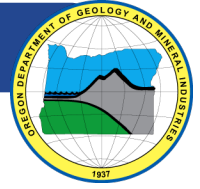


DOGAMI Fact Sheet Hydraulic Fracturing in Oregon



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Oregon's Department of Geology and Mineral Industries and Department of Environmental Quality regulate and issue permits for the drilling and operation of oil or gas wells, including wells drilled using hydraulic fracturing technology, commonly known as fracking.

Regulating & Permitting of Hydraulic Fracturing

For drilling operations that propose hydraulic fracturing, DOGAMI, DEQ, and other natural resource agencies work together to ensure that resources are being developed in compliance with state law, that each agency's regulatory responsibilities are met, and that the environment is protected.

What is Hydraulic Fracturing?

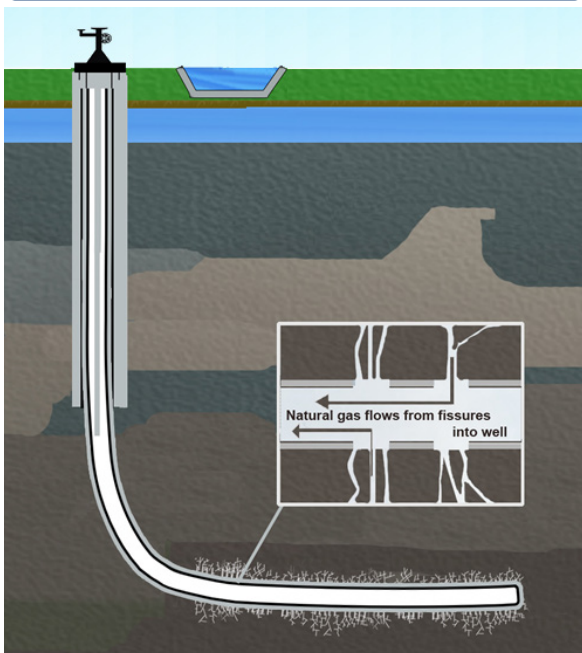


Image modified from US EPA

Hydraulic fracturing typically involves injecting water, sand, gas, and/or chemicals under high pressure into a formation via a well. This process creates new fractures in the rock and increases the size and connectivity of existing fractures. Many rock formations have low permeability, which means that the gas, oil or hot water they contain will not flow economically through the rock into the well. The hydraulic fracturing technique is commonly used to increase the permeability of a rock formation, and increase flow into a well. In recent years, technological advances in horizontal drilling and hydraulic fracturing have resulted in dramatically increased oil and gas production in many parts of the United States.

DOGAMI Regulatory Authority

- Drilling, completion, operation and decommissioning of wells, including:
 - Down-hole activities
 - The well pad
 - Off-site impacts

DEQ Regulatory Authority

- EPA-delegated authority to regulate compliance with the Safe Drinking Water Act and Clean Water Act
- Reviews proposed fracturing fluid composition
- Regulates waste disposal of fracturing fluids
- May require an Underground Injection Control (UIC) Permit prior to injection of fluids

Once an application for a permit to drill an oil or gas well is received, the application is circulated to other natural resource agencies for comment. DOGAMI then issues a permit with conditions designed to address and mitigate concerns identified by other agencies. Depending on the proposed drilling process or site-specific issues, additional information may be required from the applicant.

The Energy Policy Act passed by Congress in 2005 amended the Safe Drinking Water Act to exclude hydraulic fracturing fluids (except diesel fuel) related to energy production from regulation under the UIC program. However, as allowed under federal UIC rules, DEQ's UIC program regulates injection of all types of hydraulic fracturing fluids.

