each monitoring); PENALTY: \$3,375; ENFORCEMENT COORDINATOR: Danielle Porras, (713) 767-3682; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(10) COMPANY: ETXPG, LLC; DOCKET NUMBER: 2015-0919-WQ-E; IDENTIFIER: RN108205501; LOCATION: Tyler, Smith

County; TYPE OF FACILITY: warehouse construction site; RULES VIOLATED: 30 TAC §281.25(a)(4), by failing to obtain a Construction General Permit; PENALTY: \$875; ENFORCEMENT COORDINATOR: Jill Russell, (512) 239-4564; REGIONAL OFFICE: 2616 Teague Drive, Tyler, Texas 75701-3734, (903) 535-5100.

(11) COMPANY: F and H Builders, LLC; DOCKET NUMBER: 2015-0948-WQ-E; IDENTIFIER: RN108209586; LOCATION: Longview, Gregg County; TYPE OF FACILITY: construction site; RULES VIOLATED: 30 TAC §281.25(a)(4), by failing to obtain a Construction General Permit; PENALTY: \$875; ENFORCEMENT COORDINATOR: Jill Russell, (512) 239-4564; REGIONAL OFFICE: 2616 Teague Drive, Tyler, Texas 75701-3734, (903) 535-5100.

(12) COMPANY: GOOD TIME STORES, INCORPORATED dba Good Time Store 70; DOCKET NUMBER: 2013-1551-PST-E; IDENTIFIER: RN105683486; LOCATION: El Paso, El Paso County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §115.245(2) and Texas Health and Safety Code, §382.085(b), by failing to verify proper operation of the Stage II equipment at least once every 12 months; PENALTY: \$7,664; ENFORCEMENT COORDINATOR: Michael Meyer, (512) 239-4492; REGIONAL OFFICE: 401 East Franklin Avenue, Suite 560, El Paso, Texas 79901-1206, (915) 834-4949.

(13) COMPANY: GRASSLAND WATER SUPPLY CORPORATION; DOCKET NUMBER: 2015-0677-PWS-E; IDENTIFIER: RN101244093; LOCATION: Post, Lynn County; TYPE OF FACILITY: public water supply; RULES VIOLATED: 30 TAC §290.46(e)(4)(A) and Texas Health and Safety Code, §341.033(a), by failing to operate the facility under the direct supervision of a water works operator who holds a Class D or higher license; 30 TAC §290.46(f)(2), (2)(A)(i)(III), and (3)(A)(ii)(III), by failing to make water works operation and maintenance records available for review by commission personnel during an investigation; 30 TAC §290.41(c)(1)(F), by failing to obtain a sanitary control easement for all land within 150 feet of the well; 30 TAC §290.46(i), by failing to adopt an adequate plumbing ordinance, regulations, or service agreement with provisions for proper enforcement to ensure that neither cross-connections nor other unacceptable plumbing practices are permitted; 30 TAC §290.42(l), by failing to maintain a thorough and up-to-date plant operations manual for operator review and reference; 30 TAC §290.46(s)(1) and (2)(C)(i), by failing to calibrate the facility's well meter at least once every three years and by failing to verify the accuracy of the manual disinfectant residual analyzer at least once every 90 days using chlorine solutions of known concentrations; and 30 TAC §290.46(m)(1)(A) and (B), by failing to conduct an annual inspection of the facility's ground storage tank and failing to conduct an annual inspection of the facility's pressure tank; PENALTY: \$930; ENFORCEMENT COORDINATOR: Katy Montgomery, (210) 403-4016; REGIONAL OFFICE: 5012 50th Street, Suite 100, Lubbock, Texas 79414-3421, (806) 796-7092.

(14) COMPANY: Harris County Municipal Utility District Number 150; DOCKET NUMBER: 2015-0172-MWD-E; IDENTIFIER: RN102952884; LOCATION: Houston, Harris County; TYPE OF FACILITY: wastewater treatment facility; RULES VIOLATED: TWC, §26.121(a)(1), 30 TAC §305.125(1), and Texas Pollutant Discharge Elimination System Permit Number WQ0011863001, Effluent Limitations and Monitoring Requirements Numbers 1 and 3, by failing to comply with permitted effluent limitations; PENALTY: \$12,375; ENFORCEMENT COORDINATOR: Christopher Bost, (512) 239-4575; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(15) COMPANY: Iskander Properties, L.L.C.; DOCKET NUMBER: 2015-0376-EAQ-E; IDENTIFIER: RN107601551; LOCATION: San

Antonio, Bexar County; TYPE OF FACILITY: construction site; RULES VIOLATED: 30 TAC §213.5(f)(2) and (2)(A) and §213.4(k), and Water Pollution Abatement Plan (WPAP) Number 13-14072802, Standard Conditions Numbers 10 and 12, by failing to immediately suspend all regulated activities near any sensitive feature encountered during construction until receiving executive director approval and failing to immediately notify the San Antonio Regional Office of any sensitive feature encountered during construction; and 30 TAC §213.4(k) and WPAP Number 13-14072802, Temporary Stormwater Section Number 22, by failing to implement temporary sediment control measures to prevent pollutants from entering a sensitive feature encountered during construction; PENALTY: \$3,126; ENFORCEMENT COORDINATOR: Cheryl Thompson, (817) 588-5886; REGIONAL OFFICE: 14250 Judson Road, San Antonio, Texas 78233-4480, (210) 490-3096.

(16) COMPANY: Juan Ortiz dba El Valle Foreign and Domestic Parts; DOCKET NUMBER: 2015-0196-MSW-E; IDENTIFIER: RN104470463; LOCATION: Harlingen, Cameron County; TYPE OF FACILITY: salvage yard with used auto parts; RULES VIOLATED: 30 TAC §330.15(c), by failing to not cause, suffer, allow, or permit the unauthorized disposal of municipal solid waste; 30 TAC §324.1 and 40 Code of Federal Regulations (CFR) §279.22(c)(1), by failing to label or clearly mark used oil storage containers with the words "Used Oil"; and 30 TAC §324.15, Texas Health and Safety Code, §371.041 and 40 CFR §279.22(d), by failing to perform response action upon detection of a release of used oil; PENALTY: \$7,650; ENFORCEMENT COORDINATOR: Tiffany Maurer, (512) 239-2696; REGIONAL OFFICE: 1804 West Jefferson Avenue, Harlingen, Texas 78550-5247, (956) 425-6010.

(17) COMPANY: Kamish Investment Incorporated d/b/a Diamond Food Mart 5; DOCKET NUMBER: 2012-0504-PST-E; IDENTIFIER: RN102364403; LOCATION: San Antonio, Bexar County; TYPE OF FACILITY: a convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.50(b)(1)(A) and TWC, §26.3475(c)(1), by failing to monitor the underground storage tanks for releases at a frequency of at least once every month; PENALTY: \$2,500; ENFORCEMENT COORDINATOR: Cheryl Thompson, (817) 588-5886; REGIONAL OFFICE: 14250 Judson Road, San Antonio, Texas 78233-4480, (210) 490-3096.

(18) COMPANY: LOYALTY INVESTMENT LLC dba Fairmont Food Mart; DOCKET NUMBER: 2015-0649-PST-E; IDENTIFIER: RN101637023; LOCATION: Pasadena, Harris County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.50(b)(1)(A) and (2) and TWC, §26.3475(a) and (c)(1), by failing to monitor the underground storage tanks (USTs) for releases at a frequency of at least once every month and failing to provide release detection for the pressurized piping associated with the UST system; PENALTY: \$3,879; ENFORCEMENT COORDINATOR: Steven Van Landingham, (512) 239-5717; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(19) COMPANY: Michael Porter dba SILVEIRA INDUSTRIES INCORPORATED; DOCKET NUMBER: 2015-0434-LII-E; IDENTIFIER: RN108105925; LOCATION: McKinney, Collin County; TYPE OF FACILITY: landscape irrigation; RULES VIOLATED: 30 TAC §30.5(a), Texas Occupations Code, §1903.251, and TWC, §37.003, by failing to hold an irrigator license prior to selling, designing, consulting, installing, maintaining, altering, repairing, or servicing an irrigation system; and 30 TAC §30.5(b) and §344.34(a) and (b), Texas Occupations Code, §1903.251, and TWC, §37.003, by failing to refrain from advertising or representing to the public that it can perform services for which a license is required unless it holds a

current license, or unless it employs an individual who holds a current license and failing to refrain from using or attempting to use the license or license number of someone else who is a licensed irrigator, licensed installer, licensed irrigation technician, or licensed irrigation inspector; PENALTY: \$1,200; ENFORCEMENT COORDINATOR: Jennifer Nguyen, (512) 239-6160; REGIONAL OFFICE: 2309 Gravel Drive, Fort Worth, Texas 76118-6951, (817) 588-5800.

(20) COMPANY: Parastou Esmaeili dba Econo Lube N Tube 185; DOCKET NUMBER: 2015-0428-PST-E; IDENTIFIER: RN101615797; LOCATION: Dallas, Dallas County; TYPE OF FACILITY: automotive maintenance and repair facility; RULES VIOLATED: 30 TAC §334.50(b)(2)(B)(i)(I), by failing to provide release detection for the gravity piping associated with the underground storage tank (UST) system; 30 TAC §37.815(a) and (b), by failing to demonstrate acceptable financial assurance for taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases from the operation of a petroleum UST; and 30 TAC §334.602(a), by failing to identify and designate for the UST facility at least one named individual for each class of operator - Class A, Class B, and Class C; PENALTY: \$6,971; ENFORCEMENT COORDINATOR: Margarita Dennis, (817) 588-5892; REGIONAL OFFICE: 2309 Gravel Drive, Fort Worth, Texas 76118-6951, (817) 588-5800.

(21) COMPANY: Patricia Horak d/b/a Needville Gin; DOCKET NUMBER: 2015-0686-AIR-E; IDENTIFIER: RN101386811; LOCATION: Needville, Fort Bend County; TYPE OF FACILITY: cotton gin facility; RULES VIOLATED: 30 TAC §116.115(b)(2)(G) and (c), Texas Health and Safety Code, §382.085(b), and New Source Review Permit Number 56622, Special Conditions Number 4, by failing to maintain air pollution emission abatement equipment in good working order and operating properly during normal plant operating hours; PENALTY: \$3,563; ENFORCEMENT COORDINATOR: Rajesh Acharya, (512) 239-0577; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(22) COMPANY: Pergan Marshall LLC; DOCKET NUMBER: 2014-1067-MLM-E; IDENTIFIER: RN102498714; LOCATION: Marshall, Harrison County; TYPE OF FACILITY: manufacturer of organic peroxides; RULES VIOLATED: 30 TAC §335.6(c), by failing to update the facility's Notice of Registration (NOR) regarding all waste management units; 30 TAC §335.112(a)(2) and 40 Code of Federal Regulations (CFR) §265.37, by failing to make arrangements, agreements, or contracts for emergency services with local authorities; 30 TAC §335.69(a)(3) and 40 CFR §262.34(a)(3), by failing to ensure that each container and tank used to store hazardous waste is labeled or marked clearly with the words "Hazardous Waste"; 30 TAC §335.112(a)(9) and 40 CFR §265.193(d)(1), (e)(1)(iii), and (2)(iv), by failing to maintain the hazardous waste tank secondary containment system free of cracks or gaps and failed to maintain the impermeable coating or lining of the secondary containment system to prevent the migration of the hazardous waste into the concrete; 30 TAC §335.69(a)(1)(A) and §335.112(a)(8) and 40 CFR §265.173(a), by failing to keep hazardous waste containers closed except when adding or removing waste; 30 TAC §335.4, by failing to prevent the unauthorized discharge of industrial waste; 30 TAC §335.112(a)(8) and 40 CFR §265.174, by failing to conduct weekly inspections of all container storage areas (CSAs) looking for leaking containers and for deterioration of containers caused by corrosion or other factors; 30 TAC §335.112(a)(1) and 40 CFR §265.15(d), by failing to document the date and nature of any repairs or other remedial actions for the CSA; 30 TAC §335.112(a)(9) and 40 CFR §265.196(b)(2), by failing to remove any unauthorized discharges of hazardous waste into the secondary containment system of the hazardous waste tank within 24 hours; 30 TAC §335.10(c), by failing to designate the correct waste code on the hazardous waste manifests; 30

TAC §331.64(d), 40 CFR §146.67(f), and Waste Disposal Well (WDW) Permit Number WDW243, Section IX, by failing to properly maintain and use continuous recording devices to record the injection pressure at WDW243; 30 TAC §331.3 and §331.7, 40 CFR §144.11, TWC, §27.011, and WDW Permit Numbers WDW180 and WDW243, by failing to obtain a permit to operate an injection well; and 30 TAC §324.1 and 40 CFR §279.22(c)(1), by failing to mark or clearly label used oil storage containers with the words "Used Oil"; PENALTY: \$92,482; ENFORCEMENT COORDINATOR: Keith Frank, (512) 239-1203; REGIONAL OFFICE: 2916 Teague Drive, Tyler, Texas 75701-3734, (903) 535-5100.

