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Sixty-eighth General Assembly
STATE OF COLORADO

BILLPAPER

LLS NO. 12-0626.01 Thomas Morris x4218

SENATE BILL

CONFIDENTIAL
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Senate Committees

House Committees

A BILL FOR AN ACT

101 **CONCERNING ADDITIONAL PROTECTIONS FOR WATER RELATING TO**
102 **HYDRAULIC FRACTURING.**

Bill Summary

(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <http://www.leg.state.co.us/billsummaries>.)

The bill enacts the "Water Rights Protection Act", under which the Colorado oil and gas conservation commission (commission) must establish rules for:

- ! Hydraulic fracturing near radioactive materials and sites listed on the national priority list pursuant to the federal

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.
Capital letters indicate new material to be added to existing statute.
Dashes through the words indicate deletions from existing statute.

"superfund" law; and

- ! The shut-down of hydraulic fracturing operations when monitoring equipment detects a pressure drop.

Oil and gas operators must submit water quantity reports showing projected and actual sources and amounts of water needed for hydraulically fracturing a well. Operators must also submit pre- and post-fracturing water quality reports for all active water wells located within .5 mile of oil and gas wells that will be or have been hydraulically fractured. This information will be posted on the commission's web site. Operators cannot inject into the ground any chemical compound that would cause cancer.

In addition to existing financial assurances, each operator that engages in a high-risk hydraulic fracturing treatment must take out an environmental bond that would be forfeited if the operator's operations cause any damage to water rights.

Subject to listed affirmative defenses, an operator is presumed to be responsible for the pollution of a water supply that is within .5 mile of a line between the well head and the surface projection of the bottom hole location of the well, if the pollution occurred within 6 months after the completion of the hydraulic fracturing of the well. Hydraulic fracturing would be prohibited within .5 mile of any surface water, including a pond, reservoir, or other natural or artificial impoundment or stream, ditch, or other artificial waterway, unless the operator uses a closed-loop system.

1 *Be it enacted by the General Assembly of the State of Colorado:*

2 **SECTION 1. Legislative declaration.** (1) The general assembly
3 hereby finds and declares that:

4 (a) Energy exploration by means of hydraulic fracturing is a topic
5 of increasing interest and significance in Colorado;

6 (b) Energy exploration by means of hydraulic fracturing should be
7 conducted in a responsible way that ensures the safety of Colorado
8 residents and Colorado communities;

9 (c) Water quality and an adequate supply of water are essential to
10 Colorado's economy and are topics of great concern to Colorado's cities
11 and towns, Colorado's agricultural economy, and the outdoor recreation

1 and tourism for which Colorado is known across the nation and
2 throughout the world;

3 (d) To follow up on findings made in the October 2011 "Colorado
4 Hydraulic Fracturing State Review":

5 (I) The Colorado oil and gas conservation commission and the
6 division of water resources should evaluate available sources of water for
7 use in hydraulic fracturing; and

8 (II) The Colorado oil and gas conservation commission should
9 evaluate naturally occurring radioactive materials in wastes associated
10 with hydraulic fracturing operations;

11 (e) According to the April 2011 report addressing chemicals used
12 in hydraulic fracturing of the United States house of representatives
13 committee on energy and commerce, between 2005 and 2009, hydraulic
14 fracturing companies in Colorado used more than:

15 (I) 1.5 million gallons of fracturing products containing at least
16 one carcinogen; and

17 (II) 375,000 gallons of fracturing products containing at least one
18 chemical regulated under the "Safe Drinking Water Act of 1974";

19 (f) The United States environmental protection agency has called
20 the use of diesel fuel in fracturing fluids the greatest threat to
21 underground sources of drinking water;

22 (g) The United States secretary of energy advisory board shale gas
23 production subcommittee has stated that there is no technical or economic
24 reason to use diesel fuel in fracturing fluids, and has further
25 recommended that manifests be used to document all transfers of water
26 among different locations; and

27 (h) It is in the interest of all Colorado water right holders to

1 maintain the value of those water rights.

2 **SECTION 2.** In Colorado Revised Statutes, **add** 34-60-130 as
3 follows:

4 **34-60-130. Hydraulic fracturing - water rights protection.**

5 (1) **Short title.** THIS SECTION SHALL BE KNOWN AND MAY BE CITED AS
6 THE "WATER RIGHTS PROTECTION ACT".

7 (2) **Contamination protocols.** THE COMMISSION SHALL
8 ESTABLISH RULES FOR:

9 (a) HYDRAULIC FRACTURING NEAR:

10 (I) RADIOACTIVE MATERIALS; AND

11 (II) SITES LISTED ON THE NATIONAL PRIORITY LIST PURSUANT TO
12 THE FEDERAL "COMPREHENSIVE ENVIRONMENTAL RESPONSE,
13 COMPENSATION, AND LIABILITY ACT OF 1980", 42 U.S.C. SEC. 9601 ET
14 SEQ., AS AMENDED; AND

15 (b) SHUT-DOWN OF HYDRAULIC FRACTURING OPERATIONS WHEN
16 PRESSURE READINGS INDICATE THAT THE HYDRAULIC FRACTURING FLUID
17 HAS ENTERED A NONTARGETED AREA OF THE GEOLOGIC FORMATION.

