

Today's Railroad Commission Workshop Previews Upcoming Show Cause Hearings

June 5, 2015

Railroad Commissioner Ryan Sitton, Railroad Commission staff, Southern Methodist University (SMU) researchers, and experts from the U.S. Geological Survey, University of Texas, and Texas A&M University gathered for over five hours today to discuss induced seismicity in North Texas.

Commissioner Sitton called the workshop following release of an SMU study that linked the injection of large quantities of wastewater into disposal wells and the removal of saltwater from natural gas wells with earthquakes. The study garnered significant media attention and contributed to growing public sentiment that Barnett Shale drilling activities were and are responsible for North Texas seismic activity. The study also prompted the Railroad Commission to initiate proceedings requiring operators of two North Texas disposal wells to “show cause” why their injection well permits should not be revoked in light of the SMU study.

However, Commissioner Sitton and the Commission's seismologist raised questions about the SMU researchers' methodology and their resultant conclusions. Commissioner Sitton also has expressed concern that the study's results have been mischaracterized as linking hydraulic fracturing to seismic activity. And so Commissioner Sitton called today's workshop to review the study's findings.

Key Points from the Workshop

The SMU researchers claimed that it is well-established that human activity can cause earthquakes, but that few injection wells have been *directly* linked to seismic activity. The researchers also confirmed that there are uncertainties associated with their research and that additional data—such as pressure testing data, higher resolution seismic data, and better data on the permeability, porosity, and locations of faults—is needed to better understand the link between oil and gas activity and seismicity.

The non-SMU representatives generally agreed that the SMU study was a good start, but that additional data, such as water production data, needs to be considered before firm conclusions on induced seismicity can be drawn. The SMU researchers were open to considering additional data, but claimed that some of the data needed to refine their modeling and resultant conclusions is not readily and/or publicly available, and further to that point, the SMU researchers emphasized that better collaboration is needed between academia, industry, and regulators to get the best data sets possible to move the science forward.

One of the primary takeaways from today's workshop was the SMU research team's admission that one of their greatest uncertainties is whether or not producers have played a significant role

in causing seismic events and that additional data is needed before their modeling can be more conclusive on that point.

What's Next?

The SMU researchers pledged to make their PowerPoint slides from their presentation today available on the SMU website next week. The slides summarize their study and methodology.

In the coming weeks, the RRC will hold hearings requiring operators of two North Texas disposal wells to “show cause” why their injection well permits should not be revoked in light of the SMU study. Today’s workshop previewed some of the arguments those operating companies may make. For example, officials from one of those operating companies attended today’s workshop and presented evidence from one of its Southern Oklahoma monitoring stations indicating that some of the larger North Texas seismic events identified in the SMU study occurred many thousands of feet below the company’s injection interval. Those officials also shared the results of a recent bottom hole pressure test they ran on their disposal well that they interpret as showing there has been no pressure increase from the time the well was drilled to today. Both data points may call into question whether the company’s injection activities should be attributed to observed seismicity.

Stay tuned for updates from the show cause hearings ...

For further information, please contact Vinson & Elkins lawyers [Larry Nettles](#) or [Taylor Holcomb](#).

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