(23) COMPANY: Shintech Incorporated; DOCKET NUMBER: 2015-0077-AIR-E; IDENTIFIER: RN100213198; LOCATION: Freeport, Brazoria County; TYPE OF FACILITY: polyvinyl chloride resins production plant; RULES VIOLATED: 30 TAC §101.20(3), §116.115(c), §116.116(b)(1), and §122.143(4), New Source Review (NSR) Permit Numbers 9347 and PSDTX285M5, Special Conditions Number 1, Federal Operating Permit Number O1361, Special Terms and Conditions Number 10.A., and Texas Health and Safety Code, §382.085(b), by failing to accurately represent emissions and equipment in NSR Permit Numbers 9347 and PSDTX285M5; PENALTY: \$37,500; ENFORCEMENT COORDINATOR: Raime Hayes-Falero, (713) 767-3567; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(24) COMPANY: Sumeer Homes, Incorporated; DOCKET NUMBER: 2015-0938-WQ-E; IDENTIFIER: RN108118332; LOCATION: Aubrey, Denton County; TYPE OF FACILITY: construction site; RULES VIOLATED: 30 TAC §281.25(a)(4), by failing to obtain a Construction General Permit; PENALTY: \$875; ENFORCEMENT COORDINATOR: Jill Russell, (512) 239-4564; REGIONAL OFFICE: 2309 Gravel Drive, Fort Worth, Texas 76118-6951, (817) 588-5800.

(25) COMPANY: The Lubrizol Corporation; DOCKET NUMBER: 2015-0372-AIR-E; IDENTIFIER: RN101058410; LOCATION: Pasadena, Harris County; TYPE OF FACILITY: lubricant and additive manufacturing plant; RULES VIOLATED: 30 TAC §116.115(c) and §122.143(4), Texas Health and Safety Code, §382.085(b), New Source Review Permit Numbers 1093 and 7264, Special Conditions (SC) Number 16D (previously SC Number 15D), and Federal Operating Permit Number O1582, Special Terms and Conditions (STC) Number 12 (previously STC Number 9), by failing to perform annual calibrations of the flow, temperature, and pressure monitors for two flares, Emission Point Numbers X-100 and X-402; PENALTY: \$81,341; ENFORCEMENT COORDINATOR: Rachel Bekowies, (512) 239-2608; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(26) COMPANY: TIKI LEASING COMPANY, LIMITED; DOCKET NUMBER: 2015-0544-PWS-E; IDENTIFIER: RN101176444; LOCATION: Cove, Chambers County; TYPE OF FACILITY: public water supply; RULES VIOLATED: 30 TAC §290.115(f)(1) and Texas Health and Safety Code, §341.0315(c), by failing to comply with the maximum contaminant level of 0.080 milligrams per liter for total trihalomethanes, based on the locational running annual average; PENALTY: \$157; ENFORCEMENT COORDINATOR: Lisa Westbrook, (512) 239-1160; REGIONAL OFFICE: 5425 Polk Avenue, Suite H, Houston, Texas 77023-1486, (713) 767-3500.

(27) COMPANY: WESTBOUND WATER SUPPLY CORPORATION; DOCKET NUMBER: 2015-0698-PWS-E; IDENTIFIER: RN101195733; LOCATION: Cisco, Eastland County; TYPE OF FACILITY: public water supply; RULES VIOLATED: 30 TAC §290.115(f)(1) and Texas Health and Safety Code, §341.0315(c), by failing to comply with the maximum contaminant level of 0.080

milligrams per liter for total trihalomethanes, based on the locational running annual average; PENALTY: \$175; ENFORCEMENT COORDINATOR: Rachel Bekowies, (512) 239-2608; REGIONAL OFFICE: 1977 Industrial Boulevard, Abilene, Texas 79602-7833, (325) 698-9674.

TRD-201502664

Kathleen C. Decker

Director, Litigation Division

Texas Commission on Environmental Quality

Filed: July 14, 2015



Enforcement Orders

An agreed order was entered regarding Ballard Exploration Company, Inc., Docket No. 2013-1791-AIR-E on July 2, 2015, assessing \$3,750 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Elizabeth Lieberknecht, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding Judith Ann Gardner individually and as trustee of the Gardner Family Trust, Jack G. Garner, Jr., Lou Zane Gardner Burtleson, and Gina Gay Garner, Docket No. 2013-2168-WR-E on July 2, 2015, assessing \$3,000 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Jim Sallans, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding James McIntire dba Holiday Trav L Park, Docket No. 2014-0677-PWS-E on July 2, 2015, assessing \$2,325 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Jacquelyn Boutwell, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding R-Tex Services, LLC, Docket No. 2014-0982-OSS-E on July 2, 2015, assessing \$500 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Jacquelyn Boutwell, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding Sanhedrin Ii, L.P. dba Park Six West, Docket No. 2014-1028-PWS-E on July 2, 2015, assessing \$3,573 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Elizabeth Lieberknecht, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding Dcjr Enterprises, Inc. dba Bay-side Market, Docket No. 2014-1307-PST-E on July 2, 2015, assessing \$4,641 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Tracy Chandler, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding Lion Elastomers LLC fka Ashland Elastomers LLC, Docket No. 2014-1485-AIR-E on July 2, 2015, assessing \$7,500 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Elizabeth Lieberknecht, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding North Bengal, Inc. dba Dry Clean Super Center, Docket No. 2014-1497-DCL-E on July 2, 2015, assessing \$2,422 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Tracy Chandler, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding Asm Gasha Inc dba Lancaster Food Mart, Docket No. 2014-1556-PST-E on July 2, 2015, assessing \$5,250 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Tracy Chandler, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding Hantoushi Group, Inc. dba F M Express Food Mart 2, Docket No. 2014-1574-PST-E on July 2, 2015, assessing \$3,504 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Jake Marx, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

An agreed order was entered regarding Rhonda C. Vanover dba Seven Estates, Docket No. 2014-1624-PWS-E on July 2, 2015, assessing \$483 in administrative penalties.

Information concerning any aspect of this order may be obtained by contacting Elizabeth Harkrider, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

TRD-201502668

Bridget C. Bohac

Chief Clerk

Texas Commission on Environmental Quality

Filed: July 15, 2015



Notice of Water Quality Applications

The following notice was issued July 08, 2015, through July 09, 2015.

INFORMATION SECTION

The Texas Commission on Environmental Quality (TCEQ) has initiated a minor amendment of the Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0011432002 issued to Harborlight Marina and Resort LLC, 3150 Palo Gaucho Xing, Hemphill, Texas 75948, to change flow monitoring from a totalizing meter to an instantaneous flow measurement and to authorize sludge transport and processing to the City of Hemphill Wastewater Treatment Facility, Permit No. WQ0010493002. The existing permit authorizes the discharge of treated domestic wastewater at a daily average flow not to exceed 12,000 gallons per day. The facility is located on the east side of Farm-to-Market Road 3121, approximately 2.5 miles north of the inter-

section of Farm-to-Market Road 3121 and US Highway 83, in Sabine County, Texas 75948.

Orbit Systems Inc has applied for a minor amendment to the TPDES Permit No. WQ0012420001 to authorize the update the treatment system. The existing permit authorizes the discharge of treated domestic wastewater at a daily average flow not to exceed 17,500 gallons per day. The facility is at 120 County Road 547C, Angleton, on the southwest quadrant of the intersection of County Road 213 and County Road 547, approximately two miles east of the City of Angleton, in Brazoria County, Texas 77515.

The following do not require publication in a newspaper. Written comments or requests for a public meeting may be submitted to the Office of the Chief Clerk, Mail Code 105, P.O. Box 13087, Austin Texas 78711-3087 WITHIN (30) DAYS OF THE ISSUED DATE OF THE NOTICE.

If you need more information about these permit applications or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 800-687-4040. General information about the TCEQ can be found at our web site at www.TCEQ.texas.gov. Si desea información en español, puede llamar al 1-800-687-4040.

TRD-201502667

Bridget C. Bohac

Chief Clerk

Texas Commission on Environmental Quality

Filed: July 15, 2015

Texas Facilities Commission

Request for Proposals #303-7-20506

The Texas Facilities Commission (TFC), on behalf of the Department of Family and Protective Services (DFPS), the Health and Human Services Commission (HHSC), the Department of Aging and Disability Services (DADS), the Department of State Health Services (DSHS), and the Department of Assistive and Rehabilitative Services (DARS), announces the issuance of Request for Proposals (RFP) #303-7-20506. TFC seeks a five (5) or ten (10) year lease of approximately 9,515 square feet of office space in Pearsall, Frio County, Texas.

The deadline for questions is July 28, 2015 and the deadline for proposals is August 11, 2015 at 3:00 P.M. The award date is September 16, 2015. TFC reserves the right to accept or reject any or all proposals submitted. TFC is under no legal or other obligation to execute a lease on the basis of this notice or the distribution of an RFP. Neither this notice nor the RFP commits TFC to pay for any costs incurred prior to the award of a grant.

Parties interested in submitting a proposal may obtain information by contacting the Program Specialist, Evelyn Esquivel, at (512) 463-6494. A copy of the RFP may be downloaded from the Electronic State Business Daily at http://esbd.cpa.state.tx.us/bid_show.cfm?bidid=118685.

TRD-201502629

Kay Molina

General Counsel

Texas Facilities Commission

Filed: July 9, 2015

Texas Lottery Commission

Instant Game Number 1678 "Cowboys"

1.0 Name and Style of Game.

A. The name of Instant Game No. 1678 is "COWBOYS". The play style is "key number match".

1.1 Price of Instant Ticket.

A. Tickets for Instant Game No. 1678 shall be \$5.00 per Ticket.

1.2 Definitions in Instant Game No. 1678.

A. Display Printing - That area of the Instant Game Ticket outside of the area where the overprint and Play Symbols appear.

B. Latex Overprint - The removable scratch-off covering over the Play Symbols on the front of the Ticket.

C. Play Symbol - The printed data under the latex on the front of the Instant Ticket that is used to determine eligibility for a prize. Each Play Symbol is printed in Symbol font in black ink in positive except for dual-image games. The possible black Play Symbols are: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, FOOTBALL SYMBOL, TD SYMBOL, \$5.00, \$10.00, \$15.00, \$20.00, \$50.00, \$100, \$100,000, \$5,000 and \$100,000.

D. Play Symbol Caption - The printed material appearing below each Play Symbol which explains the Play Symbol. One caption appears under each Play Symbol and is printed in caption font in black ink in positive. The Play Symbol Caption which corresponds with and verifies each Play Symbol is as follows:

Figure 1: GAME NO. 1678 - 1.2D

PLAY SYMBOL	CAPTION
01	ONE
02	TWO
03	THR
04	FOR
05	FIV
06	SIX
07	SVN
08	EGT
09	NIN
10	TEN
11	ELV
12	TLV
13	TRN
14	FTN
15	FFN
16	SXN
17	SVT
18	ETN
19	NTN
20	TWY
21	TWON
22	TWTO
23	TWTH
24	TWFR
25	TWV
26	TWSX
27	TWSV
28	TWET
29	TWNI
30	TRTY
31	TRON
32	TRTO
33	TRTH
34	TRFR
35	TRV
36	TRSX
37	TRSV
38	TRET
39	TRNI
40	FRTY
41	FRON
42	FRTO
43	FRTH
44	FRFR
45	FRV
46	FRSX

47	FRSV
48	FRET
49	FRNI
50	FFTY
FOOTBALL SYMBOL	WIN
TD SYMBOL	WINALL
\$5.00	FIVE\$
\$10.00	TEN\$
\$15.00	FIFTN
\$20.00	TWENTY
\$50.00	FIFTY
\$100	ONE HUND
\$1,000	ONE THOU
\$5,000	FIV THOU
\$100,000	100 THOU

E. Serial Number - A unique 13 (thirteen) digit number appearing under the latex scratch-off covering on the front of the Ticket. The Serial Number is for validation purposes and cannot be used to play the game. The format will be: 0000000000000.

F. Low-Tier Prize - A prize of \$5.00, \$10.00 or \$20.00.

G. Mid-Tier Prize - A prize of \$50.00 or \$100.

H. High-Tier Prize - A prize of \$1,000, \$5,000 or \$100,000.

I. Bar Code - A 24 (twenty-four) character interleaved two (2) of five (5) Bar Code which will include a four (4) digit game ID, the seven (7) digit Pack number, the three (3) digit Ticket number and the ten (10) digit Validation Number. The Bar Code appears on the back of the Ticket.

J. Pack-Ticket Number - A 14 (fourteen) digit number consisting of the four (4) digit game number (1678), a seven (7) digit Pack number, and a three (3) digit Ticket number. Ticket numbers start with 001 and end with 075 within each Pack. The format will be: 1678-0000001-001.

K. Pack - A Pack of "COWBOYS" Instant Game Tickets contains 075 Tickets, packed in plastic shrink-wrapping and fanfolded in pages of one (1). Ticket 001 will be shown on the front of the Pack; the back of Ticket 075 will be revealed on the back of the Pack. All Packs will be tightly shrink-wrapped. There will be no breaks between the Tickets in a Pack. Every other book will reverse i.e., reverse order will be: the back of Ticket 001 will be shown on the front of the Pack and the front of Ticket 075 will be shown on the back of the Pack.

L. Non-Winning Ticket - A Ticket which is not programmed to be a winning Ticket or a Ticket that does not meet all of the requirements of these Game Procedures, the State Lottery Act (Texas Government Code, Chapter 466), and applicable rules adopted by the Texas Lottery pursuant to the State Lottery Act and referenced in 16 TAC Chapter 401.

M. Ticket or Instant Game Ticket, or Instant Ticket - A Texas Lottery "COWBOYS" Instant Game No. 1678 Ticket.

2.0 Determination of Prize Winners. The determination of prize winners is subject to the general Ticket validation requirements set forth in Texas Lottery Rule §401.302, Instant Game Rules, these Game Procedures, and the requirements set out on the back of each Instant Ticket.

