

Oklahoma orders wastewater disposal wells shut down after earthquake

US Geological Survey to investigate whether hydraulic fracking activity played a role in 5.6-magnitude earthquake, equal to strongest in state's history

**Associated Press
in Oklahoma City**

Sunday 4 September
2016 16.11 EDT

Oklahoma officials have ordered 37 wastewater disposal wells shut down after a 5.6-magnitude earthquake struck the state on Saturday, equal to the strongest in the state's history.

Governor Mary Fallin declared a state of emergency after the earthquake, which caused damage to buildings around north-central Oklahoma and could be felt as far away as Dallas and Chicago.

"We're just trying to determine just how widespread" the damage is, emergency management director Mark Randell said. He described it as minor to moderate, with some collapsed chimneys and fallen sandstone facing off buildings; no buildings collapsed.

The Oklahoma Corporation Commission ordered the shutdown of wastewater wells in a radius of about 500 square miles around the epicenter of the earthquake. "We estimate that at any one time, there are about 3,200 active disposal wells," commission spokesman Matt Skinner said.

Five months ago, US officials warned Oklahoma that the wastewater wells used for natural gas drilling were linked to an increase in earthquakes in the state, parts of which are now as likely to suffer tremors as northern California. There are about 4,200 total wells across the state and about 700 in a 15,000-square-mile "area of interest" in the area that includes the epicenter of Saturday's temblor, near Pawnee.

The United States Geological Survey said it would have to investigate hydraulic fracking activity in the area of the earthquake before drawing any conclusions about its cause.

"Without studying the specifics of the wastewater injection and oil and gas production in this

area, the USGS cannot currently conclude whether or not this particular earthquake was caused by industrial-related, human activities,” the agency said in a statement.

An increase in magnitude 3.0 or greater earthquakes in Oklahoma has been linked to underground disposal of wastewater from oil and natural gas production, and since 2013, the commission has asked wastewater-well owners to reduce disposal volumes in parts of the state where the temblors have been most frequent.

None of the utilities, pipelines or fuel infrastructure in the area had major damage, either, the commission said. The Oklahoma department of transportation (ODOT) inspected 180 state bridges within a 30-mile radius of the epicenter and reported minor cosmetic damage to two structures, but all are open and safe for travel. ODOT said the inspections across six counties took about six hours to complete.

“We are pleased with the speed and efficiency of our crews in their response to this event and dedication to ensuring public safety,” ODOT executive director Mike Patterson said.

The US Army Corps of Engineers is inspecting all dams within a 50-mile radius of the epicenter, including the Birch, Cleveland Levee, Heyburn, Kaw, Keystone and Skiatook dams.

Key energy-producing areas in both Oklahoma and Kansas saw an uptick in quakes in the first half of this decade, but took different approaches. Kansas moved quickly to limit volume in wastewater disposal wells, while Oklahoma concentrated on the depth of the disposal. Kansas saw a 60% drop while the frequency of quakes in Oklahoma continued to climb.

More news

Topics

Oklahoma Earthquakes Natural disasters and extreme weather

Save for later Article saved

Reuse this content