

SB3485



98TH GENERAL ASSEMBLY

State of Illinois

2013 and 2014

SB3485

Introduced 2/14/2014, by Sen. Ira I. Silverstein

SYNOPSIS AS INTRODUCED:

225 ILCS 732/1-5

Amends the Hydraulic Fracturing Regulatory Act. Makes changes to various definitions adding references to "horizontal drilling with fracturing operations". Defines "flowback", "fracturing", "stimulation treatment", and "horizontal drilling". Changes the definition of "high volume horizontal hydraulic fracturing operations".

LRB098 19582 MGM 54774 b

A BILL FOR

1 AN ACT concerning regulation.

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

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

6 (225 ILCS 732/1-5)

7 Sec. 1-5. Definitions. For the purposes of this Act, unless
8 the context otherwise requires:

9 "Agency" means the Illinois Environmental Protection
10 Agency.

11 "Aquatic life" means all fish, reptiles, amphibians,
12 crayfish, and mussels.

13 "Aquifer" means saturated (with groundwater) soils and
14 geologic materials that are sufficiently permeable to readily
15 yield economically useful quantities (at least 70 gallons per
16 minute) of fresh water to wells, springs, or streams under
17 ordinary hydraulic gradients. "Aquifer" is limited to aquifers
18 identified as major sand and gravel aquifers in the Illinois
19 State Water Survey's Illinois Community Water Supply Wells map,
20 Map Series 2006-01.

21 "Base fluid" means the continuous phase fluid type,
22 including, but not limited to, water used in a high volume
23 horizontal hydraulic fracturing operation, a horizontal

1 drilling with fracturing operations, or both.

2 "BTEX" means benzene, toluene, ethylbenzene, and xylene.

3 "Chemical" means any element, chemical compound, or
4 mixture of elements or compounds that has its own specific name
5 or identity, such as a Chemical Abstracts Service number,
6 regardless of whether the chemical is subject to the
7 requirements of paragraph (2) of subsection (g) of 29 Code of
8 Federal Regulations §1910.1200.

9 "Chemical Abstracts Service" means the division of the
10 American Chemical Society that is the globally recognized
11 authority for information on chemical substances.

12 "Chemical Abstracts Service number" or "CAS number" means
13 the unique identification number assigned to a chemical by the
14 Chemical Abstracts Service.

15 "Completion combustion device" means any ignition device,
16 installed horizontally or vertically, used in exploration and
17 production operations to combust otherwise vented emissions.

18 "Delineation well" means a well drilled in order to
19 determine the boundary of a field or producing reservoir.

20 "Department" means the Illinois Department of Natural
21 Resources.

22 "Diesel" means a substance having any one of the following
23 Chemical Abstracts Service Registry numbers: 68334-30-5;
24 68476-34-6; 68476-30-2; 68476-31-3; 8008-20-6; or 68410-00-4.

25 "Diesel" includes any additional substances regulated by the
26 United States Environmental Protection Agency as diesel fuel

1 used in hydraulic fracturing activities, horizontal drilling
2 with fracturing operations, or both, under the federal Safe
3 Drinking Water Act.

4 "Director" means the Director of Natural Resources.

5 "Enhanced oil recovery operation" means any secondary or
6 tertiary recovery method used in an effort to recover
7 hydrocarbons from a pool by injection of fluids, gases or other
8 substances to maintain, restore, or augment natural reservoir
9 energy, or by introducing gases, chemicals, other substances,
10 or heat, or by in-situ combustion, or by any combination
11 thereof.

12 "Flare" means a thermal oxidation system using an open,
13 enclosed, or semi-enclosed flame. "Flare" does not include
14 completion combustion devices as defined in this Section.

15 "Flowback" means the hydraulic fracturing or fracturing
16 fluid that returns to the surface following hydraulic
17 fracturing, fracturing, or re-fracturing.

18 "Flowback period" means the process of allowing fluids to
19 flow from a well following a treatment, either in preparation
20 for a subsequent phase of treatment or in preparation for
21 cleanup and returning the well to production. "Flowback period"
22 begins when ~~the material~~ the hydraulic fracturing or fracturing
23 fluid returns to the surface following hydraulic fracturing,
24 fracturing, or re-fracturing. "Flowback period" ends with
25 either well shut in or when the well is producing continuously
26 to the flow line or to a storage vessel for collection,

1 whichever occurs first.

2 "Fracturing" or "stimulation treatment" means the process
3 of pumping fluids, gas, or other substances with or without
4 proppant down a well under pressure designed to initiate and
5 propagate fractures or fracture networks in the targeted
6 geologic formation to facilitate oil, natural gas liquids, or
7 natural gas extraction.

8 "Fresh water" means surface and subsurface water in its
9 natural state that is suitable for drinking water for human
10 consumption, domestic livestock, irrigation, industrial,
11 municipal and recreational purposes, that is capable of
12 supporting aquatic life, and contains less than 10,000 ppm
13 total dissolved solids.

