

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 4, 2016

Mr. Joel Beauvais
Deputy Assistant Administrator
U. S. Environmental Protection Agency
William Jefferson Clinton Building-East
1200 Pennsylvania Avenue, N.W.
Mail Code: 4101M
Washington, DC 20460

Dear Deputy Assistant Administrator Beauvais:

This letter is provided in response to your letter dated February 29, 2016. In your letter, you have requested information to ensure state actions demonstrate that the federal Lead and Copper Rule (LCR) is being properly implemented in Texas. We have carefully, objectively, and extensively examined the issues you raised regarding the implementation of the LCR and applicable guidance as it relates to the Texas Commission on Environmental Quality's (TCEQ) protocols and procedures for implementing the LCR in Texas.

The State of Texas has met and continues to meet all the requirements for primary enforcement responsibility under the provisions of the federal Safe Drinking Water Act (SDWA). The United States Environmental Protection Agency (EPA) approved Texas' primacy in 1977 and approved a revision application for the LCR on February 29, 1996 which deemed Texas' regulations consistent with the federal LCR. On December 29, 2006, Texas achieved final primacy approval for the LCR Minor Revisions and again received final primacy approval for the LCR Short Term Revisions on August 16, 2012. Additionally, under the requirements of the SDWA, the EPA conducts annual reviews of the Texas' Public Water Supply Supervision (PWSS) program to examine compliance of the approved Texas primacy program. The EPA also remains informed of Texas' efforts to implement the LCR and other PWSS program requirements through the quarterly migration of data to the federal Safe Drinking Water Information System (SDWIS-FED) which reports on TCEQ's initiatives, activities, and achievements undertaken to meet and/or exceed the National Primary Drinking Water Standards.

On behalf of the State of Texas, the TCEQ has responsibility for overseeing approximately 7,000 public water systems that provide drinking water to approximately 27,000,000 Texans. The TCEQ is responsible for overseeing programs that ensure the production, treatment, delivery and protection of safe and adequate drinking water to the public. All public water systems in Texas are required to monitor the levels of contaminants present in treated water and to verify that each contaminant does not exceed its maximum contaminant level and/or action level. In addition, public water systems in Texas are required to meet state specific requirements for pathogen removal and inactivation as well as maintaining measureable levels of disinfectant throughout the treatment plant and the distribution system. Texas has required measurable disinfection protocols in its regulations since 1956 for surface water. In 1967, Texas reinforced measurable disinfection regulations for groundwater and throughout distribution systems. The

public water system operator is responsible for knowing and following all requirements under the SDWA, such as seeking source water approval, ensuring proper design and construction, maintaining proper licensed/trained operators, maintaining a well operated system, and demonstrating public health is protected by measuring water quality throughout the system in accordance with the federal and state drinking water standards. All public water systems in Texas must notify consumers when there is noncompliance with SDWA requirements.

State Protocols and Procedures

As of March 27, 2016, there are approximately 5,500 community and non-transient non-community public water systems in Texas that are required to monitor for the LCR. Through various actions, TCEQ continues to ensure the LCR and applicable guidance are implemented in accordance with federal and state regulations, guidelines and primacy requirements. Accordingly, the protocols and procedures that TCEQ uses for implementing the LCR are consistent with EPA's guidelines. More specifically, the TCEQ follows EPA's LCR regulations, protocols, and procedures on the following:

- Criteria used for scheduling monitoring periods
- Use of same monitoring periods
- Use of similar criteria for reviewing/approving 9-year monitoring schedules
- Use of same seasonal compliance period of June 1 – September 30 for LCR reduced monitoring schedules
- Use of the same number of sampling sites per system of needed population for initial, reduced, and follow-up sampling
- Requirements for Action Level Exceeders for treatment recommendations and corrosion control studies
- Requirements for treatment for corrosion control, if applicable
- Enforcement action for violators that meet criteria

With regard to sampling protocol for LCR tap sample monitoring, TCEQ's regulations and guidance are consistent with EPA as described below:

- Guidance documents to water systems and homeowners for sample collection protocols
- Use of same criteria for tiered classification system of sample sites
- Requirements for material surveys
- Use of 6-hour minimum period of stagnant water for sample collection with no prior intentional flushing
- Use of kitchen or bathroom cold-water faucet for sampling
- Use of guidance documents that instruct the water system and homeowner to not remove faucet aerators prior to sampling
- Use of guidance that instructs water systems to use 1 liter wide-mouth, laboratory grade and unpreserved bottles

