

**Texas Commission on Environmental Quality**  
***Drinking Water Advisory Work Group (DWA WG)***

***January 25, 2011***

***Program Updates***

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***Occupational Licensing Update***

**Allan Vargas/Meagan Warncke/Terry Thompson -**

**Meagan Warncke** - Point of Contact (POC) for occupational licensing

**Terry Thompson** - POC for Rules or Policy changes.

- **Water Operator Licensing Statistics: October 2010 – December 2010**

Number of Applications Received (new & renewal)	1412
Number of Examinations Administered	1202
Number of New Licenses Issued	492
Number of Licenses Renewed	716
Number of Licensed Water Operators	15384

- **ePay Available for Licensing Application Fees Starting February 1, 2011**

Beginning February 1, 2011, licensing applicants will be able to pay their new application fees online via credit card or ACH (electronic funds transfers). Printed receipts will be required at the time of the exam as proof of payment.

- **Online Registration for Exams**

Currently, applicants can register online for exam sessions for the Dallas Fort Worth, San Antonio, and Waco regional offices. Houston will be the next region available followed by Austin Central Office. We are estimating that by the end of calendar year 2011, all regional offices will have online registration. Once these go live for each region, applicants will be required to pre-register for the exam sessions in those regions. Walk-ins will no longer be allowed.

## **Plan & Groundwater Review Section**

### **Technical Review and Oversight Team (TROT) Update**

[Reyna Holmes](#) will be transferring to the Dam Safety Program on February 1, 2011.

[Ada Lichaa](#) is the Section Manager for the Planning and Groundwater Review Team (PGR). (512) 239-6728

### ***Utilities & Districts Section Update***

**Tammy Benter, Manager** - *Utilities & Districts Updates: Justin Taack has moved into a new role with the Section and is now a member of the Districts Creation Team. In his new role, he is working as a Financial Analyst and is working on district oversight and supervision functions as well as bond reviews.*

### **Doug Holcomb – Regulatory Guidance (RG) Document Updates**

*- The following regulatory guidance (RG) documents are approved for use and are being implemented by staff. At this time, the RGs are going through the TCEQ's publications process. Once the RGs have been officially published by TCEQ, the "DRAFT" designation will be removed and the RGs will be available on the TCEQ's website.*

- \* Leased Water and Wastewater Treatment Plants
- \* Purchase of Facilities
- \* Escrow / Do Not Expend - Project Documents
- \* Excavation Costs
- \* Developer Interest
- **TWICC Update: Texas Water Infrastructure Coordinating Council**  
TWICC- Texas Water Infrastructure Coordinating Council. The TWICC attendees are from the funding agencies- TWDB, TDRA, and USDA-RD; regulatory agencies- TCEQ and EPA; as well as other interested agencies, trade associations, water systems and consultants. This group coordinates funding and regulatory activities to make these processes more efficient and effective. The next TWICC meeting is

October 27; if you are interested please contact Elston, Dorothy or Doug.

## ***Public Drinking Water (PDW) Section***

### ***Drinking Water Quality Team (DWQT) Update-Michael Lentz***

Briefing Paper: Chapter 290, Public Drinking Water, Federal Lead/Copper Revisions and Federal Corrections for Surface Water, Disinfection, Public Notice and Groundwater

#### **Rule Project No. 2009-020-290-OW**

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### ***SUMMARY***

The bulk of this rulemaking is required under the EPA National Primary Drinking Water Regulations for Lead and Copper: Short Term Regulatory Revisions and Clarifications (LCSTR rule, which was adopted at the federal level on October 10, 2007.

The EPA's LCSTR is intended to address the issue of lead and copper, which can leach into drinking water from pipes or solder under corrosive conditions and for which the EPA has identified potential adverse impacts to human health. Federal rules for lead and copper have been in place since 1991. Reorganization of the requirements for lead and copper in the TAC is intended to make the rule easier for stakeholders to understand. Corrections of typos and rule references are intended to meet TCEQ operating procedures. The greatest impact to a public water system will be to those systems that exceed the lead action levels. Approximately 0.8% of systems have a lead action level exceedance. These systems may experience a one-time cost of \$2,315 to revise their contact lists and disseminate public education materials. Systems with fewer than five taps available for human consumption may experience a one-time of \$28.23 to request a reduction in sampling, should they choose to avail themselves of the opportunity. Systems are expected to experience a triennial (once in 3 years) cost of between \$35.39 and \$72.73 to provide analytical results to customers at the houses where sampling occurs, in the year that they perform sampling. The cost varies with each system according to the population they serve.

