Railroad Commission Holds Second "Show Cause" Seismicity Hearing

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On Monday, another operator of a North Texas oil and gas wastewater disposal well appeared before the Railroad Commission's Hearings Division to "show cause" why its injection permit should not be revoked in light of a Southern Methodist University (SMU) study linking wastewater injection activities to North Texas seismicity.

The authors of the SMU study did not attend the hearing. But unlike the operator at last week's hearing, the operator appearing at Monday's hearing directly addressed the SMU study from the start. Through a geologist, a geophysicist, and two petroleum engineers, the operator offered testimony to refute SMU's modeling and conclusions about the lack of historical seismicity, which were the bases of the SMU study. Its witnesses' testimony included the following:

- The Fort Worth basin has been tectonically active for millions of years and SMU's conclusions regarding the lack of historical seismic activity in the basin are incorrect, in part because the U.S.G.S. earthquake catalog is incomplete due to how few seismograph stations were stationed in Texas in the past.
- Seismic activity originated in the "basement" of the Fort Worth basin—far below the Ellenburger disposal zone—due to natural causes. (The operator also alleged that the SMU authors were given that information before they published their study but ignored it in reporting that seismic activity was originating at shallower depths.)
- There has been no significant reservoir pressure change near the operator's well bore despite its injecting a total volume of 5.9 million barrels of wastewater over 5 years. According to the operator, that is not surprising due to Ellenburger disposal zone rock being conducive to rapid dissipation of fluids, making it difficult to change the pressure in the Ellenburger formation and making it problematic to project pressure changes downward into the basement of the fault system, as SMU did.
- SMU's models should have but did not account for the complex geology (*e.g.*, porosity and permeability) of the Ellenburger formation.

Two of the operator's witnesses testified that disposal activities can induce seismicity, citing the Rocky Mountain Arsenal disposal well as an example, but that the operator's injection activities were not and that nothing in the SMU study should lead to a conclusion otherwise.

The hearing concluded after a Railroad Commission attorney cross-examined the operator's witnesses for nearly two hours. The hearings examiners will now begin drafting a proposal for decision (PFD) that the Commissioners will consider at a future open meeting. Exhibits can be late-filed up to ten days after the hearing, so it is unlikely that a PFD will issue by the end of the month. Once the Commissioners receive the PFD, they have broad discretion to accept, reject or modify the examiners' findings and conclusions at an open meeting. Stay tuned for future updates …

For further information, please contact Vinson & Elkins lawyers Larry Nettles or Taylor Holcomb.