A prize winner in the "COWBOYS" Instant Game is determined once the latex on the Ticket is scratched off to expose 45 (forty-five) Play Symbols. If a player matches any of YOUR NUMBERS Play Symbols to any of the WINNING NUMBERS Play Symbols, the player wins the prize for that number. If a player reveals a "FOOTBALL" Play Symbol, the player wins the prize for that symbol instantly. If the player reveals a "TD" Play Symbol, the player WINS ALL 20 PRIZES instantly! No portion of the Display Printing nor any extraneous matter whatsoever shall be usable or playable as a part of the Instant Game.

2.1 Instant Ticket Validation Requirements.

A. To be a valid Instant Game Ticket, all of the following requirements must be met:

1. Exactly 45 (forty-five) Play Symbols must appear under the Latex Overprint on the front portion of the Ticket;
2. Each of the Play Symbols must have a Play Symbol Caption underneath, unless specified, and each Play Symbol must agree with its Play Symbol Caption;
3. Each of the Play Symbols must be present in its entirety and be fully legible;
4. Each of the Play Symbols must be printed in black ink except for dual image games;
5. The Ticket shall be intact;
6. The Serial Number, Retailer Validation Code and Pack-Ticket Number must be present in their entirety and be fully legible;
7. The Serial Number must correspond, using the Texas Lottery's codes, to the Play Symbols on the Ticket;
8. The Ticket must not have a hole punched through it, be mutilated, altered, unreadable, reconstituted or tampered with in any manner;
9. The Ticket must not be counterfeit in whole or in part;
10. The Ticket must have been issued by the Texas Lottery in an authorized manner;
11. The Ticket must not have been stolen, nor appear on any list of omitted Tickets or non-activated Tickets on file at the Texas Lottery;

12. The Play Symbols, Serial Number, Retailer Validation Code and Pack-Ticket Number must be right side up and not reversed in any manner;

13. The Ticket must be complete and not miscut and have exactly 45 (forty-five) Play Symbols under the Latex Overprint on the front portion of the Ticket, exactly one Serial Number, exactly one Retailer Validation Code, and exactly one Pack-Ticket Number on the Ticket;

14. The Serial Number of an apparent winning Ticket shall correspond with the Texas Lottery's Serial Numbers for winning Tickets, and a Ticket with that Serial Number shall not have been paid previously;

15. The Ticket must not be blank or partially blank, misregistered, defective or printed or produced in error;

16. Each of the 45 (forty-five) Play Symbols must be exactly one of those described in Section 1.2.C of these Game Procedures;

17. Each of the 45 (forty-five) Play Symbols on the Ticket must be printed in the Symbol font and must correspond precisely to the artwork on file at the Texas Lottery; the Ticket Serial Numbers must be printed in the Serial font and must correspond precisely to the artwork on file at the Texas Lottery; and the Pack-Ticket Number must be printed in the Pack-Ticket Number font and must correspond precisely to the artwork on file at the Texas Lottery;

18. The Display Printing on the Ticket must be regular in every respect and correspond precisely to the artwork on file at the Texas Lottery; and

19. The Ticket must have been received by the Texas Lottery by applicable deadlines.

B. The Ticket must pass all additional validation tests provided for in these Game Procedures, the Texas Lottery's Rules governing the award of prizes of the amount to be validated, and any confidential validation and security tests of the Texas Lottery.

C. Any Instant Game Ticket not passing all of the validation requirements is void and ineligible for any prize and shall not be paid. However, the Executive Director may, solely at the Executive Director's discretion, refund the retail sales price of the Ticket. In the event a defective Ticket is purchased, the only responsibility or liability of the Texas Lottery shall be to replace the defective Ticket with another unplayed Ticket in that Instant Game (or a Ticket of equivalent sales price from any other current Texas Lottery Instant Game) or refund the retail sales price of the Ticket, solely at the Executive Director's discretion.

2.2 Programmed Game Parameters.

A. Consecutive Non-Winning Tickets within a Pack will not have matching patterns of either Play Symbols or Prize Symbols.

B. A Ticket will win as indicated by the prize structure.

C. A Ticket can win up to twenty (20) times.

D. On winning and Non-Winning Tickets, the top cash prizes of \$100,000, \$5,000 and \$1,000 will each appear at least once, except on Tickets winning eleven (11) times or more.

E. No matching non-winning YOUR NUMBERS Play Symbols on a Ticket.

F. Non-winning Prize Symbols will not match a winning Prize Symbol on a Ticket.

G. Tickets winning more than one (1) time will use as many WINNING NUMBERS Play Symbols as possible to create matches, unless restricted by other parameters, play action or prize structure.

H. No matching WINNING NUMBERS Play Symbols will appear on a Ticket.

I. The "TD" (win all) Play Symbol will never appear as a WINNING NUMBERS Play Symbol.

J. The "TD" (win all) Play Symbol will instantly win all twenty (20) prizes and will win only as per the prize structure.

K. The "TD" (win all) Play Symbol will never appear more than once on a Ticket.

L. The "TD" (win all) Play Symbol will never appear on a Non-Winning Ticket.

M. On Tickets winning with the "TD" (win all) Play Symbol, no YOUR NUMBERS Play Symbols will match any of the WINNING NUMBERS Play Symbols.

N. The "FOOTBALL" (auto win) Play Symbol will never appear as a WINNING NUMBERS Play Symbol.

O. The "FOOTBALL" (auto win) Play Symbol will automatically win the prize amount directly below the "FOOTBALL" (auto win) Play Symbol on a Ticket.

P. The "FOOTBALL" (auto win) Play Symbol will never appear more than once on a Ticket.

Q. The "FOOTBALL" (auto win) Play Symbol will never appear on a Non-Winning Ticket.

R. The "TD" (win all) Play Symbol and the "FOOTBALL" (auto win) Play Symbol will never appear on the same Ticket.

S. On Tickets winning with the "FOOTBALL" (auto win) Play Symbol, no YOUR NUMBERS Play Symbols will match any of the WINNING NUMBERS Play Symbols.

T. YOUR NUMBERS Play Symbols will never equal the corresponding Prize Symbol (i.e., 5 and \$5, 10 and \$10, 15 and \$15, 20 and \$20, 50 and \$50).

U. On all Tickets, a Prize Symbol will not appear more than four (4) times except as required by the prize structure to create multiple wins.

V. On Non-Winning Tickets, a WINNING NUMBERS Play Symbol will never match a YOUR NUMBERS Play Symbol.

2.3 Procedure for Claiming Prizes.

A. To claim a "COWBOYS" Instant Game prize of \$5.00, \$10.00, \$20.00, \$50.00 or \$100, a claimant shall sign the back of the Ticket in the space designated on the Ticket and present the winning Ticket to any Texas Lottery Retailer. The Texas Lottery Retailer shall verify the claim and, if valid, and upon presentation of proper identification, if appropriate, make payment of the amount due the claimant and physically void the Ticket; provided that the Texas Lottery Retailer may, but is not required, to pay a \$50.00 or \$100 Ticket. In the event the Texas Lottery Retailer cannot verify the claim, the Texas Lottery Retailer shall provide the claimant with a claim form and instruct the claimant on how to file a claim with the Texas Lottery. If the claim is validated by the Texas Lottery, a check shall be forwarded to the claimant in the amount due. In the event the claim is not validated, the claim shall be denied and the claimant shall be notified promptly. A claimant may also claim any of the above prizes under the procedure described in Section 2.3.B and Section 2.3.C of these Game Procedures.

B. To claim a "COWBOYS" Instant Game prize of \$1,000, \$5,000 or \$100,000, the claimant must sign the winning Ticket and present it at one of the Texas Lottery's Claim Centers. If the claim is validated by the Texas Lottery, payment will be made to the bearer of the validated winning Ticket for that prize upon presentation of proper identification. When paying a prize of \$600 or more, the Texas Lottery shall file the appropriate income reporting form with the Internal Revenue Service

(IRS) and shall withhold federal income tax at a rate set by the IRS if required. In the event that the claim is not validated by the Texas Lottery, the claim shall be denied and the claimant shall be notified promptly.

C. As an alternative method of claiming a "COWBOYS" Instant Game prize, the claimant must sign the winning Ticket, thoroughly complete a claim form, and mail both to: Texas Lottery Commission, P.O. Box 16600, Austin, Texas 78761-6600. The Texas Lottery is not responsible for Tickets lost in the mail. In the event that the claim is not validated by the Texas Lottery, the claim shall be denied and the claimant shall be notified promptly.

D. Prior to payment by the Texas Lottery of any prize, the Texas Lottery shall deduct:

1. a sufficient amount from the winnings of a prize winner who has been finally determined to be:

a. delinquent in the payment of a tax or other money to a state agency and that delinquency is reported to the Comptroller under Government Code §403.055;

b. in default on a loan made under Chapter 52, Education Code; or

c. in default on a loan guaranteed under Chapter 57, Education Code; and

2. delinquent child support payments from the winnings of a prize winner in the amount of the delinquency as determined by a court or a Title IV-D agency under Chapter 231, Family Code.

E. If a person is indebted or owes delinquent taxes to the State, other than those specified in the preceding paragraph, the winnings of a person shall be withheld until the debt or taxes are paid.

F. If a person is indebted or owes delinquent taxes to the State, and is selected as a winner in a promotional second-chance drawing, the debt to the State must be paid within 30 days of notification or the prize will be awarded to an Alternate.

2.4 Allowance for Delay of Payment. The Texas Lottery may delay payment of the prize pending a final determination by the Executive Director, under any of the following circumstances:

A. if a dispute occurs, or it appears likely that a dispute may occur, regarding the prize;

B. if there is any question regarding the identity of the claimant;

C. if there is any question regarding the validity of the Ticket presented for payment; or

D. if the claim is subject to any deduction from the payment otherwise due, as described in Section 2.3.D of these Game Procedures. No liability for interest for any delay shall accrue to the benefit of the claimant pending payment of the claim.

2.5 Payment of Prizes to Persons Under 18. If a person under the age of 18 years is entitled to a cash prize under \$600 from the "COWBOYS"

Instant Game, the Texas Lottery shall deliver to an adult member of the minor's family or the minor's guardian a check or warrant in the amount of the prize payable to the order of the minor.

2.6 If a person under the age of 18 years is entitled to a cash prize of \$600 or more from the "COWBOYS" Instant Game, the Texas Lottery shall deposit the amount of the prize in a custodial bank account, with an adult member of the minor's family or the minor's guardian serving as custodian for the minor.

2.7 Instant Ticket Claim Period. All Instant Game prizes must be claimed within 180 days following the end of the Instant Game or within the applicable time period for certain eligible military personnel as set forth in Texas Government Code §466.408. Any rights to a prize that is not claimed within that period, and in the manner specified in these Game Procedures and on the back of each Ticket, shall be forfeited.

2.8 Disclaimer. The number of prizes in a game is approximate based on the number of Tickets ordered. The number of actual prizes available in a game may vary based on number of Tickets manufactured, testing, distribution, sales and number of prizes claimed. An Instant Game Ticket may continue to be sold even when all the top prizes have been claimed.

2.9 Promotional Second-Chance Drawings. Any non-winning "COWBOYS" Instant Game scratch-off Ticket may be entered into one of five promotional drawings for a chance to win a promotional second-chance drawing prize. See instructions on the back of the Ticket for information on eligibility and entry requirements.

3.0 Instant Ticket Ownership.

A. Until such time as a signature is placed upon the back portion of an Instant Game Ticket in the space designated, a Ticket shall be owned by the physical possessor of said Ticket. When a signature is placed on the back of the Ticket in the space designated, the player whose signature appears in that area shall be the owner of the Ticket and shall be entitled to any prize attributable thereto. Notwithstanding any name or names submitted on a claim form, the Executive Director shall make payment to the player whose signature appears on the back of the Ticket in the space designated. If more than one name appears on the back of the Ticket, the Executive Director will require that one of those players whose name appears thereon be designated by such players to receive payment.

B. The Texas Lottery shall not be responsible for lost or stolen Instant Game Tickets and shall not be required to pay on a lost or stolen Instant Game Ticket.

4.0 Number and Value of Instant Prizes. There will be approximately 9,720,000 Tickets in the Instant Game No. 1678. The approximate number and value of prizes in the game are as follows:

Figure 2: GAME NO. 1678 - 4.0

Prize Amount	Approximate Number of Winners*	Approximate Odds are 1 in **
\$5	820,800	11.84
\$10	1,144,800	8.49
\$20	388,800	25.00
\$50	64,800	150.00
\$100	14,445	672.90
\$1,000	452	21,504.42
\$5,000	54	180,000.00
\$100,000	10	972,000.00

*The number of prizes in a game is approximate based on the number of tickets ordered. The number of actual prizes available in a game may vary based on number of tickets manufactured, testing, distribution, sales and number of prizes claimed.

**The overall odds of winning a prize are 1 in 3.99. The individual odds of winning for a particular prize level may vary based on sales, distribution, testing, and number of prizes claimed.

A. The actual number of Tickets in the game may be increased or decreased at the sole discretion of the Texas Lottery Commission.

5.0 End of the Instant Game. The Executive Director may, at any time, announce a closing date (end date) for the Instant Game No. 1678 without advance notice, at which point no further Tickets in that game may be sold. The determination of the closing date and reasons for closing will be made in accordance with the Instant Game closing procedures and the Instant Game Rules. See 16 TAC §401.302(j).

6.0 Governing Law. In purchasing an Instant Game Ticket, the player agrees to comply with, and abide by, these Game Procedures for Instant Game No. 1678, the State Lottery Act (Texas Government Code, Chapter 466), applicable rules adopted by the Texas Lottery pursuant to the State Lottery Act and referenced in 16 TAC Chapter 401, and all final decisions of the Executive Director.

