SB3562

LRB09819568MGM54758b

98TH GENERAL ASSEMBLY

State of Illinois

2013 and 2014

SB3562

Introduced 2/14/2014, by Sen. Dan Kotowski

SYNOPSIS AS INTRODUCED:

225 ILCS 732/1-21 new

Amends the Hydraulic Fracturing Regulatory Act. Provides that the Director of Natural Resources shall suspend acceptance, approval, and issuance of all new permits for high volume horizontal hydraulic fracturing wells and operations or horizontal drilling wells with fracturing operations for extraction of oil, liquid natural gas, and natural gas on the effective date of this amendatory Act of the 98th General Assembly. Creates the Radioactivity in Fracturing Waste Task Force. Provides that the Task Force shall investigate and write a report outlining the effects of high volume horizontal hydraulic fracturing operations, horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or both in relation to TENORM and low level radioactive waste. Effective immediately.

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FISCAL NOTE ACT
MAY APPLY

A BILL FOR

AN ACT concerning regulation.

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 5. The Hydraulic Fracturing Regulatory Act is amended by adding Section 1-21 as follows:

(225 ILCS 732/1-21 new)

Sec. 1-21. Radioactivity.

(a) As used in this Section:

"Low level radioactive waste":

(1) has the same meaning as the term under the Illinois Low Level Radioactive Waste Management Act; and

(2) includes waste used in, and generated by, high volume horizontal hydraulic fracturing wells and operations, horizontal drilling wells with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or both, specifically including, but not limited to: all waste matter, all flowback water, produced water, all flowback and produced non-water liquids, fluids and other non-water matter, all drill cuttings, radium salt precipitate found coating pipes, tanks, and equipment, slurries, contaminated soil, soil under pits and pit liners, muds, drill casings, worker protection clothing and equipment. This paragraph (2) shall apply until this

waste is proven to not be low level radioactive waste by at least 2 testings for radioactivity and radioactive elements, using a laboratory that is accredited by the federal government, and using U.S. Department of Energy spectrographic protocols for radioactivity, and include at minimum: testing for total gross alpha, beta and gamma rays, and specialized testing for radioactive uranium-235 and uranium-238, thorium-232, radium-226, radium-228, bismuth-214, lead-214, actinium-228, thallium-208, and including radon gas, within 5 days before and 14 days after the flowback period begins or the day of or day before the end of flowback, if flowback ends before 9 days, and within 5 days before or 65 days after the flowback period ends.

"Radiation" includes alpha rays, beta rays, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other atomic particles. "Radiation" does not include sound or radio waves, visible light, or infrared or ultraviolet light, as defined in 29 C.F.R. 1910.1096(a)(1).

"Radioactive matter" means any material which emits, by spontaneous nuclear disintegration, corpuscular or electromagnetic emanations, as defined in 29 C.F.R. 1910.1096(a)(2).

"TENORM" or "Technologically Enhanced Naturally Occurring Radioactive Material" means:

(1) a naturally occurring radioactive material whose radionuclide concentrations are increased by or as a result

of past or present human practices;

(2) waste used in and generated by high volume horizontal hydraulic fracturing wells and operations, horizontal drilling wells with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or both, specifically including: all waste matter, all flowback water, produced water, all flowback and produced non-water liquids, fluids and other non-water matter, all drill cuttings, radium salt precipitate found coating pipes, tanks, and equipment, slurries, contaminated soil, soil under pits and pit liners, muds, drill casings, worker protection clothing and equipment. This paragraph (2) shall apply until this waste is proven to not be TENORM by at least 2 testings for radioactivity and radioactive elements, using a laboratory that is accredited by the federal government, and using U.S. Department of Energy spectrographic protocols for radioactivity, and include at minimum: testing for total gross alpha, beta and gamma rays, and specialized testing for radioactive uranium-235 and uranium-238, thorium-232, radium-226, radium-228, bismuth-214, lead-214, actinium-228, thallium-208, and including radon gas, within 5 days before and 14 days after the flowback period begins or the day of or day before the end of flowback, if flowback ends before 9 days, and within 5 days before or 65 days after the flowback period ends; and

(3) radioactivity that is brought up in waste by high volume horizontal hydraulic fracturing wells and operations, horizontal drilling wells with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or both.