18 (3) **Water quantity reporting.** (a) BEFORE CONDUCTING A
19 HYDRAULIC FRACTURING TREATMENT, AN OPERATOR SHALL PREPARE AND
20 ELECTRONICALLY SUBMIT TO THE COMMISSION A WATER QUANTITY
21 REPORT, IN A FORMAT AND BY A DEADLINE SPECIFIED BY THE COMMISSION,
22 THAT INCLUDES:

23 (I) A GOOD-FAITH ESTIMATE OF WHERE AND HOW THE OPERATOR
24 INTENDS TO ACQUIRE THE REQUISITE WATER FOR THE HYDRAULIC
25 FRACTURING TREATMENT; AND

26 (II) A GOOD-FAITH ESTIMATE OF THE AMOUNT OF WATER THAT
27 WILL BE REQUIRED FOR THE HYDRAULIC FRACTURING TREATMENT.

1 (b) WITHIN SIXTY DAYS FOLLOWING THE CONCLUSION OF A
2 HYDRAULIC FRACTURING TREATMENT AND ANNUALLY THEREAFTER IF
3 MORE WATER IS REQUIRED FOR THE DRILLING OF OR PRODUCTION FROM A
4 WELL, AN OPERATOR SHALL PREPARE AND ELECTRONICALLY SUBMIT TO
5 THE COMMISSION A WATER QUANTITY REPORT, IN A FORMAT AND BY A
6 DEADLINE SPECIFIED BY THE COMMISSION, THAT INCLUDES:

7 (I) WHERE AND HOW THE OPERATOR ACTUALLY ACQUIRED THE
8 REQUISITE WATER FOR THE HYDRAULIC FRACTURING TREATMENT; AND

9 (II) THE AMOUNT OF WATER ACTUALLY USED IN THE HYDRAULIC
10 FRACTURING TREATMENT.

11 (c) THE COMMISSION SHALL PROMPTLY POST THE WATER
12 QUANTITY REPORTS ON ITS WEB SITE. THE REPORTS MUST BE SEARCHABLE
13 BY OPERATOR, WELL LOCATION, AND OTHER FACTORS ESTABLISHED BY
14 THE COMMISSION, AND MUST ALLOW THE PUBLIC TO EASILY FIND THE
15 TOTAL AMOUNT OF WATER USED FOR EACH WELL.

16 (4) **Water quality reporting.** (a) (I) BEFORE THE COMMISSION
17 AUTHORIZES AN OPERATOR TO HYDRAULICALLY FRACTURE A WELL, THE
18 OPERATOR SHALL COLLECT WATER QUALITY SAMPLES RELATED TO
19 POTENTIAL IMPACTS FROM HYDRAULIC FRACTURING, AS DETERMINED BY
20 THE COMMISSION, FROM ALL ACTIVE WATER WELLS LOCATED WITHIN
21 ONE-HALF MILE OF THE OIL AND GAS WELL. THE OPERATOR SHALL
22 COLLECT WATER QUALITY SAMPLES RELATED TO POTENTIAL IMPACTS
23 FROM HYDRAULIC FRACTURING BY THE FIRST, THIRD, AND SIXTH
24 ANNIVERSARY OF COMPLETION OF THE HYDRAULIC FRACTURING,
25 PURSUANT TO A SCHEDULE ESTABLISHED BY AND AS DETERMINED BY THE
26 COMMISSION, FROM ALL WATER WELLS LOCATED WITHIN ONE-HALF MILE
27 OF THE OIL AND GAS WELL. THE OPERATOR SHALL SUBMIT THE SAMPLES IN

1 A WATER QUALITY REPORT TO THE COMMISSION, IN A FORMAT AND BY A
2 DEADLINE ESTABLISHED BY THE COMMISSION.

3 (II) THE COMMISSION SHALL PROMPTLY POST THE WATER QUALITY
4 REPORTS ON ITS WEB SITE. THE REPORTS MUST BE SEARCHABLE BY
5 OPERATOR, WELL LOCATION, AND OTHER FACTORS ESTABLISHED BY THE
6 COMMISSION.

7 (b) (I) AN OPERATOR SHALL NOT INSERT INTO THE GROUND ANY
8 QUANTITY OF CHEMICALS KNOWN TO CAUSE OR REASONABLY
9 ANTICIPATED TO CAUSE CANCER, INCLUDING:

10 (A) DIESEL FUEL;

11 (B) BENZENE, TOLUENE, ETHYLBENZENE, OR XYLENE; AND

12 (C) ANY SUBSTANCE INCLUDED IN THE MOST RECENT "REPORT ON
13 CARCINOGENS" RELEASED BY THE NATIONAL TOXICOLOGY PROGRAM OF
14 THE UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES.

15 (II) NOTHING IN THIS PARAGRAPH (b) PROHIBITS THE USE OR
16 REINJECTION OF FLOW-BACK FLUID.

