

FACT SHEET: Underground Injection Control (UIC) Program Permitting Guidance for Oil and Gas Hydraulic Fracturing Activities Using Diesel Fuels, UIC Program Guidance #84 – Draft

The U.S. Environmental Protection Agency (EPA) has published draft UIC Program permitting guidance for oil and gas hydraulic fracturing activities using diesel fuels. This draft guidance is intended to provide information for EPA permit writers issuing permits under the Safe Drinking Water Act (SDWA) to ensure protection of underground sources of drinking water (USDWs). The draft guidance is open for 60 days of public comment to allow stakeholders to provide input and feedback before it is finalized.

BACKGROUND

EPA's UIC Program provides a framework to ensure protection of USDWs from endangerment related to underground injection activities. Within the UIC Program regulatory framework, Class II wells are those that inject fluids associated with oil and natural gas production activities. This draft guidance document describes legal requirements under the UIC Class II regulations for permitting hydraulic fracturing where diesel fuels are used.

SDWA requires owners or operators of injection wells to obtain a permit for hydraulic fracturing when diesel fuels are used in fracturing fluids. UIC regulations provide EPA UIC Program Directors with discretion to tailor specific Class II permit requirements to ensure that USDWs are protected from endangerment. This guidance, designed for EPA UIC permit writers, describes how Class II regulations may be tailored to address the unique risks of diesel fuels injection during hydraulic fracturing. EPA UIC permit writers may use these recommendations, and other relevant information, in permitting Class II wells when diesel fuels are injected during hydraulic fracturing. EPA is the permitting authority for UIC Class II programs in Arizona, Washington, DC, Florida, Hawaii, Iowa, Kentucky, Pennsylvania, Michigan, Minnesota, New York, Tennessee, Virginia, American Samoa, the Virgin Islands, and most Indian tribes. State, tribal and territorial UIC Class II programs are encouraged to review and consider the information in this guidance.

DIESEL FUELS

Diesel fuels may be used in hydraulic fracturing operations as a primary base (or carrier) fluid, or added to hydraulic fracturing fluids as a component of a chemical additive to adjust fluid properties (e.g., viscosity and lubricity) or act as a solvent to aid in the delivery of gelling agents. Some chemicals of concern often occur in diesel fuels as impurities or additives. Benzene, toluene, ethylbenzene, and xylene compounds (BTEX) are highly mobile in ground water and are regulated under national primary drinking water regulations because of the risks they pose to human health.

STAKEHOLDER INPUT ON GUIDANCE DEVELOPMENT

EPA sought input from a broad range of stakeholders to assist with the development of this draft guidance. State, tribal and federal governments, industry, public interest groups and the general public participated and provided input through meetings and webinars.

MORE INFORMATION, INCLUDING HOW TO COMMENT

The agency is specifically requesting input on the following topics:

- Diesel fuels description
- Diesel fuels usage information
- Permit duration and well closure
- Area of review
- Information Submitted with the Permit Application
- Monitoring

The draft guidance and link to a *Federal Register* notice with context regarding the above topics and detailed instructions for how to comment on the guidance are available on EPA's website at http://water.epa.gov/type/

groundwater/uic/class2/hydraulicfracturing/hydraulic-fracturing.cfm.

For more information please see www.epa.gov/hydraulicfracturing.