"TENORM" does not include background radiation or the natural radioactivity of rocks or soils or source material or byproduct material as those terms are defined in the federal Atomic Energy Act of 1954 (AEA 42 USC §2011 et seq.) and relevant regulations implemented by the Conference of Radiation Control Program Directors.

(a-5) In addition to the applicability under Section 1-20, this Section applies to all activities surrounding and including (1) high volume horizontal hydraulic fracturing wells and operations, (2) horizontal drilling wells with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (3) both.

(b) The Director shall suspend acceptance, approval, and issuance of all new permits for high volume horizontal hydraulic fracturing wells and operations, and horizontal drilling wells with fracturing operations for extraction of oil, liquid natural gas, and natural gas under this Act, the Illinois Oil and Gas Act, and any other law, on the effective date of this amendatory Act of the 98th General Assembly.

(b-5) All waste water, fluids, and waste debris, as defined in paragraph (2) of the definition of TENORM under subsection

(a) of this Section, shall be treated as TENORM, until all tests under paragraph (2) of the definition of TENORM under subsection (a) of this Section show that the tested material is below the thresholds for TENORM and low level radioactive waste, as determined by the Illinois Emergency Management Agency.

(b-10) All material listed in paragraph (2) of the definition of TENORM or paragraph (2) of the definition of low level radioactive waste used in and generated by high volume, horizontal hydraulic fracturing operations or horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas shall be handled at all times according to the requirements of the Illinois Low-Level Radioactive Waste Management Act and all other applicable State and federal laws and regulations governing TENORM, low level radioactive waste, and radioactive matter.

(b-15) A permit holder may apply to the Illinois Emergency Management Agency for exemption from one or more of the requirements of this Section if the permit holder shows that the specific type of material sought for exemption is determined to be below the thresholds for TENORM and low level radioactive waste by the minimum scientific testing protocol requirements as defined in this Section, and the procedures defined in subsections (b-10), (b-15), (b-20), and (b-25) of this Section are met. To apply for an exemption, the permit holder shall obtain the minimum required scientific testing

protocols specified in subsections (b-10), (b-15), (b-20), and (b-25) of this Section for the materials sought to be exempted from these mandates, at the permit holder's own expense. The Illinois Emergency Management Agency shall make the determination as to whether the exemption should be granted based on the test results. The permit holder shall request that the laboratories send all testing results directly to the Illinois Emergency Management Agency. The Illinois Emergency Management Agency shall then notify the Department of Natural Resources of its determination regarding the permit holder's request for an exemption. The Department of Natural Resources shall implement and enforce the determination and directives set by the Illinois Emergency Management Agency governing any exemptions granted.

(b-20) The Illinois Emergency Management Agency shall make all determinations as to sufficiency of the required testing and as to the content of all directives that result from this testing for the labeling, management, transportation, treatment, disposal, handling, federal occupational safety laws or rules, and public health notifications for the tested materials. These determinations by the Illinois Emergency Management Agency shall be final and must be accepted and implemented in full by the Department of Natural Resources.

(b-25) All test results from the testing of TENORM and low level radioactive waste shall be returned from the testing laboratories directly to the Illinois Emergency Management

Agency. The Illinois Emergency Management Agency shall determine whether the tested material is below the thresholds for TENORM and low level radioactive waste. Upon an affirmative determination that the specific type of material sought for exemption is below the thresholds for TENORM and low level radioactive waste, the Director of the Illinois Emergency Management Agency may exempt the permit holder from one or more of the requirements of this Section.

(c) This Act and its rules shall be construed together with the Illinois Low-Level Radioactive Waste Management Act, the Central Midwest Interstate Low-Level Radioactive Waste Compact, and all other applicable State and federal laws and rules governing radioactive matter.