TRD-201502674
 Bob Biard
 General Counsel
 Texas Lottery Commission
 Filed: July 15, 2015



Instant Game Number 1679 "Houston Texans"

1.0 Name and Style of Game.

A. The name of Instant Game No. 1679 is "HOUSTON TEXANS". The play style is "key number match".

1.1 Price of Instant Ticket.

A. Tickets for Instant Game No. 1679 shall be \$5.00 per Ticket.

1.2 Definitions in Instant Game No. 1679.

A. Display Printing - That area of the Instant Game Ticket outside of the area where the overprint and Play Symbols appear.

B. Latex Overprint - The removable scratch-off covering over the Play Symbols on the front of the Ticket.

C. Play Symbol - The printed data under the latex on the front of the Instant Ticket that is used to determine eligibility for a prize. Each Play Symbol is printed in Symbol font in black ink in positive except for dual-image games. The possible black Play Symbols are: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, FOOTBALL SYMBOL, GOALPOST SYMBOL, \$5.00, \$10.00, \$20.00, \$50.00, \$100, \$1,000, \$5,000 and \$100,000.

D. Play Symbol Caption - The printed material appearing below each Play Symbol which explains the Play Symbol. One caption appears under each Play Symbol and is printed in caption font in black ink in positive. The Play Symbol Caption which corresponds with and verifies each Play Symbol is as follows:

Figure 1: GAME NO. 1679 - 1.2D

PLAY SYMBOL	CAPTION
01	ONE
02	TWO
03	THR
04	FOR
05	FIV
06	SIX
07	SVN
08	EGT
09	NIN
10	TEN
11	ELV
12	TLV
13	TRN
14	FTN
15	FFN
16	SXN
17	SVT
18	ETN
19	NTN
20	TWY
21	TWON
22	TWTO
23	TWTH
24	TWFR
25	TWV
26	TWSX
27	TWSV
28	TWET
29	TWNI
30	TRTY
31	TRON
32	TRTO
33	TRTH
34	TRFR
35	TRFV
36	TRSX
37	TRSV
38	TRET
39	TRNI
40	FRTY
FOOTBALL SYMBOL	WIN
GOALPOST SYMBOL	DOUBLE
\$5.00	FIVE\$
\$10.00	TEN\$
\$20.00	TWENTY
\$50.00	FIFTY
\$100	ONE HUND
\$1,000	ONE THOU
\$5,000	FIV THOU
\$100,000	HUN THOU

E. Serial Number - A unique 13 (thirteen) digit number appearing under the latex scratch-off covering on the front of the Ticket. The Serial Number is for validation purposes and cannot be used to play the game. The format will be: 0000000000000.

F. Low-Tier Prize - A prize of \$5.00, \$10.00 or \$20.00.

G. Mid-Tier Prize - A prize of \$50.00 or \$100.

H. High-Tier Prize - A prize of \$1,000, \$5,000 or \$100,000.

I. Bar Code - A 24 (twenty-four) character interleaved two (2) of five (5) Bar Code which will include a four (4) digit game ID, the seven (7) digit Pack number, the three (3) digit Ticket number and the ten (10) digit Validation Number. The Bar Code appears on the back of the Ticket.

J. Pack-Ticket Number - A 14 (fourteen) digit number consisting of the four (4) digit game number (1679), a seven (7) digit Pack number, and a three (3) digit Ticket number. Ticket numbers start with 001 and end with 075 within each Pack. The format will be: 1679-0000001-001.

K. Pack - A Pack of "HOUSTON TEXANS" Instant Game Tickets contains 075 Tickets, packed in plastic shrink-wrapping and fanfolded in pages of one (1). The Packs will alternate. One will show the front of Ticket 001 and back of 075 while the other fold will show the back of Ticket 001 and front of 075.

L. Non-Winning Ticket - A Ticket which is not programmed to be a winning Ticket or a Ticket that does not meet all of the requirements of these Game Procedures, the State Lottery Act (Texas Government Code, Chapter 466), and applicable rules adopted by the Texas Lottery pursuant to the State Lottery Act and referenced in 16 TAC Chapter 401.

M. Ticket or Instant Game Ticket, or Instant Ticket - A Texas Lottery "HOUSTON TEXANS" Instant Game No. 1679 Ticket.

2.0 Determination of Prize Winners. The determination of prize winners is subject to the general Ticket validation requirements set forth in Texas Lottery Rule §401.302, Instant Game Rules, these Game Procedures, and the requirements set out on the back of each Instant Ticket. A prize winner in the "HOUSTON TEXANS" Instant Game is determined once the latex on the Ticket is scratched off to expose 45 (forty-five) Play Symbols. The player must scratch the entire play area to reveal 5 WINNING NUMBERS Play Symbols and 20 YOUR NUMBERS Play Symbols. If a player matches any of the YOUR NUMBERS Play Symbols to any of the WINNING NUMBERS Play Symbols, the player wins the prize for that number. If a player reveals a "FOOTBALL" Play Symbol, the player wins the prize for that symbol instantly. If the player reveals a "GOALPOST" Play Symbol, the player wins DOUBLE the prize for that symbol! No portion of the Display Printing nor any extraneous matter whatsoever shall be usable or playable as a part of the Instant Game.

2.1 Instant Ticket Validation Requirements.

A. To be a valid Instant Game Ticket, all of the following requirements must be met:

1. Exactly 45 (forty-five) Play Symbols must appear under the Latex Overprint on the front portion of the Ticket;
2. Each of the Play Symbols must have a Play Symbol Caption underneath, unless specified, and each Play Symbol must agree with its Play Symbol Caption;
3. Each of the Play Symbols must be present in its entirety and be fully legible;
4. Each of the Play Symbols must be printed in black ink except for dual image games;

5. The Ticket shall be intact;

6. The Serial Number, Retailer Validation Code and Pack-Ticket Number must be present in their entirety and be fully legible;

7. The Serial Number must correspond, using the Texas Lottery's codes, to the Play Symbols on the Ticket;

8. The Ticket must not have a hole punched through it, be mutilated, altered, unreadable, reconstituted or tampered with in any manner;

9. The Ticket must not be counterfeit in whole or in part;

10. The Ticket must have been issued by the Texas Lottery in an authorized manner;

11. The Ticket must not have been stolen, nor appear on any list of omitted Tickets or non-activated Tickets on file at the Texas Lottery;

12. The Play Symbols, Serial Number, Retailer Validation Code and Pack-Ticket Number must be right side up and not reversed in any manner;

13. The Ticket must be complete and not miscut and have exactly 45 (forty-five) Play Symbols under the Latex Overprint on the front portion of the Ticket, exactly one Serial Number, exactly one Retailer Validation Code, and exactly one Pack-Ticket Number on the Ticket;

14. The Serial Number of an apparent winning Ticket shall correspond with the Texas Lottery's Serial Numbers for winning Tickets, and a Ticket with that Serial Number shall not have been paid previously;

15. The Ticket must not be blank or partially blank, misregistered, defective or printed or produced in error;

16. Each of the 45 (forty-five) Play Symbols must be exactly one of those described in Section 1.2.C of these Game Procedures;

17. Each of the 45 (forty-five) Play Symbols on the Ticket must be printed in the Symbol font and must correspond precisely to the artwork on file at the Texas Lottery; the Ticket Serial Numbers must be printed in the Serial font and must correspond precisely to the artwork on file at the Texas Lottery; and the Pack-Ticket Number must be printed in the Pack-Ticket Number font and must correspond precisely to the artwork on file at the Texas Lottery;

18. The Display Printing on the Ticket must be regular in every respect and correspond precisely to the artwork on file at the Texas Lottery; and

19. The Ticket must have been received by the Texas Lottery by applicable deadlines.

B. The Ticket must pass all additional validation tests provided for in these Game Procedures, the Texas Lottery's Rules governing the award of prizes of the amount to be validated, and any confidential validation and security tests of the Texas Lottery.

C. Any Instant Game Ticket not passing all of the validation requirements is void and ineligible for any prize and shall not be paid. However, the Executive Director may, solely at the Executive Director's discretion, refund the retail sales price of the Ticket. In the event a defective Ticket is purchased, the only responsibility or liability of the Texas Lottery shall be to replace the defective Ticket with another unplayed Ticket in that Instant Game (or a Ticket of equivalent sales price from any other current Texas Lottery Instant Game) or refund the retail sales price of the Ticket, solely at the Executive Director's discretion.

2.2 Programmed Game Parameters.

A. Consecutive Non-Winning Tickets in a Pack will not have matching play data, spot for spot.

B. The top Prize Symbol will appear on every Ticket unless restricted by other parameters, play action or prize structure.

C. No matching non-winning YOUR NUMBERS Play Symbols on a Ticket.

D. No matching WINNING NUMBERS Play Symbols on a Ticket.

E. A Ticket may have up to five matching non-winning Prize Symbols unless restricted by other parameters, play action or prize structure.

F. A non-winning Prize Symbol will never be the same as a winning Prize Symbol.

G. The "GOALPOST" (double) Play Symbol will only appear as dictated by the prize structure.

H. The "FOOTBALL" (auto win) Play Symbol will never appear more than once on a Ticket.

I. No prize amount in a non-winning spot will correspond with the YOUR NUMBERS Play Symbol (i.e., 5 and \$5).

2.3 Procedure for Claiming Prizes.

A. To claim a "HOUSTON TEXANS" Instant Game prize of \$5.00, \$10.00, \$20.00, \$50.00 or \$100, a claimant shall sign the back of the Ticket in the space designated on the Ticket and present the winning Ticket to any Texas Lottery Retailer. The Texas Lottery Retailer shall verify the claim and, if valid, and upon presentation of proper identification, if appropriate, make payment of the amount due the claimant and physically void the Ticket; provided that the Texas Lottery Retailer may, but is not required, to pay a \$50.00 or \$100 Ticket. In the event the Texas Lottery Retailer cannot verify the claim, the Texas Lottery Retailer shall provide the claimant with a claim form and instruct the claimant on how to file a claim with the Texas Lottery. If the claim is validated by the Texas Lottery, a check shall be forwarded to the claimant in the amount due. In the event the claim is not validated, the claim shall be denied and the claimant shall be notified promptly. A claimant may also claim any of the above prizes under the procedure described in Section 2.3.B and Section 2.3.C of these Game Procedures.

B. To claim a "HOUSTON TEXANS" Instant Game prize of \$1,000, \$5,000 or \$100,000, the claimant must sign the winning Ticket and present it at one of the Texas Lottery's Claim Centers. If the claim is validated by the Texas Lottery, payment will be made to the bearer of the validated winning Ticket for that prize upon presentation of proper identification. When paying a prize of \$600 or more, the Texas Lottery shall file the appropriate income reporting form with the Internal Revenue Service (IRS) and shall withhold federal income tax at a rate set by the IRS if required. In the event that the claim is not validated by the Texas Lottery, the claim shall be denied and the claimant shall be notified promptly.

C. As an alternative method of claiming a "HOUSTON TEXANS" Instant Game prize, the claimant must sign the winning Ticket, thoroughly complete a claim form, and mail both to: Texas Lottery Commission, P.O. Box 16600, Austin, Texas 78761-6600. The Texas Lottery is not responsible for Tickets lost in the mail. In the event that the claim is not validated by the Texas Lottery, the claim shall be denied and the claimant shall be notified promptly.

D. Prior to payment by the Texas Lottery of any prize, the Texas Lottery shall deduct:

1. a sufficient amount from the winnings of a prize winner who has been finally determined to be:

a. delinquent in the payment of a tax or other money to a state agency and that delinquency is reported to the Comptroller under Government Code §403.055;

b. in default on a loan made under Chapter 52, Education Code; or

c. in default on a loan guaranteed under Chapter 57, Education Code; and

2. delinquent child support payments from the winnings of a prize winner in the amount of the delinquency as determined by a court or a Title IV-D agency under Chapter 231, Family Code.

E. If a person is indebted or owes delinquent taxes to the State, other than those specified in the preceding paragraph, the winnings of a person shall be withheld until the debt or taxes are paid.

F. If a person is indebted or owes delinquent taxes to the State, and is selected as a winner in a promotional second-chance drawing, the debt to the State must be paid within 30 days of notification or the prize will be awarded to an Alternate.

2.4 Allowance for Delay of Payment. The Texas Lottery may delay payment of the prize pending a final determination by the Executive Director, under any of the following circumstances:

A. if a dispute occurs, or it appears likely that a dispute may occur, regarding the prize;

B. if there is any question regarding the identity of the claimant;

C. if there is any question regarding the validity of the Ticket presented for payment; or

D. if the claim is subject to any deduction from the payment otherwise due, as described in Section 2.3.D of these Game Procedures. No liability for interest for any delay shall accrue to the benefit of the claimant pending payment of the claim.

2.5 Payment of Prizes to Persons Under 18. If a person under the age of 18 years is entitled to a cash prize under \$600 from the "HOUSTON TEXANS" Instant Game, the Texas Lottery shall deliver to an adult member of the minor's family or the minor's guardian a check or warrant in the amount of the prize payable to the order of the minor.

2.6 If a person under the age of 18 years is entitled to a cash prize of \$600 or more from the "HOUSTON TEXANS" Instant Game, the Texas Lottery shall deposit the amount of the prize in a custodial bank account, with an adult member of the minor's family or the minor's guardian serving as custodian for the minor.