No changes are required by state statute. No changes are more stringent than the federal rule or existing state rule. This rule affects only public water systems that are community water systems or non-transient non-community water systems and does not create a new group of affected regulated entities. There is no anticipated fiscal impact on the public. There are no

potentially controversial issues contained in the proposed rulemaking and no policies are being made into a rule.

### **Targeted Regulatory Changes**

- Minimum number of samples required.
- Consumer notice of lead tap water monitoring results.
- Public Education requirements.
- Definitions for compliance and monitoring periods.
- Reduced monitoring criteria.
- Advanced notification and approval of long-term treatment changes.
- Reevaluation of lead service lines.

### ***Next Steps***

Reponses to comments finished January 24, 2011

Adoption Agenda April 20, 2011

Publish May 6, 2011

Effective Date May 12, 2011

- ***LEAD AND COPPER SHORT TERM REVISIONS QUESTIONS AND ANSWERS***

- **What are the basic requirements of the Lead and Copper Rule?**

The LCR has four basic requirements: (1) require water suppliers to optimize their treatment system to control corrosion in customer's plumbing; (2) determine tap water levels of lead and copper for customers who have lead service lines or lead-based solder in their plumbing system; (3) rule out the source water as a source of significant lead levels; and, (4) if lead action levels are exceeded, require the suppliers to educate their customers about lead and suggest actions they can take to reduce their exposure to lead through public notices and public education programs. If a water system, after installing and optimizing corrosion control treatment, continues to fail to meet the lead action level, it must begin replacing the lead service lines under its ownership.

- **Who will be affected by these proposed revisions to the Lead and Copper Rule?**

The entities potentially affected by this proposed rulemaking are public water systems that are classified as community water systems (e.g., systems that provide water to year-round residents in places like homes or apartment buildings) or non-transient, non-community water systems (e.g., systems that provide water to people in locations such as schools, office buildings, restaurants, etc.); state primacy agencies; and local and tribal governments.

- **How would these proposed revisions change monitoring requirements?**

To address confusion about sample collection, the Agency is proposing to clarify language in the rule that speaks to the number of samples required and the number of sites from which samples should be collected. The Agency is also modifying definitions for monitoring and compliance periods to make it clear that all samples must be taken within the same calendar year. Finally, the Agency has proposed revisions to the reduced monitoring criteria that would prevent water systems above the lead action level to remain on a reduced monitoring schedule.

- **How would these proposed revisions change requirements for water treatment?**

The Agency is proposing a change to the rule that would require water systems to provide advanced notification to the primacy agency of intended changes in treatment or source water that could increase corrosion of lead. The state primacy agency must approve the planned changes using a process that will allow the states and water systems to take as much time as needed for systems and states to consult about potential problems.

- **How do these proposed revisions change requirements related to customer awareness?**

While many water utilities indicate that they provide the results of monitoring to customers, there is no requirement in the regulations for them to do so. To address this issue, the Agency is proposing changes to the regulation that require utilities to provide a notification of tap water monitoring results for lead to owners and/or occupants of homes and buildings that are part of the utility's sampling program.

- **How do these proposed revisions change lead service line replacement requirements?**

The current regulations allow utilities to consider lead service lines that

test below the action level as “replaced” for the purposes of compliance. The Agency is proposing revisions to the rule that would require these utilities to reconsider previously “tested-out” lines when resuming lead service line replacement programs. This provision will only apply to systems that had (1) initiated a lead service line replacement program; (2) complied with the lead action level for two consecutive monitoring periods and discontinued the lead service line replacement program; and (3) subsequently were re-triggered into lead service line replacement. All previously “tested-out” lines would then have to be tested again or added back into the sampling pool and considered for replacement.

- **How do these proposed revisions change the public education requirements?**

EPA is proposing to still require water systems to deliver public education materials after a lead action level exceedance. EPA is proposing to change, however, the content of the message to be provided to consumers, how the materials are delivered to consumers, and the timeframe in which materials must be delivered. The changes to the delivery requirements include additional organizations that systems must partner with to disseminate the message to at-risk populations as well as changes in the ways information is disseminated to ensure water systems reach consumers when there is an action level exceedance. In addition to the changes in public education for the Lead and Copper Rule, EPA is proposing to modify requirements for educational statements about lead in drinking water in the annual Consumer Confidence Report.