(d) The Radioactivity in Fracturing Waste Task Force is hereby created with the following members:

(1) two members appointed by the Director of the Illinois Emergency Management Agency;

(2) one member appointed by the Director of Natural Resources;

(3) one member appointed by the Director of the Groundwater Advisory Council established under the Illinois Groundwater Protection Act;

(4) one member appointed by the Illinois Environmental Protection Agency;

(5) one member appointed by the Department of Public Health who shall serve as chairperson of the Task Force;

and

(6) one member appointed by the Illinois Department of Labor, with a working knowledge of federal occupational safety laws or rules for working with and around radioactivity.

(e) Members of the Radioactivity in Fracturing Operations Task Force shall be appointed within 60 days after the effective date of this amendatory Act of the 98th General Assembly. The Radioactivity in Fracturing Operations Task Force shall:

(1) meet at least once a month, either in person or through video conferencing or other technology via the Internet;

(2) operate without pay, but with all expenses paid for the functioning of the Radioactivity in Fracturing Operations Task Force to be allocated by the Illinois Emergency Management Agency;

(3) provide a fully researched report as described in this Section;

(4) hold at least 3 public hearings throughout this State to discuss these issues and solicit input from the public;

(5) recommend amendments to this Act necessary to conform this Act to the Low-Level Radioactive Waste Management Act and its related administrative rules, and all other existing State and federal laws concerning

radioactivity and protection of workers from radioactivity; this set of recommended amendments and rules shall include the process of review of laboratory testing, the process of allowing exemptions, the written directives by the Illinois Emergency Management Agency for the labeling, management, transportation, treatment, disposal, handling, applicable federal occupational safety laws or rules, and public health notifications for the tested radioactive materials, the implementation, and enforcement of the Illinois Emergency Management Agency written review and directives by the Department of Natural Resources, and the well operator notification of these directives and enforcement procedures;

(6) recommend a complete set of rules based on the Conference of Radiation Control Program Directors' (A) model regulation for TENORM and (B) Part N of "Suggested State Regulation on Control of Radiation";

(7) recommend a complete set of rules for the protection of every person handling any matter used or generated in and by high volume, horizontal hydraulic fracturing operations, horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or both at the minimum requirements as set forth in 29 C.F.R. 1910.1096; these recommended rules shall include penalties for any person, corporation, or other entity who requires as a condition of employment, forces,

coerces, enters into an oral or written contract for the procurement of, or otherwise obtains or attempts to obtain any less protective worker protection measures than the minimum as provided in 29 C.F.R. 1910.1096, including through, by, from, or with any subcontractor or subsidiary corporation, of a Class 4 felony and fines of up to $1,000,000 per day per violation per individual or entity; the rules shall also include provision for an interested person to apply to the circuit court for issuance of an injunction to enforce compliance, with damages and attorney's fees;

(8) fully investigate any and all adverse effects of high volume hydraulic fracturing operations, horizontal drilling with fracturing operations, or both with regard to:

(A) the oil and natural gas wells, Class II injection wells, the industry infrastructure and pipelines and their effects and potential risks to human health and the environment from TENORM and low level radioactive waste used in and generated by (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both;

(B) the environmental and public health effects of TENORM and low level radioactive waste used in and

generated by spillage, leakage, fires, or blowouts of oil, liquid natural gas, and natural gas, its containment, processing infrastructure, and transportation infrastructure in (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both;

(C) the environmental and public health effects of TENORM and low level radioactive waste used in and generated by spillage or leakage from open fracturing waste pits during (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both;

(D) the environmental damage and public health effects of TENORM and low level radioactive waste used in or generated by (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both of spillage, leakage, fires, or blowouts of hydraulic fracturing or fracturing fluids, chemicals, proppants and byproducts, its containment, processing infrastructure, and transportation infrastructure;

(E) the environmental damage and public health

effects of TENORM and low level radioactive waste used in or generated by (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both, to water resources and water sheds;

(F) the recommended documentation of the federal Department of Energy testing protocols for radioactive matter used in or generated by (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both;

(G) the recommended comprehensive documentation system and permanent retention of all documentation for tracking all TENORM and low level radioactive waste used in or generated by (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both, from drilling site to transport to its disposition;

(H) recommended best practices for radon monitors during (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas,

and natural gas, or (iii) both; if radon is found to be released from (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both, in large quantities, then recommendations for precautions for workers and residents should be given;