2.7 Instant Ticket Claim Period. All Instant Game prizes must be claimed within 180 days following the end of the Instant Game or within the applicable time period for certain eligible military personnel as set forth in Texas Government Code §466.408. Any rights to a prize that is not claimed within that period, and in the manner specified in these Game Procedures and on the back of each Ticket, shall be forfeited.

2.8 Disclaimer. The number of prizes in a game is approximate based on the number of Tickets ordered. The number of actual prizes available in a game may vary based on number of Tickets manufactured, testing, distribution, sales and number of prizes claimed. An Instant Game Ticket may continue to be sold even when all the top prizes have been claimed.

2.9 Promotional Second-Chance Drawings. Any non-winning "HOUSTON TEXANS" Instant Game scratch-off Ticket may be entered into one of five promotional drawings for a chance to win a promotional second-chance drawing prize. See instructions on the back of the Ticket for information on eligibility and entry requirements.

3.0 Instant Ticket Ownership.

A. Until such time as a signature is placed upon the back portion of an Instant Game Ticket in the space designated, a Ticket shall be owned by the physical possessor of said Ticket. When a signature is placed

on the back of the Ticket in the space designated, the player whose signature appears in that area shall be the owner of the Ticket and shall be entitled to any prize attributable thereto. Notwithstanding any name or names submitted on a claim form, the Executive Director shall make payment to the player whose signature appears on the back of the Ticket in the space designated. If more than one name appears on the back of the Ticket, the Executive Director will require that one of those players whose name appears thereon be designated by such players to receive payment.

B. The Texas Lottery shall not be responsible for lost or stolen Instant Game Tickets and shall not be required to pay on a lost or stolen Instant Game Ticket.

4.0 Number and Value of Instant Prizes. There will be approximately 5,520,000 Tickets in the Instant Game No. 1679. The approximate number and value of prizes in the game are as follows:

Figure 2: GAME NO. 1679 - 4.0

Prize Amount	Approximate Number of Winners*	Approximate Odds are 1 in **
\$5	588,800	9.38
\$10	552,000	10.00
\$20	165,600	33.33
\$50	55,200	100.00
\$100	21,206	260.30
\$1,000	184	30,000.00
\$5,000	20	276,000.00
\$100,000	4	1,380,000.00

*The number of prizes in a game is approximate based on the number of tickets ordered. The number of actual prizes available in a game may vary based on number of tickets manufactured, testing, distribution, sales and number of prizes claimed.

**The overall odds of winning a prize are 1 in 3.99. The individual odds of winning for a particular prize level may vary based on sales, distribution, testing, and number of prizes claimed.

A. The actual number of Tickets in the game may be increased or decreased at the sole discretion of the Texas Lottery Commission.

5.0 End of the Instant Game. The Executive Director may, at any time, announce a closing date (end date) for the Instant Game No. 1679 without advance notice, at which point no further Tickets in that game may be sold. The determination of the closing date and reasons for closing will be made in accordance with the Instant Game closing procedures and the Instant Game Rules. See 16 TAC §401.302(j).

6.0 Governing Law. In purchasing an Instant Game Ticket, the player agrees to comply with, and abide by, these Game Procedures for Instant Game No. 1679, the State Lottery Act (Texas Government Code, Chapter 466), applicable rules adopted by the Texas Lottery pursuant to the State Lottery Act and referenced in 16 TAC Chapter 401, and all final decisions of the Executive Director.

TRD-201502675
 Bob Biard
 General Counsel
 Texas Lottery Commission
 Filed: July 15, 2015



Instant Game Number 1699 "Big Cash Money"

1.0 Name and Style of Game.

A. The name of Instant Game No. 1699 is "BIG CASH MONEY." The play style is "beat score."

1.1 Price of Instant Ticket.

A. Tickets for Instant Game No. 1699 shall be \$2.00 per Ticket.

1.2 Definitions in Instant Game No. 1699.

A. Display Printing - That area of the Instant Game Ticket outside of the area where the overprint and Play Symbols appear.

B. Latex Overprint - The removable scratch-off covering over the Play Symbols on the front of the Ticket.

C. Play Symbol - The printed data under the latex on the front of the Instant Ticket that is used to determine eligibility for a prize. Each Play Symbol is printed in Symbol font in black ink in positive except for dual-image games. The possible black Play Symbols are: 2 SYMBOL, 3 CARD SYMBOL, 4 CARD SYMBOL, 5 CARD SYMBOL, 6 CARD SYMBOL, 7 CARD SYMBOL, 8 CARD SYMBOL, 9 CARD SYMBOL, 10 CARD SYMBOL, J CARD SYMBOL, Q CARD SYMBOL, K CARD SYMBOL, A CARD SYMBOL, \$2.00, \$5.00, \$10.00, \$15.00, \$20.00, \$30.00, \$50.00, \$100, \$1,000 and \$25,000.

D. Play Symbol Caption - The printed material appearing below each Play Symbol which explains the Play Symbol. One caption appears under each Play Symbol and is printed in caption font in black ink in positive. The Play Symbol Caption which corresponds with and verifies each Play Symbol is as follows:

Figure 1: GAME NO. 1699 - 1.2D

PLAY SYMBOL	CAPTION
2 SYMBOL	DBL
3 CARD SYMBOL	THR
4 CARD SYMBOL	FOR
5 CARD SYMBOL	FIV
6 CARD SYMBOL	SIX
7 CARD SYMBOL	SVN
8 CARD SYMBOL	EGT
9 CARD SYMBOL	NIN
10 CARD SYMBOL	TEN
J CARD SYMBOL	JAK
Q CARD SYMBOL	QEN
K CARD SYMBOL	KNG
A CARD SYMBOL	ACE
\$2.00	TWO\$
\$5.00	FIVE\$
\$10.00	TEN\$
\$15.00	FIFTN
\$20.00	TWENTY
\$30.00	THIRTY
\$50.00	FIFTY
\$100	ONE HUND
\$1,000	ONE THOU
\$25,000	25 THOU

E. Serial Number- A unique 13 (thirteen) digit number appearing under the latex scratch-off covering on the front of the Ticket. The Serial Number is for validation purposes and cannot be used to play the game. The format will be: 0000000000000.

F. Low-Tier Prize - A prize of \$2.00, \$5.00, \$6.00, \$10.00, \$15.00, \$16.00 or \$20.00.

G. Mid-Tier Prize - A prize of \$30.00, \$50.00 or \$100.

H. High-Tier Prize - A prize of \$1,000 or \$25,000.

I. Bar Code - A 24 (twenty-four) character interleaved two (2) of five (5) Bar Code which will include a four (4) digit game ID, the seven (7) digit Pack number, the three (3) digit Ticket number and the ten (10) digit Validation Number. The Bar Code appears on the back of the Ticket.

J. Pack-Ticket Number - A 14 (fourteen) digit number consisting of the four (4) digit game number (1699), a seven (7) digit Pack number, and a three (3) digit Ticket number. Ticket numbers start with 001 and end with 125 within each Pack. The format will be: 1699-0000001-001.

K. Pack - A Pack of "BIG CASH MONEY" Instant Game Tickets contains 125 Tickets, packed in plastic shrink-wrapping and fanfolded in pages of two (2). One ticket will be folded over to expose a front and back of one ticket on each pack. All Packs will be tightly shrink-wrapped. There will be no breaks between the Tickets in a Pack.

L. Non-Winning Ticket - A Ticket which is not programmed to be a winning Ticket or a Ticket that does not meet all of the requirements

of these Game Procedures, the State Lottery Act (Texas Government Code, Chapter 466), and applicable rules adopted by the Texas Lottery pursuant to the State Lottery Act and referenced in 16 TAC Chapter 401.

M. Ticket or Instant Game Ticket, or Instant Ticket - A Texas Lottery "BIG CASH MONEY" Instant Game No. 1699 Ticket.

2.0 Determination of Prize Winners. The determination of prize winners is subject to the general Ticket validation requirements set forth in Texas Lottery Rule §401.302, Instant Game Rules, these Game Procedures, and the requirements set out on the back of each Instant Ticket. A prize winner in the "BIG CASH MONEY" Instant Game is determined once the latex on the Ticket is scratched off to expose 30 (thirty) Play Symbols. If a player's YOUR CARD Play Symbol beats the DEALER'S CARD Play Symbol in any one HAND across, the player wins the PRIZE for that HAND. If a player's YOUR CARD Play Symbol is a "2" Play Symbol, the player wins DOUBLE the PRIZE for that HAND. Card ranking (highest to lowest): A, K, Q, J, 10, 9, 8, 7, 6, 5, 4, 3. Each HAND plays separately. No portion of the Display Printing nor any extraneous matter whatsoever shall be usable or playable as a part of the Instant Game.

2.1 Instant Ticket Validation Requirements.

A. To be a valid Instant Game Ticket, all of the following requirements must be met:

1. Exactly 30 (thirty) Play Symbols must appear under the Latex Overprint on the front portion of the Ticket;

2. Each of the Play Symbols must have a Play Symbol Caption underneath, unless specified, and each Play Symbol must agree with its Play Symbol Caption;
 3. Each of the Play Symbols must be present in its entirety and be fully legible;
 4. Each of the Play Symbols must be printed in black ink except for dual image games;
 5. The Ticket shall be intact;
 6. The Serial Number, Retailer Validation Code and Pack-Ticket Number must be present in their entirety and be fully legible;
 7. The Serial Number must correspond, using the Texas Lottery's codes, to the Play Symbols on the Ticket;
 8. The Ticket must not have a hole punched through it, be mutilated, altered, unreadable, reconstituted or tampered with in any manner;
 9. The Ticket must not be counterfeit in whole or in part;
 10. The Ticket must have been issued by the Texas Lottery in an authorized manner;
 11. The Ticket must not have been stolen, nor appear on any list of omitted Tickets or non-activated Tickets on file at the Texas Lottery;
 12. The Play Symbols, Serial Number, Retailer Validation Code and Pack-Ticket Number must be right side up and not reversed in any manner;
 13. The Ticket must be complete and not miscut and have exactly 30 (thirty) Play Symbols under the Latex Overprint on the front portion of the Ticket, exactly one Serial Number, exactly one Retailer Validation Code, and exactly one Pack-Ticket Number on the Ticket;
 14. The Serial Number of an apparent winning Ticket shall correspond with the Texas Lottery's Serial Numbers for winning Tickets, and a Ticket with that Serial Number shall not have been paid previously;
 15. The Ticket must not be blank or partially blank, misregistered, defective or printed or produced in error;
 16. Each of the 30 (thirty) Play Symbols must be exactly one of those described in Section 1.2.C of these Game Procedures;
 17. Each of the 30 (thirty) Play Symbols on the Ticket must be printed in the Symbol font and must correspond precisely to the artwork on file at the Texas Lottery; the Ticket Serial Numbers must be printed in the Serial font and must correspond precisely to the artwork on file at the Texas Lottery; and the Pack-Ticket Number must be printed in the Pack-Ticket Number font and must correspond precisely to the artwork on file at the Texas Lottery;
 18. The Display Printing on the Ticket must be regular in every respect and correspond precisely to the artwork on file at the Texas Lottery; and
 19. The Ticket must have been received by the Texas Lottery by applicable deadlines.
- B. The Ticket must pass all additional validation tests provided for in these Game Procedures, the Texas Lottery's Rules governing the award of prizes of the amount to be validated, and any confidential validation and security tests of the Texas Lottery.
- C. Any Instant Game Ticket not passing all of the validation requirements is void and ineligible for any prize and shall not be paid. However, the Executive Director may, solely at the Executive Director's discretion, refund the retail sales price of the Ticket. In the event a defective Ticket is purchased, the only responsibility or liability of the Texas Lottery shall be to replace the defective Ticket with another unplayed Ticket in that Instant Game (or a Ticket of equivalent sales price

from any other current Texas Lottery Instant Game) or refund the retail sales price of the Ticket, solely at the Executive Director's discretion.

2.2 Programmed Game Parameters.

- A. Consecutive Non-Winning Tickets within a Pack will not have matching patterns of either Play Symbols or Prize Symbols.
- B. A Ticket will win as indicated by the prize structure.
- C. A Ticket can win up to ten (10) times.
- D. On winning and Non-Winning Tickets, the top cash prizes of \$25,000 and \$1,000 will each appear at least once, except on Tickets winning ten (10) times.
- E. Non-winning Prize Symbols will not match a winning Prize Symbol on a Ticket.
- F. Ranks of cards in this game in order from highest to lowest: A, K, Q, J, 10, 9, 8, 7, 6, 5, 4, 3. Each HAND plays separately.
- G. All YOUR CARDS and DEALER'S CARDS will consist of one (1) Play Symbol each.
- H. There will be no ties between YOUR CARD Play Symbol and DEALER'S CARD Play Symbol in the same HAND.
- I. On Non-Winning Tickets, there will be at least three (3) instances in which a YOUR CARD Play Symbol is within two (2) card ranks lower than the DEALER'S CARD Play Symbol. (i.e., If DEALER'S CARD Play Symbol is Q, YOUR CARD Play Symbol in that HAND will be J or 10. If DEALER'S CARD Play Symbol is K, YOUR CARD Play Symbol in that HAND will be Q or J.)
- J. There will be no more than two (2) matching YOUR CARD Play Symbols on a Ticket, unless restricted by other parameters, play action or prize structure.
- K. There will be no more than two (2) matching DEALER'S CARD Play Symbols on a Ticket, unless restricted by other parameters, play action or prize structure.
- L. The "2" (DBL) Play Symbol will never appear as a DEALER'S CARD Play Symbol.
- M. There will be no more than two (2) matching non-winning Prize Symbols on a Ticket.
- N. The "2" (DBL) Play Symbol will never appear on a Non-Winning Ticket.
- O. The "2" (DBL) Play Symbol will win double the prize.

