

Fracking Caused Ohio Earthquakes: It's (Almost) Official

Saturday 31 March 2012, by [CASEY Tina](#) (Date first published: 12 March 2012).

Remember those earthquakes in Ohio [1] seismologists from Columbia University thought could be caused by activities related to natural gas fracking? [2] Well it looks like the experts were on the right track. Last week the Ohio Department of Natural Resources [3] issued the strictest set of fracking-related rules in the country, based on a preliminary report linking last December's seismological events around Youngstown to the injection of fracking wastewater into a fracking brine disposal well.

Strict new rules for fracking wastewater

The Ohio DNR did not mince any words in its announcement, which was issued last Friday. Among other permitting, testing and monitoring requirements, the new rules:

"...prohibit any new wells to be drilled into the Precambrian basement rock formation; mandate operators submit extensive geological data before drilling; and implement state-of-the-art pressure and volume monitoring devices including automatic shut-off switches and electronic data recorders. In addition, ODNR will require that brine haulers install electronic transponders to ensure "cradle to grave" monitoring of all shipments."

Out of sight, out of fracking mind

According to the U.S. EPA, there are about 144,000 brine disposal wells in the U.S., into which about two billion gallons of fracking brine [4] are injected daily. Ironically, wells were deemed a better alternative to the old method, internment in lagoons, due to concerns over potential surface water contamination. In addition to the earthquake hazard [5], though, well injection is emerging as a contamination issue for wells and aquifers.

Brine well fingered as earthquake culprit

DNR cautioned that its actions were based on a preliminary report, but the evidence all pointed to the Northstar 1 Class II fracking brine disposal well as the cause of twelve quakes that shook the Youngstown area. Northstar is a 200-foot deep well that had been in use for a little over two years, and apparently, fluid from the well got into an unmapped fault line that was already under stress.

Whole lotta fracking going on...or not

As President Obama is fond of reminding us, oil and gas drilling are up under his administration, despite the risks. On the other hand, the President is also pushing hard for the development of renewable sources of natural gas, so it's possible that the fracking frenzy may die down sooner rather than later. The California based company HyperSolar [6], for example, has come up with a method for squeezing natural gas and hydrogen from municipal wastewater, and a company in New Jersey called Primus Green Energy [7] is churning out natural gas from wood pellets. The Obama Administration is also pushing renewable sources through its ramped-up AgStar manure to biogas program [8].

P.S.

* Source: Clean Technica (<http://s.tt/179tG>).
<http://cleantechnica.com/2012/03/12/fracking-caused-ohio-earthquakes-its-almost-official/>

Footnotes

- [1] <http://cleantechnica.com/2011/11/13/epa-finds-fracking-chemical-and-other-pollutants-in-drinking-water-of-pavillion-wyoming/>
- [2] <http://cleantechnica.com/2011/04/18/fracking-and-the-terrible-horrible-no-good-very-bad-week/>
- [3] http://www.ohiodnr.com/home_page/NewsReleases/tabid/18276/EntryId/2711/Ohios-New-Rules-for-Brine-Disposal-Among-Nations-Toughest.aspx
- [4] <http://cleantechnica.com/2010/09/12/epa-asks-natural-gas-drillers-to-disclose-chemicals-in-fracking-brine/>
- [5] <http://cleantechnica.com/2011/11/07/earthquakes-fracking/>
- [6] <http://cleantechnica.com/2012/01/17/hypersolars-green-gas-makes-fracking-obsolete/>
- [7] <http://www.triplepundit.com/2012/02/primus-green-energy-pitches-gasoline-from-wood-pellet/>
- [8] <http://cleantechnica.com/2010/05/04/big-methane-biogas-blowout-planned-for-u-s-farmers/>