

Current State of Fracking Regulation in NC

Ryke Longest
Jen Hayes

Duke Law Environmental Policy Clinic



Current State of Federal Regulation

Jen Hayes
Advanced Clinic Student
Duke School of Law
Nicholas School of the Environment



Inherent Limitations of Major Environmental Laws

- ◆ Inherent limitations of the Clean Water Act, the Comprehensive Environmental Response Compensation and Liability Act, the Hazardous Materials Transportation Act, and the Endangered Species Act prevent comprehensive regulation of hydraulic fracturing activities.

Additional Loopholes in Federal Law

- ◆ E&P, or exploration and production, exemption in the Resource Conservation and Recover Act (RCRA) regulations .
- ◆ “Halliburton Loophole” redefines the Safe Drinking Water Act (SDWA) definition of underground injection to not include:
“underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities.”
- ◆ Emergency Planning and Community Right to Know (EPCRA) exemption reduces the ability of persons to acquire information on toxic releases from the sites of oil and gas production activities.

EPA Efforts: Fracking Study

- ◆ EPA scientists are undertaking a study of hydraulic fracturing to better understand any potential impacts of the practice on drinking water and groundwater.
- ◆ On August 11, 2011 EPA sent letters to nine oil and gas companies requesting their voluntary participation in EPA's Hydraulic Fracturing Study.
- ◆ EPA is requesting data on well construction, design, and well operation practices for 350 oil and gas wells that were hydraulically fractured from 2009-2010.

EPA Efforts: SDWA

- ◆ EPA's central authority to protect drinking water is drawn from the SDWA. Protection of drinking water is focused in the Underground Injection Control (UIC) program, which regulates subsurface injection of fluid. UIC has limited authority to address oil and gas activities.
- ◆ EPA is developing Underground Injection Control (UIC) permitting guidance for hydraulic fracturing activities that use **diesel fuels** in fracturing fluids.

EPA: Proposed Air Quality Rules on Oil & Gas Industry

- ◆ The U.S. Environmental Protection Agency proposed a suite of highly cost-effective standards to reduce emissions of smog-forming volatile organic compounds (VOCs) and air toxics from the oil and natural gas industry. The rules also would significantly reduce methane, a potent greenhouse gas.
- ◆ EPA will hold three public hearings on the proposed standards to reduce air pollution from the oil and natural gas industry. The hearings will be Sept. 27, 28 and 29 in Pittsburgh, Denver and Arlington, Texas.

EPA: Disclosure under TSCA

- ◆ In early August, environmental groups petitioned the EPA to require manufacturers and drillers to test the chemicals they use and report the data to the agency.
- ◆ EPA officials have less than 60 days to respond. If the agency declines, it must explain its reasons in the *Federal Register* -- and the groups can challenge that decision with a lawsuit.

DOE: Draft Study on Environmental Impacts

- ◆ On August 11, 2011 the Natural Gas Subcommittee identified the four most significant areas of environmental concern associated with fracking as: 1) the pollution of drinking water supplies from chemicals used in fracking fluids; 2) air pollution; 3) community disruption; and 4) cumulative adverse impacts on communities and ecosystems.
- ◆ Report made recommendations

Federal Preemption

- ◆ Federal preemption is the invalidation of state or local law that conflicts with federal law.
 - ◆ Express preemption: statute specifically confirms Congress' intent to preempt state law.
 - ◆ Implied preemption occurs when there is a conflict between state and federal law or when the federal regulatory scheme "occupies the field."
- ◆ Question: Will the federal government act or can current law be read to preempt state law?

Federal Preemption: FRAC Act

- ◆ Variations of proposed law would have require disclosure of chemicals used in fracking operations and ended the Halliburton loophole in the SDWA.
- ◆ Federal law can be a floor like the CWA, allowing states to require more rigorous regulation, or a ceiling, preventing states from more rigorous regulation.

Applicable NC Statutes and Regulations

Ryke Longest

Director

Duke Environmental Law and Policy Clinic



North Carolina Law: Prohibits Injection into Producing Strata

- ◆ Oil and Gas Conservation Act §§ 113-378 to 113-415 regulates drilling.
- ◆ § 113-390. “Waste of oil or gas as defined in this law is hereby prohibited.”
- ◆ § 113-389 (14)(f) defines “drowning with water of any stratum or part thereof capable of producing oil or gas” as “waste.”

North Carolina Law: Recent Changes

- ◆ House Bill 242 passed in June, 2011
- ◆ Increased bonding amounts and fees relatively modestly
- ◆ Adds sections for increasing landowner protection
- ◆ Limitations on lease terms

North Carolina Law: Prohibiting Horizontal Drilling

- ◆ § 113-393(d) prohibits horizontal drilling: “Whenever the Department fixes the location of any well or wells on the surface, the point at which the maximum penetration of such wells into the producing formation is reached shall not unreasonably vary from the vertical drawn from the center of the hole at the surface, provided, that the Department shall prescribe rules and orders governing the reasonableness of such variation.”

North Carolina Rules Applicable to Injection Wells

- ◆ **Rule 15A NCAC 02C.0209** classifies injection wells and prohibits most types of injection wells
- ◆ **This rule** prohibits injection wells:
 - ◆ for oil and gas production,
 - ◆ for enhanced recovery of oil or natural gas
 - ◆ for hydrocarbon storage

North Carolina Rules Applicable to Injection Wells

- ◆ **Rule 15A NCAC 02C. 0213** regulates injection wells.
 - ◆ **(a)(5)** “For all other well types the minimum horizontal separation between a well that is designed for injection and potential sources of groundwater contamination shall be the distance necessary to prevent migration of contaminants or a violation of groundwater standards as demonstrated by hydrogeologic computer modeling.”
 - ◆ **(b)** “Drilling fluids and additives shall not contain organic materials that cause the surrounding groundwaters to become non-potable nor toxic substances...”

North Carolina Rules Applicable to Injection Wells

- ◆ 15A NCAC 02C .0213(e)(1) PERMITS also requires:
- ◆ “ Pressure at the well head shall be limited to a maximum which will ensure that the pressure in the injection zone does not initiate new fractures or propagate existing fractures in the injection zone, initiate fractures in the confining zone, or cause the migration of injected or formation fluids outside the injection zone or area.”

North Carolina Rules on Horizontal Drilling Limitations

- ◆ **Rule 15A NCAC 05D.0107(e)**

- ◆ “All wells shall be drilled in such a manner so that vertical deviation of the hole does not exceed **three degrees between the bottom of the hole and the top of hole**, and shall not deviate in such a manner as to cross property or unit lines, unless an exception is granted by the director.”
- ◆ The Director is the Director of the Division of Land Resources

State Preemption of Local Controls

- ◆ If state law has created a complete and integrated system of regulation, local laws preempted. Chatham County's hog farm zoning ordinances were preempted by the regulatory scheme created by the State of North Carolina including setbacks and permit requirements. See [*Craig v. County of Chatham*, 143 N.C. App. 30, 545 S.E.2d 455 \(2001\)](#).

Questions?

◆ Ryke Longest

◆ Jen Hayes