

Oklahoma regulators impose water injection cut to stem earthquakes

Yeganeh Torbati, Reuters, 8-5-15

Oklahoma regulators are imposing new restrictions on energy companies injecting wastewater underground, in the latest effort to stem a sharp increase in earthquakes.

The new rules, announced by the Oklahoma Corporation Commission on Monday evening, require operators in parts of two Oklahoma counties to reduce the amount of saltwater they inject underground by 38 percent from current levels in the next 60 days. The reduction will bring injected volumes to about 2.4 million barrels below those in 2012, when the most dramatic spike in the area earthquakes began.

The restrictions affect 23 wells run by 12 operators. The operators are mostly small companies, but one of the wells is run by Devon Energy Corp of Oklahoma City. The state has about 3,500 saltwater disposal wells.

Oklahoma and several other central U.S. states have experienced a big increase in earthquakes since 2009. Scientists attribute this to increased underground injection since then of briny wastewater, a byproduct of booming oil and gas production.

Noticeable quakes, above magnitude 3.0, now strike Oklahoma at a rate of two per day or more, compared with two or so per year before 2009.

The earthquakes are not related to the drilling technique of hydraulic fracturing, or "fracking." Instead, researchers say, they stem from the underground re-injection of saltwater that occurs naturally in oil and gas formations.

After three quakes of magnitude 4.0 or higher struck the state in a single day last month, the commission required operators of more wells to prove they are not injecting water below the state's deepest rock formation, a practice believed to be particularly dangerous.

Monday's move goes beyond past restrictions by capping the amount of water operators in certain areas can inject at any depth. Many of Oklahoma's most active oil and gas fields have high amounts of naturally occurring water, and a reduction in the amount of water that can be injected could mean lower production of oil and gas.

Kansas, which has also had a spike in quakes, undertook a similar move in March.

"There was a time when the scientific, legal, policy and other concerns related to this issue had to first be carefully researched and debated in order to provide a valid framework for such action," Dana Murphy, who sits on the commission, said in a statement on Monday. "That time is over."