2.3 Procedure for Claiming Prizes.

A. To claim a "BIG CASH MONEY" Instant Game prize of \$2.00, \$5.00, \$6.00, \$10.00, \$15.00, \$16.00, \$20.00, \$30.00, \$50.00 or \$100, a claimant shall sign the back of the Ticket in the space designated on the Ticket and present the winning Ticket to any Texas Lottery Retailer. The Texas Lottery Retailer shall verify the claim and, if valid, and upon presentation of proper identification, if appropriate, make payment of the amount due the claimant and physically void the Ticket; provided that the Texas Lottery Retailer may, but is not required, to pay a \$30.00, \$50.00 or \$100 Ticket. In the event the Texas Lottery Retailer cannot verify the claim, the Texas Lottery Retailer shall provide the claimant with a claim form and instruct the claimant on how to file a claim with the Texas Lottery. If the claim is validated by the Texas Lottery, a check shall be forwarded to the claimant in the amount due. In the event the claim is not validated, the claim shall be denied and the claimant shall be notified promptly. A claimant may also claim any of the above prizes under the procedure described in Section 2.3.B and Section 2.3.C of these Game Procedures.

B. To claim a "BIG CASH MONEY" Instant Game prize of \$1,000 or \$25,000, the claimant must sign the winning Ticket and present it at one of the Texas Lottery's Claim Centers. If the claim is validated by the Texas Lottery, payment will be made to the bearer of the validated winning Ticket for that prize upon presentation of proper identification. When paying a prize of \$600 or more, the Texas Lottery shall file the appropriate income reporting form with the Internal Revenue Service (IRS) and shall withhold federal income tax at a rate set by the IRS if required. In the event that the claim is not validated by the Texas Lottery, the claim shall be denied and the claimant shall be notified promptly.

C. As an alternative method of claiming a "BIG CASH MONEY" Instant Game prize, the claimant must sign the winning Ticket, thoroughly complete a claim form, and mail both to: Texas Lottery Commission, P.O. Box 16600, Austin, Texas 78761-6600. The Texas Lottery is not responsible for Tickets lost in the mail. In the event that the claim is not validated by the Texas Lottery, the claim shall be denied and the claimant shall be notified promptly.

D. Prior to payment by the Texas Lottery of any prize, the Texas Lottery shall deduct:

1. A sufficient amount from the winnings of a prize winner who has been finally determined to be:

a. delinquent in the payment of a tax or other money to a state agency and that delinquency is reported to the Comptroller under Government Code §403.055;

b. in default on a loan made under Chapter 52, Education Code; or

c. in default on a loan guaranteed under Chapter 57, Education Code; and

2. delinquent child support payments from the winnings of a prize winner in the amount of the delinquency as determined by a court or a Title IV-D agency under Chapter 231, Family Code.

E. If a person is indebted or owes delinquent taxes to the State, other than those specified in the preceding paragraph, the winnings of a person shall be withheld until the debt or taxes are paid.

2.4 Allowance for Delay of Payment. The Texas Lottery may delay payment of the prize pending a final determination by the Executive Director, under any of the following circumstances:

A. if a dispute occurs, or it appears likely that a dispute may occur, regarding the prize;

B. if there is any question regarding the identity of the claimant;

C. if there is any question regarding the validity of the Ticket presented for payment; or

D. if the claim is subject to any deduction from the payment otherwise due, as described in Section 2.3.D of these Game Procedures. No liability for interest for any delay shall accrue to the benefit of the claimant pending payment of the claim.

2.5 Payment of Prizes to Persons Under 18. If a person under the age of 18 years is entitled to a cash prize under \$600 from the "BIG CASH MONEY" Instant Game, the Texas Lottery shall deliver to an adult member of the minor's family or the minor's guardian a check or warrant in the amount of the prize payable to the order of the minor.

2.6 If a person under the age of 18 years is entitled to a cash prize of \$600 or more from the "BIG CASH MONEY" Instant Game, the Texas Lottery shall deposit the amount of the prize in a custodial bank account, with an adult member of the minor's family or the minor's guardian serving as custodian for the minor.

2.7 Instant Ticket Claim Period. All Instant Game prizes must be claimed within 180 days following the end of the Instant Game or within the applicable time period for certain eligible military personnel as set forth in Texas Government Code §466.408. Any rights to a prize that is not claimed within that period, and in the manner specified in these Game Procedures and on the back of each Ticket, shall be forfeited.

2.8 Disclaimer. The number of prizes in a game is approximate based on the number of Tickets ordered. The number of actual prizes available in a game may vary based on number of Tickets manufactured, testing, distribution, sales and number of prizes claimed. An Instant Game Ticket may continue to be sold even when all the top prizes have been claimed.

3.0 Instant Ticket Ownership.

A. Until such time as a signature is placed upon the back portion of an Instant Game Ticket in the space designated, a Ticket shall be owned by the physical possessor of said Ticket. When a signature is placed on the back of the Ticket in the space designated, the player whose signature appears in that area shall be the owner of the Ticket and shall be entitled to any prize attributable thereto. Notwithstanding any name or names submitted on a claim form, the Executive Director shall make payment to the player whose signature appears on the back of the Ticket in the space designated. If more than one name appears on the back of the Ticket, the Executive Director will require that one of those players whose name appears thereon be designated by such players to receive payment.

B. The Texas Lottery shall not be responsible for lost or stolen Instant Game Tickets and shall not be required to pay on a lost or stolen Instant Game Ticket.

4.0 Number and Value of Instant Prizes. There will be approximately 7,200,000 Tickets in the Instant Game No. 1699. The approximate number and value of prizes in the game are as follows:

Figure 2: GAME NO. 1699 - 4.0

Prize Amount	Approximate Number of Winners*	Approximate Odds are 1 in **
\$2	748,800	9.62
\$5	364,800	19.74
\$6	172,800	41.67
\$10	230,400	31.25
\$15	19,200	375.00
\$16	57,600	125.00
\$20	38,400	187.50
\$30	7,260	991.74
\$50	3,720	1,935.48
\$100	1,255	5,737.05
\$1,000	16	450,000.00
\$25,000	7	1,028,571.43

*The number of prizes in a game is approximate based on the number of tickets ordered. The number of actual prizes available in a game may vary based on number of tickets manufactured, testing, distribution, sales and number of prizes claimed.

**The overall odds of winning a prize are 1 in 4.38. The individual odds of winning for a particular prize level may vary based on sales, distribution, testing, and number of prizes claimed.

A. The actual number of Tickets in the game may be increased or decreased at the sole discretion of the Texas Lottery Commission.

5.0 End of the Instant Game. The Executive Director may, at any time, announce a closing date (end date) for the Instant Game No. 1699 without advance notice, at which point no further Tickets in that game may be sold. The determination of the closing date and reasons for closing will be made in accordance with the Instant Game closing procedures and the Instant Game Rules. See 16 TAC §401.302(j).

6.0 Governing Law. In purchasing an Instant Game Ticket, the player agrees to comply with, and abide by, these Game Procedures for Instant Game No. 1699, the State Lottery Act (Texas Government Code, Chapter 466), applicable rules adopted by the Texas Lottery pursuant to the State Lottery Act and referenced in 16 TAC Chapter 401, and all final decisions of the Executive Director.

TRD-201502676
 Bob Biard
 General Counsel
 Texas Lottery Commission
 Filed: July 15, 2015



Instant Game Number 1713 "\$1,000,000 Instant Cashout"

1.0 Name and Style of Game.

A. The name of Instant Game No. 1713 is "\$1,000,000 INSTANT CASHOUT". The play style is "key number match".

1.1 Price of Instant Ticket.

A. Tickets for Instant Game No. 1713 shall be \$20.00 per Ticket.

1.2 Definitions in Instant Game No. 1713.

A. Display Printing - That area of the Instant Game Ticket outside of the area where the overprint and Play Symbols appear.

B. Latex Overprint - The removable scratch-off covering over the Play Symbols on the front of the Ticket.

C. Play Symbol - The printed data under the latex on the front of the Instant Ticket that is used to determine eligibility for a prize. Each Play Symbol is printed in symbol font in black ink in positive except for dual-image games. The possible black Play Symbols are: 01, 02, 03, 04, 05, 06, 07, 08, 09, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, \$20.00, \$25.00, \$50.00, \$100, \$150, \$200, \$500, \$1,000, \$10,000, \$1,000,000, MONEY BAG SYMBOL, GOLD BAR SYMBOL, CROWN SYMBOL, POT OF GOLD SYMBOL, MONEY CLIP SYMBOL, DIAMOND SYMBOL, TREASURE CHEST SYMBOL, GOLD COIN SYMBOL, STACK OF CASH SYMBOL, PIGGY BANK SYMBOL, SAFE SYMBOL and WALLET SYMBOL.

D. Play Symbols Caption - The printed material appearing below each Play Symbol which explains the Play Symbol. One caption appears under each Play Symbol and is printed in caption font in black ink in positive. The Play Symbol Caption which corresponds with and verifies each Play Symbol is as follows:

Figure 1: GAME NO. 1713 - 1.2D

PLAY SYMBOLS	CAPTIONS
01	ONE
02	TWO
03	THR
04	FOR
05	FIV
06	SIX
07	SVN
08	EGT
09	NIN
11	ELV
12	TLV
13	TRN
14	FTN
15	FFN
16	SXN
17	SVT
18	ETN
19	NTN
20	TWY
21	TWON
22	TWTO
23	TWTH
24	TWFR
25	TWV
26	TWSX
27	TWSV
28	TWET
29	TWNI
30	TRTY
31	TRON
32	TRTO
33	TRTH
34	TRFR
35	TRV
36	TRSX
37	TRSV
38	TRET
39	TRNI
40	FRTY
41	FRON
42	FRTO
43	FRTH
44	FRFR
45	FRV
46	FRSX
47	FRSV

48	FRET
49	FRNI
50	FFTY
MONEY BAG SYMBOL	WIN
GOLD BAR SYMBOL	WINX10
CROWN SYMBOL	CROWN
POT OF GOLD SYMBOL	POTGLD
MONEY CLIP SYMBOL	CLIP
DIAMOND SYMBOL	DMND
TREASURE CHEST SYMBOL	CHEST
GOLD COIN SYMBOL	COIN
STACK OF CASH SYMBOL	CASH
PIGGY BANK SYMBOL	PGYBNK
SAFE SYMBOL	SAFE
WALLET SYMBOL	WALLET
\$20.00	TWENTY
\$25.00	TWY FIV
\$50.00	FIFTY
\$100	ONE HUND
\$150	ONEFIFTY
\$200	TWO HUN
\$500	FIV HUN
\$1,000	ONE THOU
\$10,000	10 THOU
\$1,000,000	ONE MILL

E. Serial Number - A unique 13 (thirteen) digit number appearing under the latex scratch-off covering on the front of the Ticket. The Serial Number is for validation purposes and cannot be used to play the game. The format will be: 0000000000000.

F. Low-Tier Prize - A prize of \$20.00.

G. Mid-Tier Prize - A prize of \$25.00, \$50.00, \$70.00, \$100, \$150, \$200 or \$500.

H. High-Tier Prize - A prize of \$1,000, \$10,000 or \$1,000,000.

I. Bar Code - A 24 (twenty-four) character interleaved two (2) of five (5) Bar Code which will include a four (4) digit game ID, the seven (7) digit Pack number, the three (3) digit Ticket number and the ten (10) digit Validation Number. The Bar Code appears on the back of the Ticket.

J. Pack-Ticket Number - A 14 (fourteen) digit number consisting of the four (4) digit game number (1713), a seven (7) digit Pack number, and a three (3) digit Ticket number. Ticket numbers start with 001 and end with 025 within each Pack. The format will be: 1713-0000001-001.

K. Pack - A Pack of "\$1,000,000 INSTANT CASHOUT" Instant Game Tickets contains 025 Tickets, packed in plastic shrink-wrapping and fanfolded in pages of one (1). The front of Ticket 001 will be shown on the front of the Pack; the back of Ticket 025 will be revealed on the back of the Pack. All Packs will be tightly shrink-wrapped. There will be no breaks between the Tickets in a Pack. Every other book will reverse i.e., reverse order will be: the back of Ticket 001 will be shown

on the front of the Pack and the front of Ticket 025 will be shown on the back of the Pack.

L. Non-Winning Ticket - A Ticket which is not programmed to be a winning Ticket or a Ticket that does not meet all of the requirements of these Game Procedures, the State Lottery Act (Texas Government Code, Chapter 466), and applicable rules adopted by the Texas Lottery pursuant to the State Lottery Act and referenced in 16 TAC, Chapter 401.

M. Ticket or Instant Game Ticket, or Instant Ticket - A Texas Lottery "\$1,000,000 INSTANT CASHOUT" Instant Game No. 1713 Ticket.

2.0 Determination of Prize Winners. The determination of prize winners is subject to the general Ticket validation requirements set forth in Texas Lottery Rule §401.302, Instant Game Rules, these Game Procedures, and the requirements set out on the back of each Instant Ticket. A prize winner in the "\$1,000,000 INSTANT CASHOUT" Instant Game is determined once the latex on the Ticket is scratched off to expose 61 (sixty-one) Play Symbols. If a player matches any of YOUR NUMBERS Play Symbols to any of the WINNING NUMBERS Play Symbols, the player wins the prize for that number. If a player reveals a "Money Bag" Play Symbol, the player wins the prize for that symbol instantly. If a player reveals a "Gold Bar" Play Symbol, the player wins 10 TIMES the prize for that symbol. BONUS: If a player matches 2 of 3 Play Symbols, the player WINS \$50! No portion of the Display Printing nor any extraneous matter whatsoever shall be usable or playable as a part of the Instant Game.