(I) best practices regarding the burning and flaring of radon in large quantities;

(J) recommendations for testing natural gas, liquid natural gas, and oil produced in this State for radon, and recommendations if the test shows high amounts of radon at the wellhead;

(K) recommendations for best practices for hand-held radiation monitors on the site of (i) high volume horizontal hydraulic fracturing operations, (iii) horizontal drilling with fracturing operations, or (iii) both and dosimeters worn by the workers to measure for Total Gamma and Total Beta as a general alert, as well as radon monitors worn by the workers, and for compliance with federal occupational safety laws or rules if the monitors and dosimeters exceed acceptable limits, and the radioactivity testing of fracturing waste is reported with results that dictate compliance with all federal occupational safety laws or rules for radioactivity in the work place; and

(L) recommendations for implementation of the testing of all fracturing waste, and the regulatory framework under this Act, and recommendations for the communication and timely follow up of testing of all fracturing waste, and recommendations for the determinations of methods of labeling, management, transportation, treatment, disposal, handling, federal occupational safety laws or rules, and public health notifications described in this Act, by and between the appropriate personnel at the Illinois Emergency Management Agency and the Department.

(f) The Task Force shall investigate and write a report outlining the effects of (i) high volume horizontal hydraulic fracturing operations, (ii) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (iii) both, in relation to TENORM and low level radioactive waste, to be submitted to the General Assembly, the Governor, the Task Force on Hydraulic Fracturing Regulation, the Illinois State Water Survey, the Illinois Emergency Management Agency, the Department of Natural Resources, the Groundwater Advisory Council established under the Illinois Groundwater Protection Act, the Illinois Environment Protection Agency, the Illinois Groundwater Association, the Department of Public Health, and to the public via the website of the Illinois Emergency Management Agency and the website of Department of Natural Resources, which shall

include recommendations and conclusions about:

(1) the recommended rules and amendments to this Act described under paragraphs (5), (6), and (7) of subsection (e);

(2) the risks of drilling and extracting oil, liquid natural gas, and natural gas in relation to TENORM and low level radioactive waste;

(3) the risks of drilling and operating Class II injection wells for oil, liquid natural gas, and natural gas waste disposal in relation to TENORM and low level radioactive waste;

(4) the use of high volume horizontal hydraulic fracturing operations or horizontal drilling with fracturing operations waste or wastewater open pits in relation to TENORM and low level radioactive waste, and the public health and environmental effects of the use of that waste;

(5) the risks of spillage and leakage resulting in water contamination from oil, liquid natural gas, and natural gas wells and operations in relation to TENORM and low level radioactive waste;

(6) bonding requirements for infrastructure in relation to TENORM and low level radioactive waste from (A) high volume horizontal hydraulic fracturing operations, (B) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or

(C) both;

(7) insurance requirements for infrastructure in relation to TENORM and low level radioactive waste during (A) high volume horizontal hydraulic fracturing operations, (B) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (C) both;

(8) best practices for the oil and natural gas industry in relation to TENORM and low level radioactive waste; and

(9) any and all additional recommendations related to TENORM and low level radioactive waste for the oil and natural gas industry and its (A) high volume horizontal hydraulic fracturing operations, (B) horizontal drilling with fracturing operations for extraction of oil, liquid natural gas, and natural gas, or (C) both.

(g) The report shall include recommendations to the General Assembly and the Governor for legislation to protect the public health, safety, and welfare and the environment of this State from any adverse effects of blowouts, spillage, leakage, and damages associated with high volume horizontal hydraulic fracturing operations or horizontal drilling with fracturing operations, wells, drilling, Class II injection wells, waste and waste water containment, transportation including, trucking accidents and hazmat emergency planning, pipelines, infrastructure, chemicals, proppants, and byproducts, in relation to TENORM and low level radioactive waste.

(h) The Task Force shall submit this report on or before July 1, 2015. The Task Force shall be dissolved on January 1, 2016.

(i) This Section is repealed on January 31, 2016.

Section 99. Effective date. This Act takes effect upon becoming law.