INTERSTATE
Oil & Gas
COMPACT COMMISSION

2004 EPA HYDRAULIC FRACTURING STUDY FACT SHEET

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THE STUDY

EPA completed its study of the possible impacts of hydraulic fracturing on underground sources of drinking water (USDWs) in 2004.

The goal of the study was to assess the potential for contamination of USDWs due to the injection of hydraulic fracturing fluids into coalbed methane production wells.

THE METHODOLOGY

The EPA researched over 200 peer-reviewed publications, interviewed approximately 50 employees from state or local government agencies and communicated with approximately 40 citizens who were concerned that hydraulic fracturing impacted their drinking water wells. The agency searched for confirmed incidents of drinking water well damage and thoroughly reviewed the information collected.

EPA made a draft of the report available for a 60-day public comment period in August 2002. Comments received from more than 100 commentors, including private citizens, environmental and citizen groups, government agencies, oil and gas companies, and trade associations.

THE RESULTS

- The agency concluded that the injection of hydraulic fracturing fluids poses little or no threat to USDWs.
- EPA found no confirmed cases linked to fracturing fluid injection or subsequent underground movement of fracturing fluids.
- EPA found that no hazardous constituents were used in fracturing fluids, and hydraulic fracturing did not result in creating a path for fluids to move between isolated formations.
- Reported incidents of water quality the degradation were attributed to other, more plausible causes.
- Although thousands of wells are fractured annually, EPA did not find a single incident of the contamination of drinking water wells by hydraulic fracturing fluid injection.

KEY QUOTES DIRECTLY FROM THE EPA

Excerpts from U.S. Environmental Protection Agency, "Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs," Executive Summary

Is hydraulic fracturing a threat to drinking water?

"Based on the information collected and reviewed, EPA has concluded that the injection of hydraulic fracturing fluids into CBM wells poses little or no threat to USDWs and does not justify additional study at this time."

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"After reviewing data and incident reports provided by states, EPA sees no conclusive evidence that water quality degradation in USDWs is a direct result of injection of hydraulic fracturing fluids into CBM wells and subsequent underground movement of these fluids. Several other factors may contribute to groundwater problems, such as various aspects of resource development, naturally occurring conditions, population growth, and historical well-completion or abandonment practices." -- Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs, Executive Summary

Was the EPA study extensive enough?

"EPA's approach for evaluating the potential threat to USDWs was an extensive information collection and review of empirical and theoretical data. EPA reviewed incidents of drinking water well contamination believed to be associated with hydraulic fracturing and found no confirmed cases that are linked to fracturing fluid injection into CBM wells or subsequent underground movement of fracturing fluids. Although thousands of CBM wells are fractured annually, EPA did not find confirmed evidence that drinking water wells have been contaminated by hydraulic fracturing fluid injection into CBM wells."

What role do the states play in regulating hydraulic fracturing?

"It is important to note that states with primary enforcement authority (primacy) for their UIC Programs implement and enforce their regulations, and have the authority under SDWA to place additional controls on any injection activities that may threaten USDWs. States may also have additional authorities by which they can regulate hydraulic fracturing. With the expected increase in CBM production, the Agency is committed to working with states to monitor this issue."

MORE INFORMATION

The full EPA study is available online at: http://www.epa.gov/OGWDW/uic/wells_coalbedmethanestudy.html