

Fracking can cause nearby abandoned wells to leak methane – study

Richard Valdmanis, Reuters, 10-21-15

Hydraulic fracturing can cause nearby abandoned oil wells to leak methane, according to a study published on Tuesday in the peer-reviewed Water Resources Research journal, marking a potentially large source of unrecorded greenhouse gas emissions.

Researchers at the University of Vermont examined a part of New York state overlying the Marcellus shale gas reservoir to determine the chances that a newly fracked well there would intersect one of the state's thousands of existing wellbores.

"Average probability estimates for the entire region of New York underlain by the Marcellus Shale range from 0.00 percent to 3.45 percent," according to the study, which suggested the results held broader national implications.

It said oil and gas companies could reduce the probability of triggering methane leaks by seeking to identify the locations of abandoned wells before any new fracking, a potentially daunting task given the large number of unmarked abandoned wells across the country.

New York banned fracking earlier this year, citing concerns that the technology could cause water and air pollution. Fracking involves injecting water, sand and chemicals deep underground to break up rock formations.

Researchers at Princeton University last year published a paper in the Proceedings of the National Academy of Sciences that showed abandoned wells in nearby Pennsylvania were emitting an average of 0.27 kg (0.6 lb) of methane per day. But that study did not outline what might be causing the leaks.

The U.S. Environmental Protection Agency in August proposed new standards to cut greenhouse gas emissions and smog-forming pollutants from oil and gas facilities as part of President Barack Obama's broader strategy to slash methane emissions in the energy sector over 10 years.

Methane warms the climate at least 80 times more than the same amount of carbon dioxide, the most prevalent greenhouse gas, over a 20-year period.