



EARTHWORKS

EARTHWORKS FACTSHEET

EPA'S DIESEL GUIDANCE

Summary: The U.S. Environmental Protection Agency (EPA) has developed permitting guidance for hydraulic fracturing operations using diesel. The guidance is the first federal policy focused on protecting drinking water sources from hydraulic fracturing.

Hydraulic Fracturing: Hydraulic fracturing is a method of extracting natural gas and oil trapped inside shale or other rock formations. Water is mixed with silicates (what industry refers to as sand) and chemicals and injected into the earth at high pressure in order to fracture the rock around the well. The gas or oil released by this “fracturing” is then pumped out. Increased use of fracturing or “fracking” along with horizontal drilling has dramatically increased the health and environmental impacts from drilling.

The Safe Drinking Water Act and Hydraulic Fracturing: The Energy Policy Act of 2005 (EPAct) exempts fracking from the Safe Drinking Water Act (SDWA) “... except when diesel fuel is used.” During the debate around the Energy Policy Act, Congress became concerned about the potential for diesel contamination of underground sources of drinking water (USDW). At the time, industry representatives claimed that diesel was no longer used in hydraulic fracturing operations, but there is increasing evidence that the use of diesel remains widespread. In early 2011, an [investigation](#) by members of the U.S. House of Representatives found that drilling service companies injected over 30 million gallons of fracturing fluid containing diesel underground during hydraulic fracturing between 2005 and 2009. Injecting diesel underground is problematic because of the toxic chemicals it contains, especially the “BTEX” compounds- benzene, toluene, ethylbenzene and xylene. These chemicals are linked to numerous health problems including cancer, kidney and liver problems and nervous system damage. They are both toxic at very low levels and are soluble in water, which is of particular concern when injecting them into the ground in proximity to underground sources of drinking water.

What is the EPA doing? The EPA has issued a guidance document to clarify what operators need to do to comply with the law. EPA’s draft guidance explains to state agency staff and sometimes EPA regional staff how to use diesel as part of the mix injected underground to “fracture” the rock and extract gas or oil. After publishing the draft guidance, EPA opened a formal public comment period that ends July 9th. This is an important part of the regulatory process when interested parties can comment on the Agency action. During this period, Earthworks will issue action alerts to our membership to solicit public comments.

Earthworks calls on EPA to:

- Ban the use of diesel in hydraulic fracturing. Concern about diesel use in this method of gas extraction is warranted. The Department of Energy Secretary of Energy Advisory Board (SEAB) Shale Gas Subcommittee found that, in light of these risks and the available alternatives, “there is no technical or economic reason to use diesel as a stimulating fluid.” [Natural Gas Subcommittee, First 90-day [interim report](#), (August 18, 2011)]
- Initiate formal rulemaking, in order to give the protections the full force of the law. The SDWA’s Underground Injection Control program is an appropriate way to protect drinking water from these operations and a rule with the force of law is necessary.
- Broadly define diesel to include petroleum distillates and BTEX-containing compounds in order to most fully prevent contamination of drinking water from these hazardous chemicals.



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EPA should ban diesel and define it broadly because Earthworks has new research detailing states' poor enforcement of oil and gas regulations

- Of the 516 reported oil and gas industry spills in 2011, COGCC imposed only five fines, and those were for violations in *previous* years.
- In 2010, there were more than 43,000 active wells in Colorado. That year the COGCC employed 15 inspectors, who performed a total of 16,228 inspections. Assuming that each inspection was conducted for an individual well site, approximately 27,000 wells or 63% of Colorado's active oil and gas wells were not inspected in 2010. Even fewer inspections were conducted in 2011 (12,239), while the number of active wells increased to 46,835, leaving an even greater number of wells with little or no oversight.
- In New Mexico, OCD Compliance Summary data shows that as of early 2012, compliance had been achieved in 311 (39%) of the 797 incidents that resulted in letters of non-compliance in 2010, and compliance had been achieved in 170 of the 453 cases in 2011 (38% compliance).

The Costs of Compliance *Are* Worth The Benefits: Taking action to control the use of diesel in hydraulic fracturing is an important step towards cleaner, safer drinking water. By instituting a prohibition on diesel fuels, EPA will improve state and operator compliance with SWDA, maximize protection of drinking water for communities and provide regulatory certainty to the oil and gas industries. A prohibition will also relieve enforcement costs for both states and the EPA, ease compliance with chemical disclosure, and eliminate the possibility of costly clean-ups related to potential diesel spills and leakages.

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