- **How much will these proposed revisions cost water suppliers and consumers?**

The total annual direct costs to water systems are estimated between \$4.8 and \$5.1 million. The majority of these costs to water systems are from the monitoring and public education requirements of the revisions. For state primacy agencies, the annual direct costs are estimated between \$281,000 and \$456,000. The majority of the costs to state primacy agencies arise from the state review and approval requirement for treatment changes included in the revisions. The one time costs for review of the rule and implementation for water systems and state primacy agencies are approximately \$8.1 million and \$730,000, respectively.

- **How did EPA identify the proposed changes to the LCR?**

In early 2004, EPA began a wide-range review of implementation of the Lead and Copper Rule to determine if there was a national problem related to elevated levels of lead in drinking water. The review

identified several areas in which there was confusion about implementation in the existing regulations. As part of its national review, EPA also held expert workshops to discuss the effectiveness of the regulations. After reviewing findings from the workshops and implementation review, EPA released a Drinking Water Lead Reduction Plan in March 2005. This plan outlined short-term and long-term goals for improving implementation of the Lead and Copper Rule, including several targeted changes to the regulations, which are included in this proposed rule.

- **What are the longer-term goals of the Drinking Water Lead Reduction Plan?**

EPA identified a number of issues that we will continue to review as part of potentially more comprehensive revisions to the rule. The issues require additional data collection, research, analysis, and stakeholder involvement to support decisions. The issues include, but are not limited to, requirements for consecutive systems, and broader revisions to monitoring and lead service line replacement requirements.

***Steven Swierenga - Briefing Paper: Regulatory Guidance for EPA Method 334.0***

***(See Attached Presentation)***

**SUMMARY**

Public water systems in Texas are being cited for two infractions related to the use of on-line chlorine analyzers: (1) not properly calibrating approved equipment (DPD Colorimetric, e.g. Hach CL-17) and/or (2) using unapproved on-line chlorine analyzers that do not use the DPD colorimetric analytical method.

Until Method 334.0 received expedited approval and was published in the Federal Register on November 10, 2009, only the DPD (N,N-diethyl-p-phenylenediamine) method (SM 4500-Cl G) was approved for on-line chlorine analyzers for compliance monitoring. EPA Method 334.0 now allows the use of any type of on-line chlorine analyzers using EPA-approved analytical methods. The method establishes quality control (QC) criteria for all on-line chlorine analyzers that ensure that the analyzers, regardless of analytical method, provide data equivalent to the grab sample methods that are already approved in the regulations for monitoring free and total chlorine residuals (40 CFR 141.74(a)(2) and 40 CFR 141.131(c)(1)).

The quality control procedures described in Method 334 can roughly be broken into two components. The first is the demonstration of capability which establishes the accuracy and precision of the grab sample method and the accuracy of the on-line chlorine analyzer. This must be done for all non-DPD instruments used to collect residual compliance data and is completed when the analyzer is first installed. The second component of Method 334.0 describes quality control methods for demonstrating the continued accuracy of the on-line chlorine and grab sample analyzers. For this, on-line chlorine analyzer readings must be compared with grab sample results every five days. Grab sample accuracy, using an approved method for drinking water compliance monitoring, must be confirmed on a quarterly basis and prior to adjustments to an analyzer.

## BENEFITS

The use of on-line chlorine analyzers is advantageous operationally and in terms of public health. They provide continuous real-time data that increases an operator's ability to control water treatment processes and reduces the burden of frequent sampling and data recording. The RG will benefit public water systems (PWSs) by helping operators understand what steps to take to have an on-line chlorine analyzer approved and what their routine compliance responsibilities are. This document will also benefit the Agency because it will be a reference that provides clear guidance thereby increasing compliance and enabling investigators to be efficient and effective.

## ACTIONS

Create a Regulatory Guidance (RG) for public water systems (PWSs) that will help operators have on-line chlorine analyzers approved and properly calibrated for compliance monitoring and to meet on-going verification and record keeping requirements.