2.1 Instant Ticket Validation Requirements.

A. To be a valid Instant Game Ticket, all of the following requirements must be met:

1. Exactly 61 (sixty-one) Play Symbols must appear under the Latex Overprint on the front portion of the Ticket;
2. Each of the Play Symbols must have a Play Symbol Caption underneath, unless specified, and each Play Symbol must agree with its Play Symbol Caption;
3. Each of the Play Symbols must be present in its entirety and be fully legible;
4. Each of the Play Symbols must be printed in black ink except for dual image games;
5. The Ticket shall be intact;
6. The Serial Number, Retailer Validation Code and Pack-Ticket Number must be present in their entirety and be fully legible;
7. The Serial Number must correspond, using the Texas Lottery's codes, to the Play Symbols on the Ticket;
8. The Ticket must not have a hole punched through it, be mutilated, altered, unreadable, reconstituted or tampered with in any manner;
9. The Ticket must not be counterfeit in whole or in part;
10. The Ticket must have been issued by the Texas Lottery in an authorized manner;
11. The Ticket must not have been stolen, nor appear on any list of omitted Tickets or non-activated Tickets on file at the Texas Lottery;
12. The Play Symbols, Serial Number, Retailer Validation Code and Pack-Ticket Number must be right side up and not reversed in any manner;
13. The Ticket must be complete and not miscut and have exactly 61 (sixty-one) Play Symbols under the Latex Overprint on the front portion of the Ticket, exactly one Serial Number, exactly one Retailer Validation Code, and exactly one Pack-Ticket Number on the Ticket;
14. The Serial Number of an apparent winning Ticket shall correspond with the Texas Lottery's Serial Numbers for winning Tickets, and a Ticket with that Serial Number shall not have been paid previously;
15. The Ticket must not be blank or partially blank, misregistered, defective or printed or produced in error;
16. Each of the 61 (sixty-one) Play Symbols must be exactly one of those described in Section 1.2.C of these Game Procedures;
17. Each of the 61 (sixty-one) Play Symbols on the Ticket must be printed in the symbol font and must correspond precisely to the artwork on file at the Texas Lottery; the Ticket Serial Numbers must be printed in the serial font and must correspond precisely to the artwork on file at the Texas Lottery; and the Pack-Ticket Number must be printed in the Pack-Ticket Number font and must correspond precisely to the artwork on file at the Texas Lottery;
18. The Display Printing on the Ticket must be regular in every respect and correspond precisely to the artwork on file at the Texas Lottery; and
19. The Ticket must have been received by the Texas Lottery by applicable deadlines.

B. The Ticket must pass all additional validation tests provided for in these Game Procedures, the Texas Lottery's Rules governing the award of prizes of the amount to be validated, and any confidential validation and security tests of the Texas Lottery.

C. Any Instant Game Ticket not passing all of the validation requirements is void and ineligible for any prize and shall not be paid. However, the Executive Director may, solely at the Executive Director's discretion, refund the retail sales price of the Ticket. In the event a defective Ticket is purchased, the only responsibility or liability of the Texas Lottery shall be to replace the defective Ticket with another unplayed Ticket in that Instant Game (or a Ticket of equivalent sales price from any other current Texas Lottery Instant Game) or refund the retail sales price of the Ticket, solely at the Executive Director's discretion.

2.2 Programmed Game Parameters.

A. Consecutive Non-Winning Tickets within a Pack will not have matching patterns of either Play Symbols or Prize Symbols.

B. A Ticket will win as indicated by the prize structure.

C. A Ticket can win up to twenty-seven (27) times.

D. On winning and Non-Winning Tickets, the top cash prizes of \$1,000, \$10,000 and \$1,000,000 will each appear at least once, except on Tickets winning twenty-seven (27) times.

E. No matching non-winning YOUR NUMBERS Play Symbols on a Ticket.

F. Non-winning Prize Symbols will not match a winning Prize Symbol on a Ticket.

G. Tickets winning more than one (1) time will use as many WINNING NUMBERS Play Symbols as possible to create matches, unless restricted by other parameters, play action or prize structure.

H. No matching WINNING NUMBERS Play Symbols will appear on a Ticket.

I. YOUR NUMBERS Play Symbols will never equal the corresponding Prize Symbol (i.e., 20 and \$20, 50 and \$50).

J. On all Tickets, a Prize Symbol will not appear more than four (4) times except as required by the prize structure to create multiple wins.

K. On Non-Winning Tickets, a WINNING NUMBERS Play Symbol will never match a YOUR NUMBERS Play Symbol.

L. The "MONEY BAG" (WIN) Play Symbol will never appear as a WINNING NUMBER Play Symbol.

M. The "MONEY BAG" (WIN) Play Symbol will never appear more than once on a Ticket.

N. The "MONEY BAG" (WIN) Play Symbol will never appear on a Non-Winning Ticket.

O. The "GOLD BAR" (WINX10) Play Symbol will never appear as a WINNING NUMBERS Play Symbol.

P. The "GOLD BAR" (WINX10) Play Symbol will win 10 TIMES the prize for that Play Symbol and will win as per the prize structure.

Q. The "GOLD BAR" (WINX10) Play Symbol will never appear more than once on a Ticket.

R. The "GOLD BAR" (WINX10) Play Symbol will never appear on a Non-Winning Ticket.

S. On winning Tickets, a non-winning prize amount will not match a winning prize amount.

T. This Ticket consists of five (5) WINNING NUMBERS Play Symbols, twenty-five (25) YOUR NUMBERS Play Symbols, twenty-five (25) Prize Symbols and six (6) BONUS Play Symbols.

U. BONUS PLAY AREAS: There will never be more than two (2) matching Play Symbols in either BONUS play area.

V. BONUS PLAY AREAS: You can win up to one (1) time in each BONUS play area.

W. BONUS PLAY AREAS: On all Tickets, the Play Symbols used in one BONUS play area will not match the Play Symbols used in the other BONUS play area.

2.3 Procedure for Claiming Prizes.

A. To claim a "\$1,000,000 INSTANT CASHOUT" Instant Game prize of \$20.00, \$25.00, \$50.00, \$70.00, \$100, \$150, \$200 or \$500, a claimant shall sign the back of the Ticket in the space designated on the Ticket and present the winning Ticket to any Texas Lottery Retailer. The Texas Lottery Retailer shall verify the claim and, if valid, and upon presentation of proper identification, if appropriate, make payment of the amount due the claimant and physically void the Ticket; provided that the Texas Lottery Retailer may, but is not required, to pay a \$25.00, \$50.00, \$70.00, \$100, \$150, \$200 or \$500 Ticket. In the event the Texas Lottery Retailer cannot verify the claim, the Texas Lottery Retailer shall provide the claimant with a claim form and instruct the claimant on how to file a claim with the Texas Lottery. If the claim is validated by the Texas Lottery, a check shall be forwarded to the claimant in the amount due. In the event the claim is not validated, the claim shall be denied and the claimant shall be notified promptly. A claimant may also claim any of the above prizes under the procedure described in Section 2.3.B and Section 2.3.C of these Game Procedures.

B. To claim a "\$1,000,000 INSTANT CASHOUT" Instant Game prize of \$1,000, \$10,000 or \$1,000,000, the claimant must sign the winning Ticket and present it at one of the Texas Lottery's Claim Centers. If the claim is validated by the Texas Lottery, payment will be made to the bearer of the validated winning Ticket for that prize upon presentation of proper identification. When paying a prize of \$600 or more, the Texas Lottery shall file the appropriate income reporting form with the Internal Revenue Service (IRS) and shall withhold federal income tax at a rate set by the IRS if required. In the event that the claim is not validated by the Texas Lottery, the claim shall be denied and the claimant shall be notified promptly.

C. As an alternative method of claiming a "\$1,000,000 INSTANT CASHOUT" Instant Game prize, the claimant must sign the winning Ticket, thoroughly complete a claim form, and mail both to: Texas Lottery Commission, P.O. Box 16600, Austin, Texas 78761-6600. The Texas Lottery is not responsible for Tickets lost in the mail. In the event that the claim is not validated by the Texas Lottery, the claim shall be denied and the claimant shall be notified promptly.

D. Prior to payment by the Texas Lottery of any prize, the Texas Lottery shall deduct:

1. A sufficient amount from the winnings of a prize winner who has been finally determined to be:

a. delinquent in the payment of a tax or other money to a state agency and that delinquency is reported to the Comptroller under Government Code §403.055;

b. in default on a loan made under Chapter 52, Education Code; or

c. in default on a loan guaranteed under Chapter 57, Education Code; and

2. delinquent child support payments from the winnings of a prize winner in the amount of the delinquency as determined by a court or a Title IV-D agency under Chapter 231, Family Code.

E. If a person is indebted or owes delinquent taxes to the State, other than those specified in the preceding paragraph, the winnings of a person shall be withheld until the debt or taxes are paid.

2.4 Allowance for Delay of Payment. The Texas Lottery may delay payment of the prize pending a final determination by the Executive Director, under any of the following circumstances:

A. if a dispute occurs, or it appears likely that a dispute may occur, regarding the prize;

B. if there is any question regarding the identity of the claimant;

C. if there is any question regarding the validity of the Ticket presented for payment; or

D. if the claim is subject to any deduction from the payment otherwise due, as described in Section 2.3.D of these Game Procedures. No liability for interest for any delay shall accrue to the benefit of the claimant pending payment of the claim.

2.5 Payment of Prizes to Persons Under 18. If a person under the age of 18 years is entitled to a cash prize under \$600 from the "\$1,000,000 INSTANT CASHOUT" Instant Game, the Texas Lottery shall deliver to an adult member of the minor's family or the minor's guardian a check or warrant in the amount of the prize payable to the order of the minor.

2.6 If a person under the age of 18 years is entitled to a cash prize of \$600 or more from the "\$1,000,000 INSTANT CASHOUT" Instant Game, the Texas Lottery shall deposit the amount of the prize in a custodial bank account, with an adult member of the minor's family or the minor's guardian serving as custodian for the minor.

2.7 Instant Ticket Claim Period. All Instant Game prizes must be claimed within 180 days following the end of the Instant Game or within the applicable time period for certain eligible military personnel as set forth in Texas Government Code §466.408. Any rights to a prize that is not claimed within that period, and in the manner specified in these Game Procedures and on the back of each Ticket, shall be forfeited.

2.8 Disclaimer. The number of prizes in a game is approximate based on the number of Tickets ordered. The number of actual prizes available in a game may vary based on number of Tickets manufactured, testing, distribution, sales and number of prizes claimed. An Instant Game Ticket may continue to be sold even when all the top prizes have been claimed.

3.0 Instant Ticket Ownership.

A. Until such time as a signature is placed upon the back portion of an Instant Game Ticket in the space designated, a Ticket shall be owned by the physical possessor of said Ticket. When a signature is placed on the back of the Ticket in the space designated, the player whose signature appears in that area shall be the owner of the Ticket and shall be entitled to any prize attributable thereto. Notwithstanding any name or names submitted on a claim form, the Executive Director shall make payment to the player whose signature appears on the back of the Ticket in the space designated. If more than one name appears on the back of the Ticket, the Executive Director will require that one of those players whose name appears thereon be designated by such players to receive payment.

B. The Texas Lottery shall not be responsible for lost or stolen Instant Game Tickets and shall not be required to pay on a lost or stolen Instant Game Ticket.

4.0 Number and Value of Instant Prizes. There will be approximately 6,000,000 Tickets in the Instant Game No. 1713. The approximate number and value of prizes in the game are as follows:

Figure 2: GAME NO. 1713 - 4.0

Prize Amount	Approximate Number of Winners*	Approximate Odds are 1 in **
\$20	640,000	9.38
\$25	400,000	15.00
\$50	600,000	10.00
\$70	105,250	57.01
\$100	187,250	32.04
\$150	29,000	206.90
\$200	2,750	2,181.82
\$500	93	64,516.13
\$1,000	37	162,162.16
\$10,000	12	500,000.00
\$1,000,000	6	1,000,000.00

*The number of prizes in a game is approximate based on the number of tickets ordered. The number of actual prizes available in a game may vary based on number of tickets manufactured, testing, distribution, sales and number of prizes claimed.

**The overall odds of winning a prize are 1 in 3.05. The individual odds of winning for a particular prize level may vary based on sales, distribution, testing, and number of prizes claimed.

A. The actual number of Tickets in the game may be increased or decreased at the sole discretion of the Texas Lottery Commission.

5.0 End of the Instant Game. The Executive Director may, at any time, announce a closing date (end date) for the Instant Game No. 1713 without advance notice, at which point no further Tickets in that game may be sold. The determination of the closing date and reasons for closing will be made in accordance with the Texas Lottery Instant Game closing procedures and the Instant Game Rules. See 16 TAC §401.302(j).

6.0 Governing Law. In purchasing an Instant Game Ticket, the player agrees to comply with, and abide by, these Game Procedures for Instant Game No. 1713, the State Lottery Act (Texas Government Code, Chapter 466), applicable rules adopted by the Texas Lottery pursuant to the State Lottery Act and referenced in 16 TAC Chapter 401, and all final decisions of the Executive Director.

