

EPA's Hydraulic Fracturing Study

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EPA is currently studying the potential impacts of hydraulic fracturing (“fracking”) on drinking water supplies and groundwater as directed by Congress in its FY2010 Appropriations Committee Conference Report. The Congressional directive was issued amidst increased public concerns raised about the environmental impacts of fracking. Currently, fracking fluids (except diesel fuel) are exempt from the Safe Drinking Water Act’s underground injection control program, which regulates the underground injection of fluids.

The [draft study plan](#) prepared by EPA indicates the Agency will seek to answer the following five fundamental research questions regarding the full lifecycle of water in the fracking process:

- Water Acquisition – How do large volume water withdrawals impact drinking water resources?
- Chemical Mixing – What are the possible impacts of fracking fluid releases on drinking water resources?
- Well Injection – What are the possible impacts of the injection and fracking process on drinking water resources?
- Flowback and Produced Water – What are the possible impacts of releases of flowback and produced water on drinking water resources?
- Wastewater Treatment and Disposal – What are the possible impacts of inadequate wastewater treatment on drinking water resources?

EPA will research the impact of fracking on drinking water and groundwater by analyzing existing data, as well as conducting case studies and hypothetical scenario evaluations. EPA selected five case study locations where it will investigate claims of groundwater contamination due to fracking operations. These case study locations are: 1) the Bakken Shale in Killdeer and Dunn Counties, North Dakota; 2) the Barnett Shale in Wise and Denton Counties, Texas; 3) the Marcellus Shale in Bradford and Susquehanna Counties, Pennsylvania; 4) the Marcellus Shale in Washington County, Pennsylvania; and 5) the Raton Basin in Los Animas County, Colorado. EPA will also monitor the fracking process at future fracking sites in the Haynesville Shale, DeSoto Parish, Louisiana, and the Marcellus Shale, Washington County, Pennsylvania.

EPA requested information from nine hydraulic fracturing service providers on the chemical composition of fracking fluids, the impacts of those chemicals on human health and the environment, and standard operating procedures. All nine companies have agreed to provide the requested information. One of the nine companies, Halliburton, did not immediately agree to provide the requested information, but did so after receiving a mandatory subpoena from EPA.

EPA indicated it aims to provide initial study results by the end of 2012, and the final study report sometime in 2014.

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