Texas adheres to EPA's *Lead and Copper Rule Guidance Manual, Volume II: Corrosion Control Treatment*, September 1992 and *Revised Guidance Manual for Selecting Lead and Copper Control Strategies*, March 2003. Texas also received on March 30, 2016 a courtesy copy of EPA's *Optimal Corrosion Control Treatment Evaluation Technical Recommendations for Primacy Agencies and Public Water Systems* guidance. Texas appreciates receiving EPA's new Optimal Corrosion Control guidance. TCEQ requires that public water systems complete

corrosion control studies if a system exceeds the lead and/or copper action levels. The corrosion control study must include optimal water quality parameters, evaluate treatment methods, address potential constraints to the corrosion control treatment methods and evaluate the effect of the corrosion control treatment on other water quality treatment processes. Once a holistic review of an effective treatment for the specific system's operating conditions is determined, construction approval can be granted for either modifying a treatment design to include an inhibitor or a blending ratio of source waters is approved to optimize water chemistry. The new EPA Optimal Corrosion Control guidance should assist public water systems in achieving their action to recommend an optimal corrosion control treatment for their unique challenges. The public water system is required to monitor after treatment to demonstrate an optimized system was achieved to receive final approval. Since source water chemistry is ever changing daily due to water treatment, season changes, water age, and environmental conditions (e.g. drought, flooding, water use, etc.), the LCR is intended to serve the public water system, state and federal governments in continued measurement of a system's finished water and provides education to consumers of their premises plumbing results. If a public water system's finished water becomes at some level corrosive, the Lead and Copper action level exceedance activities are triggered, which moves the public water system into addressing treatment to avoid public health concerns/risks. The job of the public water systems' operators and regulators is never done, because it is necessary to continuously conduct process controls and monitor water chemistry changes to implement preventive measures to be most protective of public health.

Relevant EPA Guidance on LCR Sampling Protocols and Procedures; Availability of Protocols and Guidance for Identification of Tier 1 sites on TCEQ's website

TCEQ's guidance for protocols and procedures for LCR tap sample monitoring has and continues to be consistent with EPA guidance. The TCEQ continues to promote and provide training and technical assistance regarding guidance for tap sample monitoring through various activities such as correspondence, workshops, conferences, and meetings. TCEQ's LCR sampling protocols and procedures including Tier 1 identification are already posted on the agency's website. Additionally, based upon EPA's sampling guidance dated February 29, 2016, TCEQ has also posted the revisions, per EPA instructions, on the TCEQ's Public Drinking Water Program's Lead and Copper webpage at the following link:

https://www.tceq.texas.gov/drinkingwater/chemicals/lead_copper/lead-copper.html

Work with Public Water Systems to Increase Transparency in Implementation of the LCR

The TCEQ ensures that all public water systems have the capability to operate successfully. The TCEQ contracts with the Texas Rural Water Association to assist systems with financial, managerial, and technical (FMT) expertise. The FMT Assistance Contract provides approximately 500 free onsite system visits per year. Through the contract, the TCEQ has provided public water systems with 201 specific LCR compliance assistance assignments in 2015. TCEQ staff also assisted public water systems by presenting LCR compliance information at least 6 workshops/presentations as well as at the TCEQ's free Annual Public Drinking Water Conference, Drinking Water Advisory Workgroups, utility stakeholder groups, and TCEQ's Trade Fair.

LCR Compliance Sampling

The TCEQ completes compliance activities for the LCR, which includes enforcing compliance of Lead Consumer Notice delivery, certification and Lead Public Education materials requirements, and timely evaluation of data and determination of LCR action level exceedances. In addition, the TCEQ performs quality assurance oversight review activities of laboratories, as well as conducts training events and presentations for laboratories that are certified to perform analysis of the LCR data. The TCEQ does not invalidate samples but will accept an invalidation if the sample is invalidated by the laboratory that performed analysis. To address those compliance determinations that require formal enforcement actions, the TCEQ's Public Drinking Water Program prioritizes weekly the highest human health violations for formal enforcement referrals and works closely with the agency's Enforcement Division to expedite enforcement actions.

TCEQ provides template materials to water systems for dissemination of the Lead Consumer Notice, Lead Public Education, and Consumer Confidence Reports. TCEQ staff works with public water systems to promote rapid dissemination of these materials by the water system. In some extreme situations where a public water system is incapable or unwilling to provide proper service and/or notice to their customers, the TCEQ works with local emergency coordinators to protect public health until a capable service provider can be found to operate the system. To promote transparency, the TCEQ provides its own searchable online data tool, called the Texas Drinking Water Watch, so the public can find information on the quality of locally produced drinking water for each public water system. Texas Drinking Water Watch is a web-based read-only view of the state's version of the EPA's Safe Drinking Water Information System (SDWIS) database. Texas' SDWIS/STATE database is the state's database of record for determining compliance with drinking water standards and associated requirements and other related drinking water data used by TCEQ and reported to the EPA. Accordingly, LCR sampling data is already available to the public on the TCEQ's website.

Material Inventory Surveys

All public water systems in Texas are required to submit engineering plans and specifications for new sources, new treatment processes, changes in sources or water treatment facilities, as well as their distribution systems, prior to construction. The plans and specifications are reviewed for compliance with state and federal regulations. The State of Texas has had regulations in place for distribution system materials since 1956. If the material specified in the specifications is not in conformance with regulations, construction of the project is not approved. Effective in January 2014, EPA's federal drinking water regulations reduced the allowable lead content in pipe and pipe fittings to 0.25% lead and 0.2% lead for solders and flux. Based on the federal regulations, TCEQ does not approve construction of the project if these federal regulations are not met.

