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Ryan Sitton: Groundwater studies show Railroad Commission rules and vigilance are working



Thao Nguyen/Special Contributor

Railroad Commissioner Ryan Sitton, center, sits with seismologists from SMU, UT-Austin and the U.S. Geological Survey as they spoke before the Railroad Commission about their study of recent quakes in Azle and Reno at a panel in Austin last year.

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Every day the more than 700 Texans who make up the Railroad Commission of Texas wake up and go to work in every corner of our great state to make sure the energy industry is operating safely and responsibly. Our team includes hundreds of professional geologists, petroleum engineers, attorneys and experts in their field who are deeply committed to protecting public safety and our natural resources while maintaining a regulatory environment that allows the energy industry to remain a cornerstone of our state's economic success.

Among the thousands of rules and regulations our team aggressively enforces, 16 Texas Administrative Code §3.13, known as Statewide Rule 13 (SWR 13), and its requirements for protecting groundwater, is one of the most critical.

SWR 13 requires all oil and gas wells to meet extremely stringent design and construction regulations to ensure against contamination of groundwater. The rule was most recently updated by the commission in 2014 to keep pace with industry innovations and the growing use of hydraulic fracturing to more efficiently, effectively and safely recover the abundant oil and gas resources found across Texas.

Under SWR 13, oil and gas operators must make sure any geologic zone they drill through that could allow fluids to flow through it, must be fully cemented and cased to prevent any flow that could cause groundwater contamination. These same precautions are required of wells drilled through zones where corrosive fluids could damage well integrity. Updates to SWR 13 even include more stringent requirements on cement quality in certain circumstances, as well as more rigorous well bore testing. A complete, technical explanation of updates to SWR 13 can be found on the Commission's [website](#).

Several recent independent scientific studies indicate oil and gas activity in Texas is not impacting groundwater quality. The most recent scientific study was conducted by the University of Texas at Austin Bureau of Economic Geology. This study found only isolated pockets of methane and concluded: "Overall the source of the dissolved methane is likely natural sourced from shallow natural gas accumulations in the Barnett Shale, lignite beds associated with a fault in the Haynesville Shale, and lignite and degradation of oil and deep organic matter associated with a fractured zone in the Eagle Ford Shale.

A study released last summer by the University of Texas at Arlington discusses diminished groundwater quality in the Barnett Shale, including the presence of heavy metals and Volatile

Organic Compounds. But importantly, the study concludes: “These data do not necessarily identify UOG (unconventional oil and gas extraction) activities as the source of contamination.”

Finally, a national, multi-year study on water quality related to oil and gas activity conducted by the Environmental Protection Agency and released last year concludes: “We did not find evidence that these mechanisms (hydraulic fracturing) have led to widespread, systemic impacts on drinking water resources in the United States.”

While it’s not surprising all three studies call for additional monitoring and study to ensure groundwater safety, the studies serve as confirmation the commission’s rules and vigilance protecting the public and our natural resources are working.

Just as the energy industry continues to innovate and evolve, so too will the commission’s rules and regulations. What will never change is the commitment of the team of professionals at the commission to ensure safe, responsible and successful energy production that continues to benefit all Texans.

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