



Regulation of Hydraulic Fracturing in Oregon by DOGAMI and DEQ

DOGAMI regulates the construction of well bores to ensure the mechanical integrity of the system and to ensure that formation fluids do not migrate to other zones or contaminate groundwater or drinking water. The statutory authority comes from:

<u>520.095</u> Rules and orders; bond. The governing board of the State Department of Geology and Mineral Industries may adopt rules and issue orders, and the department may issue orders, as may be necessary in the proper administration and enforcement of this chapter, including but not limited to rules and orders for the following purposes:

- (1) To require the drilling, casing and plugging of wells to be done in such a manner as to prevent the escape of oil or gas out of one stratum to another; to prevent the intrusion of water into oil or gas strata; to prevent the pollution of fresh water supplies by oil, gas or salt water; and to require reasonable bond conditioned upon compliance with applicable laws and rules and upon the performance of the duty to plug each dry or abandoned well.
- (9) To regulate the stimulation and chemical treatment of wells.
- (10) To regulate secondary recovery methods, including the introduction of gas, air, water or other substance into producing formations.
 - (12) To require the protection of ground water.

The relevant rules are:

632-010-0014

(2)(b) Other casing requirements: Each fluid-bearing zone above the producing horizon must be cased and sealed off to prevent the migration of formation fluids to other zones. Such casing and sealing off must be completed and tested in a manner and method approved by the department.

632-010-0142

(2) Except for the purpose of straightening the hole, sidetracking junk, or correcting mechanical difficulties as provided in this rule, no well may be intentionally deviated from the vertical unless the permittee files an application and obtains a permit from the department

632-010-0194

(1) Application and Approval: The permittee of a well may inject water under pressure into the formation containing oil or gas for the purpose of obtaining oil or gas from the reservoir, upon application to and approval by the Oregon Department of Environmental Quality. No water injection or water flooding program may be instituted until it has been authorized by the Oregon Department of Environmental Quality.

632-010-0198

(3) A well is considered properly plugged and decommissioned, for the purposes of this chapter, when the conditions of ORS 520.005 to 520.991 and these rules are fulfilled and the person has shown to the satisfaction of the department that all proper steps have been taken to protect groundwater and surface water from contamination resulting from the drilling or drilling related activities and to prevent the commingling of fluids between zones or to surface.

DEQ regulates the use of injection wells to ensure they are constructed and operated in a manner that is protective of groundwater through its <u>Underground Injection Control</u> program. Injection wells are used to place fluid underground into porous geologic formations, which may include oil and gas drilling operations. DEQ's UIC regulations can be found at OAR 340-044.

A DEQ UIC permit is required prior to the injection of fluids into the ground in Oregon. The federal Energy Policy Act of 2005 removed fracking from the definition of underground injection and thus removed EPA's regulatory authority, except when diesel is used in the fracking fluids. However, DEQ's UIC and groundwater protection rules were adopted before 2005, and so the limitation in the Energy Policy Act does not appear in our rules. Oregon's statutes and rules also provide more protection for aquifers than is required under federal regulations and may also come into play to limit the ability to inject fracking fluids or re-inject wastewater.