### ***Next Steps***

- Assign RG number
- Seek internal review
- Submit final draft to Agency Publications

## ***Goals***

- Present draft RG to Field Operations Division
- Publish in time for Public Drinking Water Conference

## ***Required QC Procedures for Method 334.0***

### ***Initial***

#### **Grab Sample:**

1. Verify internal calibration curve according to manufacturer's instructions or prepare calibration curve using a method blank and a set of at least three aqueous calibration standards
2. Each field sampler must perform an IDC by analyzing a method blank and five replicate independent reference samples at the same concentration

#### **On-line Chlorine Analyzer**

1. Install the analyzer according to the manufacturer's specifications.
2. After the accuracy of the grab sample measurement is verified, collect and analyze a grab sample collected as close as feasible to the location where the sample enters the on-line chlorine analyzer. Compare the results from the grab sample analysis to the measurement made by the on-line chlorine analyzer. Adjust analyzer to have analyzer readings agree with grab sample measurements with 0.1 mg/L or  $\pm 15\%$ .
3. Perform the IDC for each on-line chlorine analyzer by comparing analyzer readings with grab sample analysis collected at least daily for 14 consecutive days. The analyzer reading must be within  $\pm 0.1$  mg/L or  $\pm 15\%$  (whichever is larger) of the grab sample measurement for each data pair. When multiple on-line chlorine analyzers are being installed, the IDC may be shortened if the same model analyzer is installed at each location and the water quality characteristics and treatment processes are equivalent at each location.

### **Routine**

#### **Grab Sample**

1. Prepare an aqueous calibration check standard at a concentration near the expected concentration of the water samples. The grab sample measured concentration of the calibration check standard must be within  $\pm 15\%$  of the expected value. The results from the analysis of calibration check standards must be recorded and maintained.
2. Minimum calibration check frequency: Quarterly

## **On-line Chlorine Analyzer**

1. Compare on-line chlorine analyzer readings with grab sample analysis. The analyzer reading must be within  $\pm 0.1$  mg/l or  $\pm 15\%$  (whichever is larger) of the grab sample measurement for each data pair.
2. Adjust the calibration of the analyzer so it gives the same value as the grab sample analysis. Follow the manufacturer's instructions.
3. After a major repair or after replacement of the on-line chlorine analyzer with an equivalent model, perform the initial calibration procedure. Return to the routine schedule for grab sample comparisons after verifying the accuracy of the analyzer on a daily basis for 7 consecutive days (or business days).
4. Minimum calibration frequency: every five days.

## ***Public Drinking Water (PDW) Section***

### ***Drinking Water Protection Team (DWPT) Update***

***John Schildwachter – Update***

### ***Field Operations Support Division (FOSD)***

### ***Public Drinking Water Update***

#### ***June Ella Martinez -Staff Update***

Information below represents the number of regional activities conducted from **October 11, 2010 to January 11, 2011**:

- 178 complaints
- 59 focused investigations
- 10 compliance record reviews (CRRs)
- 16 follow-up investigations
- 11 reconnaissance investigations (Recons)
- 528 comprehensive compliance investigations (CCIs)

To date the following activities have been conducted for FY11 (9/01/10 to 8/31/11) and include the numbers noted above:

- 254 complaints

- 99 focused investigations
- 12 compliance record reviews (CRRs)
- 29 follow-up investigations
- 38 reconnaissance investigations (Recons)
- 737 comprehensive compliance investigations (CCIs)

- **Direct Supervision**

***Will set up a meeting and discuss Supervision Guidance.***

**DRAFT**

DWA WG

Discussion concerning the definition of "Direct Supervision"

October 11, 2010

**Proposed Definition:**

Direct Supervision – Direct Supervision can be accomplished by an appropriately licensed individual according to 290.46(e), on-site or by remote means, including but not limited to telephone or radio. An individual not holding a Class D or higher public water system operator license must not perform process control duties, even under the direct supervision of an appropriately licensed individual.

*Specifically, a Field Citation or other enforcement action may be issued against the unlicensed individual for performing process control duties without an appropriate level of operator license when one is required.*

**Summary of the Problem:**

"Direct supervision" is used within the Texas Administrative Code (TAC), but is not defined within the TAC. TCEQ Investigators have noticed that, because of the lack of a clear definition, investigators and public water systems (PWSs) inconsistently apply the rules in regard to employing a water works operator.

