



97TH GENERAL ASSEMBLY

State of Illinois

2011 and 2012

SB2058

Introduced 2/10/2011, by Sen. Michael W. Frerichs

SYNOPSIS AS INTRODUCED:

765 ILCS 530/6.5 new

Amends the Drilling Operations Act. Requires the Department of Natural Resource to approve certain well stimulation activities before they are undertaken. Requires the owners and operators of the affected wells to provide the Department with specific information concerning, among other things: the geological names, geological description, and the depth of the formation into which well stimulation fluids are to be injected; each stimulation fluid identified by additive type; the chemical compound name and Chemical Abstracts Service (CAS) number for each additive used; and a copy of the contractor's proposed well stimulation program design. Requires the owner or operator to provide a detailed description of the proposed well stimulation design. Prohibits the use of volatile organic compounds, such as benzene, toluene, ethylbenzene, and xylene, or any petroleum distillates for the specified types of well stimulation. Requires the owners and operators of the affected wells to provide certain information about the reuse and disposal of well stimulation fluids.

LRB097 10134 JDS 50318 b

FISCAL NOTE ACT
MAY APPLY

A BILL FOR

1 AN ACT concerning civil law.

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

4 Section 5. The Drilling Operations Act is amended by adding
5 Section 6.5 as follows:

6 (765 ILCS 530/6.5 new)

7 Sec. 6.5. Extraction of natural gas using hydraulic
8 fracturing.

9 (a) An application for a permit to extract natural gas from
10 shale using well stimulation fluids must be approved by the
11 Department of Natural Resources prior to the initiation of any
12 such extraction activity. The Director of Natural Resources
13 shall require, prior to such extraction, the owner or operator
14 to perform a suitable mechanical integrity test of the casing
15 or of the casing-tubing annulus or other mechanical integrity
16 test methods using procedures approved by the Department of
17 Natural Resources.

18 (b) The owner or operator shall provide geological names,
19 geological description, and the depth of the formation into
20 which well stimulation fluids are to be injected.

21 (c) The owner or operator shall provide detailed
22 information to the Director of Natural Resources concerning the
23 base stimulation fluid source. The owner, operator, or service

1 company shall also provide to the Director, for each stage of
2 the well stimulation program, the following:

3 (1) each stimulation fluid identified by additive
4 type;

5 (2) the chemical compound name and Chemical Abstracts
6 Service (CAS) number for each additive used;

7 (3) the proposed rate or concentration for each
8 additive;

9 (4) a copy of the contractor's proposed well
10 stimulation program design; and

11 (5) any other information requested by the Director of
12 the Environmental Protection Agency.

13 (d) The owner or operator shall also provide a detailed
14 description of the proposed well stimulation design, which
15 shall include:

16 (1) the anticipated surface treating pressure range;

17 (2) the maximum injection treating pressure; and

18 (3) the estimated or calculated fracture length and
19 fracture height.

20 (e) The Department of Natural Resources shall post the
21 information that it receives under subsections (c) and (d) on
22 its Internet website for a period of not less than 5 years. In
23 the interest of public health and safety, such information may
24 not be claimed as a trade secret under this or any other Act.

25 (f) The injection of volatile organic compounds, such as
26 benzene, toluene, ethylbenzene, and xylene, also known as BTEX

1 compounds, or any petroleum distillates, is prohibited without
2 exception.

3 (g) In addition to any other information that it must
4 provide, the owner, operator, or service company shall provide
5 the Director of Natural Resources the following post well
6 stimulation detail:

7 (1) the actual total well stimulation treatment volume
8 pumped;

9 (2) detail as to each fluid stage pumped, including
10 actual volume by fluid stage, proppant rate or
11 concentration, actual chemical additive name, type,
12 concentration or rate, and amounts;

13 (3) the actual surface pressure and rate at the end of
14 each fluid stage and the actual flush volume, rate, and
15 final pump pressure; and

16 (4) the instantaneous shut-in pressure, and the actual
17 15-minute and 30-minute shut-in pressures when these
18 pressure measurements are available.

19 (h) During the well stimulation operation, the owner or
20 operator shall monitor and record the annulus pressure at the
21 bradenhead. If intermediate casing has been set on the well
22 being stimulated, the pressure in the annulus between the
23 intermediate casing and the production casing shall also be
24 monitored and recorded. A continuous record of the annulus
25 pressure during the well stimulation shall be submitted.

26 (i) If, during the stimulation, the annulus pressure

1 increases by more than 500 pounds per square inch gauge (psig)
2 compared to the pressure immediately preceding the
3 stimulation, the owner or operator shall verbally notify the
4 Director of Natural Resources as soon as practical but no later
5 than 24 hours following the incident. The owner or operator
6 shall include a report containing all details pertaining to the
7 incident, including corrective actions taken.

8 (j) The owner or operator shall provide information to the
9 Director of Natural Resources as to the amounts, handling, and,
10 if necessary, disposal at an identified appropriate disposal
11 facility, or reuse of the well stimulation fluid load recovered
12 during flow back, swabbing, or recovery from production
13 facility vessels. Storage of that fluid shall be protective of
14 groundwater as demonstrated by the use of either tanks or lined
15 pits.