Do you have 4-log treatment or a triggered source monitoring plan for your groundwater supplies?

Freese and Nichols can help. Based on the type of system you have, we will help you identify a cost-effective alternative for compliance with TCEQ’s new groundwater rule.

Effective December 1, 2009, the Texas Commission on Environmental Quality (TCEQ) began enforcing a new groundwater rule for source water monitoring. The rule applies to all public water systems and defines new testing that must be completed when a total coliform positive result is indicated in a distribution system sample. If your system does not provide 4-log treatment of groundwater, the water system must conduct triggered source water monitoring and collect a source sample from each active well within 24 hours and report findings to TCEQ.

Does the new rule apply to you?

The new rule applies to public water systems that:

- Use 100 percent groundwater
- Have consecutive systems receiving groundwater
- Use mixed surface water and groundwater systems

What must you do for compliance?

Each utility must achieve either 4-log virus inactivation/removal or conduct source water monitoring. To see an overview process, refer to the chart on the back of this sheet.
WHAT IS A TRIGGERED SOURCE MONITORING PLAN (TSMP)?

A TSMP is prepared by a public water system and supports the implementation of source water monitoring. Once approved by TCEQ, the plan can save a utility significant time and money by limiting the number of wells tested during each triggered event. It includes:

- Details of each well
- Location of Total Coliform Rule sample sites
- Pressure plane mapping
- Influence area of each groundwater well
- Description of a group of wells similar to and considered representative of one another and connections with other systems that use wells

WHAT IS INVOLVED IN CLAIMING 4-log TREATMENT?

In order for a public water system to claim 4-log treatment, the utility must demonstrate 99.99 percent inactivation or removal of viruses. A contact time study must be completed to calculate the minimum specified residual required at the entry point to achieve 4-log inactivation/removal. If a public water system chooses to claim 4-log treatment, chemical disinfection compliance monitoring is required such that:

- Systems with a population less than 3,300 must collect a source water sample daily
- Systems with a population greater than 3,300 must conduct continuous disinfection monitoring (one reading every 30 minutes)

GRAND PRAIRIE’S TSMP SAVES TIME AND MONEY

The TSMP will be submitted to TCEQ and, upon approval, the City will have a plan in place for source water testing should they receive a positive result of total coliform in their distribution system.

The City will save time and money by significantly reducing the amount and number of tests required when a positive coliform sample is received.