TRD-201502677
 Bob Biard
 General Counsel
 Texas Lottery Commission
 Filed: July 15, 2015

◆ ◆ ◆
Public Utility Commission of Texas

Announcement of Application for Amendment to a State-Issued Certificate of Franchise Authority

The Public Utility Commission of Texas (commission) received an application on July 7, 2015, to amend a state-issued certificate of franchise authority, pursuant to Public Utility Regulatory Act (PURA) §§66.001 - 66.016.

Project Title and Number: Application of Time Warner Cable Texas LLC for Amendment to its State-Issued Certificate of Franchise Authority, Project Number 44910.

The requested amendment is to expand the service area footprint to include the newly incorporated areas excluding any federal properties in the cities of Sandy Oaks and San Elizario, Texas.

Information on the application may be obtained by contacting the Public Utility Commission of Texas by mail at P.O. Box 13326, Austin, Texas 78711-3326, or by phone at (512) 936-7120 or toll free at (888) 782-8477. Hearing and speech-impaired individuals with text telephone (TTY) may contact the commission through Relay Texas by dialing 7-1-1. All inquiries should reference Project Number 44910.

TRD-201502630
 Adriana Gonzales
 Rules Coordinator
 Public Utility Commission of Texas
 Filed: July 9, 2015

◆ ◆ ◆
Announcement of Application for Amendment to a State-Issued Certificate of Franchise Authority

The Public Utility Commission of Texas (commission) received an application on July 7, 2015, to amend a state-issued certificate of franchise authority, pursuant to Public Utility Regulatory Act (PURA) §§66.001 - 66.016.

Project Title and Number: Application of Nortex Communications Company d/b/a Nortex Communications for Amendment to its State-Issued Certificate of Franchise Authority, Project Number 44912.

The requested amendment is to expand the service area footprint to include the following: City limits of Gainesville, Texas; unincorporated community in Montague County known as Forestburg; unincorporated community in Cooke County known as Rosston; and unincorporated community in Cooke County known as Myra.

Information on the application may be obtained by contacting the Public Utility Commission of Texas by mail at P.O. Box 13326, Austin, Texas 78711-3326, or by phone at (512) 936-7120 or toll free at (888) 782-8477. Hearing and speech-impaired individuals with text telephone (TTY) may contact the commission through Relay Texas by dialing 7-1-1. All inquiries should reference Project Number 44912.

TRD-201502631
Adriana Gonzales
Rules Coordinator
Public Utility Commission of Texas
Filed: July 9, 2015



Notice of Application for Retail Electric Provider Certification

Notice is given to the public of the filing with the Public Utility Commission of Texas of an application on July 9, 2015, for retail electric provider (REP) certification, pursuant to Public Utility Regulatory Act (PURA) §39.352.

Docket Title and Number: Application of Gerdau Ameristeel Energy, Inc. for Retail Electric Provider Certification; Docket Number 44915.

The Application: Gerdau Ameristeel Energy, Inc. requests certification as an Option II retail electric provider.

Information on the application may be obtained by contacting the Public Utility Commission of Texas by mail at P.O. Box 13326, Austin, Texas 78711-3326 or by phone at (512) 936-7120 or toll-free at (888) 782-8477. Hearing and speech-impaired individuals with text telephones (TTY) may contact the commission through Relay Texas by dialing 7-1-1. All inquiries should reference Docket Number 44915.

TRD-201502655
Adriana Gonzales
Rules Coordinator
Public Utility Commission of Texas
Filed: July 13, 2015



Notice of Application to Amend a Certificate of Convenience and Necessity for a Proposed Transmission Line

Notice is given to the public of an application filed with the Public Utility Commission of Texas (commission) on July 10, 2015, to amend a certificate of convenience and necessity for a proposed transmission line in Anderson, Freestone, Henderson and Navarro Counties, Texas.

Docket Style and Number: Application of Oncor Electric Delivery Company, LLC to Amend its Certificate of Convenience and Necessity for a 345-kV Transmission Line in Anderson, Freestone, Henderson and Navarro Counties, Docket Number 44672.

The Application: The application of Oncor Electric Delivery Company, LLC for a transmission line in Anderson, Freestone, Henderson and Navarro Counties is designated as the New Bethel 345-kV Transmission Line Project. The facilities include construction of a new 345-kV double-circuit transmission line interconnecting a new proposed Compressed Air Energy Storage electric generation facility, located at salt dome near Tennessee Colony in Anderson County, with the Electric Reliability Council of Texas grid. The transmission line project will connect the proposed New Bethel Switching Station, to be located southeast of the Farm-to-Market Road 2706 and County Road 2504 intersection in Anderson County, to a connecting location along one of four existing 345-kV transmission line segments in the region. The total estimated cost for the project ranges from approximately \$33,731,000 to \$63,271,000 depending on the route chosen.

The proposed project is presented with 72 alternate routes and is estimated to be approximately 12.2 to 26.6 miles in length. Any of the routes or route segments presented in the application could, however, be approved by the commission.

Persons wishing to intervene or comment on the action sought should contact the Public Utility Commission of Texas by mail at P.O. Box 13326, Austin, Texas 78711-3326 or by phone at (512) 936-7120 or toll-free at (888) 782-8477. The deadline for intervention in this proceeding is August 24, 2015. Hearing and speech-impaired individuals with text telephones (TTY) may contact the commission through Relay Texas by dialing 7-1-1. All comments should reference Docket Number 44672.

TRD-201502658
Adriana Gonzales
Rules Coordinator
Public Utility Commission of Texas
Filed: July 13, 2015



Notice of Application to Amend Water Certificate of Convenience and Necessity

Notice is given to the public of the filing with the Public Utility Commission of Texas of an application to amend a water certificate of convenience and necessity (CCN) in Cooke County.

Docket Style and Number: Application of Lindsay Pure Water Company to Amend a Certificate of Convenience and Necessity in Cooke County, Docket Number 44899.

The Application: Lindsay Pure Water Company requests approval to add approximately 100 acres in Cooke County to its water CCN No. 12858. There are 63 current customers in the requested area.

Persons wishing to intervene or comment on the action sought should contact the Public Utility Commission of Texas by mail at P.O. Box 13326, Austin, Texas 78711-3326, or by phone at (512) 936-7120 or toll-free at (888) 782-8477. A deadline for intervention in this proceeding will be established. Hearing and speech-impaired individuals with text telephone (TTY) may contact the commission through Relay Texas by dialing 7-1-1. All comments should reference Docket Number 44899.

TRD-201502632
Adriana Gonzales
Rules Coordinator
Public Utility Commission of Texas
Filed: July 9, 2015



South East Texas Regional Planning Commission

9-1-1 Electrician Services Request for Proposals

GENERAL: The 9-1-1 Emergency Network, a Division of the South East Texas Regional Planning Commission (SETRPC), is interested in purchasing Licensed/Bonded Electrician services for 9/1/2015 through 8/31/2017.

REQUEST FOR PROPOSAL: The competitive Request for Proposal (RFP) will be available at the 9-1-1 Emergency Network office located at 2210 Eastex Freeway, Beaumont, TX 77703 or the SETRPC website (www.setrpc.org) after 10:00 a.m. on July 17, 2015. Except for holidays, the 9-1-1 Emergency Network office is open 8:00 to 12:00 a.m. and 1:00 to 5:00 PM Monday through Friday. Copies of the RFP are available in Microsoft Office "Word" format at the above website.

Once the website is displayed, navigate your cursor to the left "Main Menu" column, click on "RFP", under "Request for Proposal" click on "9-1-1 Electrician Services RFP" and download the "Word" document. All bids are due on or before 10:00 a.m. Friday, August 14, 2015 (late bids will not be accepted).

BID OPENING: Bid opening will be at 10:00 a.m., Monday August 17, 2015, at the SETRPC office at 2210 Eastex Freeway, Beaumont, Texas. The 9-1-1 Emergency Network reserves the right to reject any or all bids and does not bind itself to accept the lowest bid for the Electrical Services or any part thereof, and shall have the right to ask for new bids for the whole or parts.

TRD-201502637

Pete De La Cruz

Director of 9-1-1 Emergency Network

South East Texas Regional Planning Commission

Filed: July 10, 2015



Workforce Solutions Borderplex

Broker Services Request for Proposals

Workforce Solutions Borderplex, Inc. (WFSB) is soliciting proposals from qualified organizations/individuals to Provide Broker Services for the WFSB Staff. The Board has forty-four (44) authorized staff positions, which are currently filled by forty-three (43) regular employees

and one (1) temporary staff personnel. Respondents must have experience and qualifications to acquire insurance company(ies) that have the capability to provide the following coverages and benefits, at a reasonable cost.

Request for Proposal (RFP) # PY15-RFP-200-815 may be requested in writing or picked up in person on or after 4:00 p.m. MDT, Monday, July 20, 2015, at the WFSB offices located at 300 E. Main, Suite 800, El Paso, TX 79901. The RFP will also be available on the Board's website (www.borderplexjobs.com) on and after the above date and time. Questions may be submitted via email to muriel.borders@borderplexjobs.com on or before 1:00 p.m. MDT, August 6, 2015. Proposals to this RFP must be physically received by the Contracts/Real Estate Administrator at the Board offices no later than 5:00 p.m. MST, Thursday, August 27, 2015.

Questions pertaining to this RFP may be directed to Muriel Thomas-Borders, Contracts/Real Estate Administrator, at (915) 887-2220 or via email at muriel.borders@borderplexjobs.com.

TRD-201502680

Muriel Thomas-Borders

Contracts/Real Estate Administrator

Workforce Solutions Borderplex

Filed: July 15, 2015



How to Use the Texas Register

Information Available: The 14 sections of the *Texas Register* represent various facets of state government. Documents contained within them include:

Governor - Appointments, executive orders, and proclamations.

Attorney General - summaries of requests for opinions, opinions, and open records decisions.

Texas Ethics Commission - summaries of requests for opinions and opinions.

Emergency Rules- sections adopted by state agencies on an emergency basis.

Proposed Rules - sections proposed for adoption.

Withdrawn Rules - sections withdrawn by state agencies from consideration for adoption, or automatically withdrawn by the Texas Register six months after the proposal publication date.

Adopted Rules - sections adopted following public comment period.

Texas Department of Insurance Exempt Filings - notices of actions taken by the Texas Department of Insurance pursuant to Chapter 5, Subchapter L of the Insurance Code.

Tables and Graphics - graphic material from the proposed, emergency and adopted sections.

Transferred Rules- notice that the Legislature has transferred rules within the *Texas Administrative Code* from one state agency to another, or directed the Secretary of State to remove the rules of an abolished agency.

In Addition - miscellaneous information required to be published by statute or provided as a public service.

Review of Agency Rules - notices of state agency rules review.

Specific explanation on the contents of each section can be found on the beginning page of the section. The division also publishes cumulative quarterly and annual indexes to aid in researching material published.

How to Cite: Material published in the *Texas Register* is referenced by citing the volume in which the document appears, the words "TexReg" and the beginning page number on which that document was published. For example, a document published on page 2402 of Volume 40 (2015) is cited as follows: 40 TexReg 2402.

In order that readers may cite material more easily, page numbers are now written as citations. Example: on page 2 in the lower-left hand corner of the page, would be written "40 TexReg 2 issue date," while on the opposite page, page 3, in the lower right-hand corner, would be written "issue date 40 TexReg 3."

How to Research: The public is invited to research rules and information of interest between 8 a.m. and 5 p.m. weekdays at the *Texas Register* office, James Earl Rudder Building, 1019 Brazos, Austin. Material can be found using *Texas Register* indexes, the *Texas Administrative Code* section numbers, or TRD number.

Both the *Texas Register* and the *Texas Administrative Code* are available online at: <http://www.sos.state.tx.us>. The *Texas Register* is available in an .html version as well as a .pdf version through the internet. For website information, call the Texas Register at (512) 463-5561.

Texas Administrative Code

The *Texas Administrative Code (TAC)* is the compilation of all final state agency rules published in the *Texas Register*. Following its effective date, a rule is entered into the *Texas Administrative Code*. Emergency rules, which may be adopted by an agency on an interim basis, are not codified within the *TAC*.

The *TAC* volumes are arranged into Titles and Parts (using Arabic numerals). The Titles are broad subject categories into which the agencies are grouped as a matter of convenience. Each Part represents an individual state agency.

The complete *TAC* is available through the Secretary of State's website at <http://www.sos.state.tx.us/tac>.

The Titles of the *TAC*, and their respective Title numbers are:

1. Administration
4. Agriculture
7. Banking and Securities
10. Community Development
13. Cultural Resources
16. Economic Regulation
19. Education
22. Examining Boards
25. Health Services
28. Insurance
30. Environmental Quality
31. Natural Resources and Conservation
34. Public Finance
37. Public Safety and Corrections
40. Social Services and Assistance
43. Transportation

How to Cite: Under the *TAC* scheme, each section is designated by a *TAC* number. For example in the citation 1 TAC §27.15: 1 indicates the title under which the agency appears in the *Texas Administrative Code*; *TAC* stands for the *Texas Administrative Code*; §27.15 is the section number of the rule (27 indicates that the section is under Chapter 27 of Title 1; 15 represents the individual section within the chapter).

How to update: To find out if a rule has changed since the publication of the current supplement to the *Texas Administrative Code*, please look at the *Index of Rules*.

The *Index of Rules* is published cumulatively in the blue-cover quarterly indexes to the *Texas Register*.

If a rule has changed during the time period covered by the table, the rule's *TAC* number will be printed with the *Texas Register* page number and a notation indicating the type of filing (emergency, proposed, withdrawn, or adopted) as shown in the following example.

TITLE 1. ADMINISTRATION

Part 4. Office of the Secretary of State

Chapter 91. Texas Register

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