## **Background:**

According to 30 TAC 290.46(e), a PWS 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. The ambivalence of this rule results in several interpretations of compliance and non-compliance with the rule. Some PWSs and investigators interpret that a PWS is in compliance with the rule, allowing an unlicensed person or a person not holding a license of an adequate Class to perform process control duties, because the water system is under the direct supervision of a person who holds an adequate license. Sometimes, the direct supervision is performed by a person who is at the water system facility. Sometimes, the direct supervision is limited to a contract with, or a hand-shake understanding with, a licensed person who is never or rarely at the water system facility. Sometimes, the person providing the direct supervision has little or no knowledge of the water system. Some investigators allege a violation of the rules for the same or similar situations. Some PWSs require all employees working for the water system, even ditch-diggers and water meter readers, to have at least a Class D license, so that there is no violation of 30 TAC 290.46(e).

## **Applicable Rules:**

Texas Health and Safety Code Sec. 341.034. LICENSING AND REGISTRATION OF PERSONS WHO PERFORM DUTIES RELATING TO PUBLIC WATER SUPPLIES.

(a) A person who operates a public water supply on a contract basis must hold a registration issued by the commission under Chapter 37, Water Code.

(b) A person who performs process control duties in production or distribution of drinking water for a public water system must hold a license issued by the commission under Chapter 37, Water Code, unless:

(1) The duties are provided to a transient, noncommunity water system; and

(2) The water system uses groundwater that is not under the influence of surface water.

## 30 TAC 30.5. General Provisions

(a) A person must be licensed or registered by the commission before engaging in an activity, occupation, or profession described by Texas Water Code, §§26.0301, 26.3573, 26.452, 26.456, or 37.003, Texas Health and Safety Code, §§341.033, 341.034, 341.102, 341.103, 361.027, 366.014, 366.071, 366.0515, or Texas Occupations Code, §1903.251 and §1904.051. The commission shall issue a license or registration only after an applicant

has met the minimum requirements for a license or registration as specified in this chapter.

30 TAC 30.381. Purpose and Applicability

(a) The purpose of this subchapter is to establish qualifications for issuing and renewing licenses and registrations to:

(1) Public water system operators who perform process control duties in production or distribution of drinking water; and

(2) Operations companies that operate public water systems on a contractual basis.

(b) A person who performs any of the tasks listed in subsection (a) of this section must meet the qualifications of this subchapter and be licensed or registered according to Subchapter A of this chapter (relating to Administration of Occupational Licenses and Registrations), unless exempt under §30.402 of this title (relating to Exemptions); and must comply with the requirements in Chapter 290 of this title (relating to Public Drinking Water).

30 TAC 290.38(63) Process control duties--Activities that directly affect the potability of public drinking water, including: making decisions regarding the day-to-day operations and maintenance of public water system production and distribution; maintaining system pressures; determining the adequacy of disinfection and disinfection procedures; taking routine microbiological samples; taking chlorine residuals and microbiological samples after repairs or installation of lines or appurtenances; and operating chemical feed systems, filtration, disinfection, or pressure maintenance equipment; or performing other duties approved by the executive director.

30 TAC 290.46(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.

30 TAC 290.46(f)(3)(A)(vii) [The following records shall be retained for at least two years:] 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.

## ***Public Drinking Water (PDW) Section***

### ***Drought Update/Contract Subcommittee Update***

#### **James Beauchamp – DWAWS Contracts Sub-Committee**

The DWAWS Contracts Sub-Committee held their last meeting on **September 29, 2010**. As a result, the TCEQ is developing and conducting an internal review of a Draft Contract Guidance Document which will provide:

- Framework Template for Contract Exception Process.

The next DWAWS Contracts Sub-Committee meeting is scheduled for **February 2011**.

Drought - See the Drought and Public Water Systems [webpage](#) concerning Drought contingency planning and Water conservation.

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As of January 20, 2011:

- **75** public water systems on the agencies drought list which are remaining from December 2010. All of these systems are asking customers to restrict water use by following outdoor watering schedules
- **43** are asking customers to adhere to a **mandatory** outside watering schedule based on address and day of the week.
- **32** are asking customers to **voluntarily** limit water usage and avoid waste.

Despite seasonal forecasts that continue to predict little rain in the coming months, many areas of the State did receive beneficial rains during the previous weeks. As a result, demand for outdoor water use has been minimal. As the traditional outdoor growing season approaches, water systems can expect to have increased water demands which may trigger the response stages of their Drought Contingency Plans.

***See the U.S. Drought Monitor ([Attached](#))***

***See the Drought 2011 Public Water Systems affected ([Attached](#))***

You can also contact [Scott Swanson](#)