14 "Gas" means all natural gas, including casinghead gas, and
15 all other natural hydrocarbons not defined as oil.

16 "Groundwater" means any water below the land surface that
17 is within the saturated zone or geologic materials where the
18 fluid pressure in the pore space is equal to or greater than
19 atmospheric pressure.

20 "Health professional" means a physician, physician
21 assistant, nurse practitioner, a registered professional
22 nurse, emergency medical technician, or other individual
23 appropriately licensed or registered to provide health care
24 services.

25 "High volume horizontal hydraulic fracturing operations"
26 or "horizontal drilling with fracturing operations" means all

1 stages of controlled directional drilling of wells with lateral
2 penetration of at least 100 feet through a geologic formation
3 targeted for oil, natural gas liquids, or natural gas
4 extraction which uses fracturing ~~means all stages of a~~
5 ~~stimulation treatment of a horizontal well as defined by this~~
6 ~~Act by the pressurized application of more than 80,000 gallons~~
7 ~~per stage or more than 300,000 gallons total of hydraulic~~
8 ~~fracturing fluid and proppant to initiate or propagate~~
9 ~~fractures in a geologic formation to enhance extraction or~~
10 ~~production of oil or gas.~~

11 "High volume horizontal hydraulic fracturing permit" means
12 the permit issued by the Department under this Act allowing
13 high volume horizontal hydraulic fracturing operations or
14 horizontal drilling with fracturing operations to occur at a
15 well site.

16 "High volume horizontal hydraulic fracturing treatment"
17 shall have the same definition as "High volume horizontal
18 hydraulic fracturing operations" or "horizontal drilling with
19 fracturing operations".

20 "Horizontal drilling" means all stages of controlled
21 directional drilling of a well with lateral penetration of at
22 least 100 feet through a geologic formation targeted for oil,
23 natural gas liquids, or natural gas extraction.

24 "Horizontal well" means a well with a wellbore drilled
25 laterally, ~~at an angle of at least 80 degrees to the vertical~~
26 ~~and~~ with a lateral ~~horizontal~~ projection exceeding 100 feet

1 measured from the initial point of penetration into the
2 geologic productive formation targeted for oil, natural gas
3 liquids, or natural gas extraction ~~through the terminus of the~~
4 ~~lateral in the same common source of hydrocarbon supply.~~

5 "Hydraulic fracturing additive" means any chemical
6 substance or combination of chemicals, including, but not
7 limited to, any chemical or proppant that is added to a base
8 fluid for the purposes of preparing a hydraulic fracturing
9 fluid or fracturing fluid for a high volume horizontal
10 hydraulic fracturing operation or horizontal drilling with
11 fracturing operations.

12 "Hydraulic fracturing flowback" means all hydraulic
13 fracturing fluid and other fluids that return to the surface
14 after a stage of high volume horizontal hydraulic fracturing
15 operations or horizontal drilling with fracturing operations
16 has been completed and prior to the well being placed in
17 production.

18 "Hydraulic fracturing fluid" means the mixture of the base
19 fluid and all the hydraulic fracturing additives, used to
20 perform high volume horizontal hydraulic fracturing or
21 horizontal drilling with fracturing operations.

22 "Hydraulic fracturing string" means any pipe or casing
23 string used for the transport of hydraulic fracturing or
24 fracturing fluids during the conduct of the high volume
25 horizontal hydraulic fracturing operations or horizontal
26 drilling with fracturing operations.

1 "Intake" means a pipe or other means to withdraw raw water
2 from a water source.

3 "Landowner" means the legal title holder or owner of real
4 property and includes an owner of an undivided interest, a life
5 tenant, a remainderman, a public or private corporation, a
6 trustee under an active trust, and the holder of the beneficial
7 interest under a land trust. "Landowner" does not include a
8 mortgagee, a trustee under a trust deed in the nature of a
9 mortgage, a lien holder, or a lessee.

10 "Low pressure well" means a well with reservoir pressure
11 and vertical well depth such that 0.445 times the reservoir
12 pressure (in psia) minus 0.038 times the vertical well depth
13 (in feet) minus 67.578 psia is less than the flow line pressure
14 at the sales meter.

15 "Nature preserve" shall have the same meaning as provided
16 in Section 3.11 of the Illinois Natural Areas Preservation Act.

17 "Oil" means natural crude oil or petroleum and other
18 hydrocarbons, regardless of gravity, which are produced at the
19 well in liquid form by ordinary production methods or by the
20 use of an oil and gas separator and which are not the result of
21 condensation of gas after it leaves the underground reservoir.

22 "Operator" means the individual or entity controlling the
23 right to drill or produce a horizontal well in accordance with
24 the requirements of the Illinois Oil and Gas Act.

25 "Owner" shall have the same meaning as provided in Section
26 1 of the Illinois Oil and Gas Act.

1 "Perennial stream" means a stream that has continuous flow
2 in its stream bed during all of the calendar year.