In addition, all community and non-transient non-community water systems are required to complete TCEQ's *Lead and Copper Sample Site Selection Pool and Materials Survey* prior to initiation of lead and copper sample collection in accordance with the federal and state LCR. The TCEQ's *Lead and Copper Sample Site Selection Pool and Materials Survey* was designed in accordance with federal and state rules. Historically, TCEQ has strongly recommended water systems to include schools and day care facilities in their site selection pool, if applicable.

As part of the materials survey, all community and non-transient non-community water systems are required to perform an evaluation that identifies plumbing materials in their system. The system is responsible for verifying the materials present in the system and is required to certify to the TCEQ that the information contained within the survey is accurate. Public water systems

may have their own additional plumbing information that they obtain through various mechanisms including local ordinances, customer service inspections, material purchases, plumber logs, building permits, etc.

The TCEQ reviews the public water system's survey information to determine compliance with federal and state rules. Any documentation used to complete the materials survey is to be maintained with the public water system and can be made available for field investigation. Per the federal rule, states ensured that water systems did the required materials inventory so that an adequate number of Tier 1 sites could be selected; but very few states actually received the full inventory from their systems¹. Therefore, Texas agrees with the Association of State Drinking Water Administrators that posting this information will have to primarily be at the water system level. While the posting of materials inventory is not required under SDWA regulations, in response to your request, the TCEQ will encourage the larger public water systems to post this information on their websites.

Continued EPA and State Coordination and Identification of Strategies to Improve the Safety and Sustainability of Drinking Water

As drinking water program requirements for addressing public health risks posed by drinking water contaminants have become more complex and demanding, TCEQ's responsibilities for managing sources of drinking water, overseeing the treatment of drinking water and supervising approximately 7,000 public water systems have all increased. During the last three federal fiscal years (2014 to 2016) federal funding for the Public Water System Supervision (PWSS) program in Texas has decreased approximately 5.5%. Despite this decrease in grant funding for both the Drinking Water State Revolving Fund and PWSS grants, TCEQ, as required, continues to implement the LCR and other federal regulations to maintain primacy over the PWSS program.

Texas' implementation of the federal Revised Total Coliform Rule (RTCR) continues to be labor-intensive requiring significant state resources. The RTCR will reduce the automated processes and will require labor-intensive reviews to determine compliance. The RTCR requires the development of several new guidance materials, education, outreach, as well as the development of numerous complex new business processes. EPA has provided minimal training and guidance for the implementation of the RTCR. The TCEQ welcomes an opportunity to review EPA's offer of assistance to provide information and training to state and public water system employees. The need for operator training has increased as the knowledge and technical expertise necessary to manage and operate innovative technologies has increased. Therefore, we welcome support from the EPA to facilitate the needs our state training provider to develop and implement the necessary training in regards to LCR and other drinking water quality requirements.

The TCEQ commends EPA's commitment to increase the effectiveness of the federal LCR in the upcoming year and encourages EPA to seek input from the states to ensure that the new rule and any related EPA guidance can be effectively implemented by the states and public water systems in a timely manner. The TCEQ agrees that more guidance is needed for calculating 90th percentile values for samples taken outside of regular monitoring periods and strongly encourages the development of standardized templates for gathering data regarding the presence and use of lead service lines in distributions systems and how systems will engage in conducting replacement.

¹ The Association of State Drinking Water Administrators noted in their March 14, 2016 response to EPA that states have not received a full inventory from systems.

Mr. Joel Beauvais
Page 6
April 4, 2016

As new guidance is released by EPA concerning the LCR, TCEQ will continue to work in partnership with EPA to strengthen the PWSS program, address the challenges of adopting new primacy requirements, enhance program efficiency and compliance determinations, and ultimately assure Texas consumers access to cost effective and superior quality drinking water.

The TCEQ has always been committed to minimizing risks from drinking water contaminants by ensuring timely compliance monitoring and compliance determination for chemical and microbiological drinking water standards, formal enforcement action for public water systems that exceed compliance trigger levels agreed upon by TCEQ and EPA and providing ongoing education, training, financial, managerial and technical assistance, and ensuring the sustainability of Texas' drinking water infrastructure.

The TCEQ looks forward to meeting with you to discuss Texas' and EPA's implementation of the LCR as well as what strategies and actions EPA has identified to improve the safety and sustainability of public water systems in Texas. If you have any questions or require further information, please contact L'Oreal Stepney, P.E., Deputy Director for the Office of Water at 512-239-1321.

Sincerely,

A handwritten signature in blue ink that reads "Bryan W. Shaw". The signature is written in a cursive style with a long, sweeping underline.

Bryan W. Shaw, Ph.D., P.E., Chairman
Texas Commission on Environmental Quality