3 "Permit" means a high volume horizontal hydraulic
4 fracturing or horizontal drilling with fracturing operations
5 permit.

6 "Permittee" means a person holding a high volume horizontal
7 hydraulic fracturing or horizontal drilling with fracturing
8 operations permit under this Act.

9 "Person" means any individual, partnership,
10 co-partnership, firm, company, limited liability company,
11 corporation, association, joint stock company, trust, estate,
12 political subdivision, state agency, or any other legal entity
13 or their legal representative, agent, or assigns.

14 "Pollution or diminution" means:

15 (1) in groundwater, any of the following:

16 (A) detection of benzene or any other carcinogen in
17 any Class I, Class II, or Class III groundwater;

18 (B) detection of any constituent in item (i) of
19 subparagraph (A) of paragraph (3) of subsection (a) of
20 35 Ill. Adm. Code 620.310 equal to or above the listed
21 preventive response criteria in any Class I, Class II,
22 or Class III groundwater;

23 (C) detection of any constituent in 35 Ill. Adm.
24 Code 620.410 (a), (b), (c), (d) or (e) equal to or
25 above the listed standard in any Class I, Class II, or
26 Class III groundwater;

1 (D) detection of any constituent in Class III
2 groundwater equal to or above a standard established
3 under 35 Ill. Adm. Code 620.260; or

4 (E) detection of any constituent in Class I, Class
5 II, or Class III groundwater equal to or above a
6 cleanup objective listed in 35 Ill. Adm. Code 742.

7 (2) in surface water, exceeding any applicable numeric
8 or narrative standard in 35 Ill. Adm. Code Part 302 or Part
9 304.

10 "Produced water" means water, regardless of chloride and
11 total dissolved solids content, that is produced in conjunction
12 with oil or natural gas production or natural gas storage
13 operations, but does not include hydraulic fracturing
14 flowback.

15 "Proppant" means sand or any natural or man-made material
16 that is used during high volume horizontal hydraulic fracturing
17 operations or horizontal drilling with fracturing operations
18 to prop open the artificially created or enhanced fractures.

19 "Public water supply" means all mains, pipes, and
20 structures through which water is obtained and distributed to
21 the public, including wells and well structures, intakes and
22 cribs, pumping stations, treatment plants, reservoirs, and
23 storage tanks and appurtenances, collectively or severally,
24 actually used or intended for use for the purpose of furnishing
25 water for drinking or general domestic use, and which serves at
26 least 15 service connections or which regularly serves at least

1 25 persons at least 60 days per year.

2 "Register of Land and Water Reserves" means the list of
3 areas registered in accordance with Section 16 of the Illinois
4 Natural Areas Preservation Act and Part 4010 of Title 17 of the
5 Illinois Administrative Code.

6 "Release" means any spilling, leaking, pumping, pouring,
7 emitting, emptying, discharging, injecting, escaping,
8 leaching, dumping, or disposing into the environment.

9 "Serious violation" means any violation set forth in 62
10 Ill. Adm. Code 240.140(c).

11 "Service connection" means the opening, including all
12 fittings and appurtenances, at the water main through which
13 water is supplied to the user.

14 "Surface water" means all water that is open to the
15 atmosphere and subject to surface runoff.

16 "Total water volume" means the total quantity of water from
17 all sources used in the high volume horizontal hydraulic
18 fracturing operations, including surface water, groundwater,
19 produced water, or recycled water.

20 "True vertical depth" or "TVD" means the vertical distance
21 from a depth in a planned or existing wellbore or well to a
22 point at the surface.

23 "Water pollution" means any alteration of the physical,
24 thermal, chemical, biological, or radioactive properties of
25 any waters of the State, or the discharge of any contaminant
26 into any water of the State, as will or is likely to create a

1 nuisance or render the waters harmful, detrimental, or
2 injurious to public health, safety, or welfare, or to domestic,
3 commercial, industrial, agricultural, recreational, or other
4 legitimate uses, or to livestock, wild animals, birds, or fish
5 or other aquatic life.

6 "Water source" means (1) any existing water well or
7 developed spring used for human or domestic animal consumption,
8 or (2) any river, perennial stream, aquifer, natural or
9 artificial lake, pond, wetland listed on the Register of Land
10 and Water Reserves, or reservoir.

11 "Well" means any drill hole required to be permitted under
12 the Illinois Oil and Gas Act.

13 "Well site" means surface areas, including the well,
14 occupied by all equipment or facilities necessary for or
15 incidental to high volume horizontal hydraulic fracturing
16 operations, horizontal drilling with fracturing operations,
17 drilling, production, or plugging a well.

18 "Wildcat well" means a well outside known fields or the
19 first well drilled in an oil or gas field where no other oil
20 and gas production exists.

21 "Wildlife" means any bird or mammal that are by nature wild
22 by way of distinction from those that are naturally tame and
23 are ordinarily living unconfined in a state of nature without
24 the care of man.

25 (Source: P.A. 98-22, eff. 6-17-13.)