17 (5) **Financial assurance.** (a) IN ADDITION TO THE FINANCIAL
18 ASSURANCES OF SECTION 34-60-106 (3.5) AND (13), EACH OPERATOR THAT
19 ENGAGES IN A HIGH-RISK HYDRAULIC FRACTURING TREATMENT SHALL
20 TAKE OUT AN ENVIRONMENTAL BOND OR OTHER FINANCIAL ASSURANCE
21 LISTED IN SECTION 34-60-106 (13) THAT WOULD BE FORFEITED IF THE
22 OPERATOR'S OPERATIONS CAUSE ANY DAMAGE TO ABSOLUTE OR DECREED
23 CONDITIONAL WATER RIGHTS OR NONTRIBUTARY WATER. THE
24 COMMISSION SHALL PROMULGATE RULES TO ESTABLISH THE REQUIRED
25 AMOUNT AND TYPE OF ASSURANCE. THE RULES MUST ALLOW AN
26 OPERATOR TO BOND PER HIGH-RISK WELL OR FOR ALL OF THE OPERATOR'S
27 WELLS IN OPERATION IN THE STATE AT THE OPERATOR'S ELECTION.

1 (b) AS USED IN THIS SUBSECTION (5), "HIGH-RISK HYDRAULIC
2 FRACTURING TREATMENT" MEANS A HYDRAULIC FRACTURING TREATMENT
3 THAT IS LOCATED WITHIN ONE-HALF MILE OF:

4 (I) ANY SITE LISTED ON THE NATIONAL PRIORITY LIST PURSUANT
5 TO THE FEDERAL "COMPREHENSIVE ENVIRONMENTAL RESPONSE,
6 COMPENSATION, AND LIABILITY ACT OF 1980", 42 U.S.C. SEC. 9601 ET
7 SEQ., AS AMENDED;

8 (II) NATURALLY OR NONNATURALLY OCCURRING RADIOACTIVE
9 MATERIAL EXPLOSIVES, INCLUDING MUNITIONS;

10 (III) SURFACE WATER; OR

11 (IV) FEDERALLY DESIGNATED WILDERNESS.

12 (6) **Rebuttable presumption.** (a) UNLESS REBUTTED BY ONE OR
13 MORE OF THE DEFENSES ESTABLISHED IN PARAGRAPH (b) OF THIS
14 SUBSECTION (6), AN OPERATOR IS PRESUMED TO BE RESPONSIBLE FOR THE
15 POLLUTION OF A WATER SUPPLY THAT IS WITHIN ONE-HALF MILE OF A LINE
16 BETWEEN THE WELL HEAD AND THE SURFACE PROJECTION OF THE BOTTOM
17 HOLE LOCATION OF THE WELL, IF THE POLLUTION OCCURRED WITHIN SIX
18 MONTHS AFTER THE COMPLETION OF THE HYDRAULIC FRACTURING OF THE
19 WELL.

20 (b) IN ORDER TO REBUT THE PRESUMPTION OF LIABILITY
21 ESTABLISHED IN PARAGRAPH (a) OF THIS SUBSECTION (6), THE OPERATOR
22 MUST AFFIRMATIVELY PROVE ONE OF THE FOLLOWING DEFENSES:

23 (I) THE POLLUTION EXISTED PRIOR TO THE HYDRAULIC
24 FRACTURING, AS DETERMINED BY A PREDRILLING OR PREALTERATION
25 SURVEY, INCLUDING A WATER QUALITY REPORT SUBMITTED PURSUANT TO
26 PARAGRAPH (a) OF SUBSECTION (4) OF THIS SECTION;

27 (II) THE SURFACE OWNER OR WATER WELL OWNER FAILED TO

1 ALLOW THE OPERATOR ACCESS TO CONDUCT A PREDRILLING OR
2 PREALTERATION SURVEY;

3 (III) THE WATER SUPPLY IS NOT WITHIN ONE-HALF MILE OF THE
4 WELL;

5 (IV) THE POLLUTION OCCURRED MORE THAN SIX MONTHS AFTER
6 INITIAL HYDRAULIC FRACTURING OF THE WELL; OR

7 (V) THE POLLUTION OCCURRED AS THE RESULT OF SOME CAUSE
8 OTHER THAN THE HYDRAULIC FRACTURING OF THE WELL.

9 (7) **Water-based setbacks.** (a) AN OPERATOR SHALL NOT
10 CONDUCT HYDRAULIC FRACTURING WITHIN ONE-HALF MILE OF ANY
11 SURFACE WATER, INCLUDING A POND, RESERVOIR, OR OTHER NATURAL OR
12 ARTIFICIAL IMPOUNDMENT OR STREAM, DITCH, OR OTHER ARTIFICIAL
13 WATERWAY UNLESS THE OPERATOR USES A CLOSED-LOOP SYSTEM.

14 (b) NOTHING IN THIS SECTION PROHIBITS THE COMMISSION OR A
15 LOCAL GOVERNMENT FROM ADOPTING MORE STRINGENT LOCAL
16 PROTECTIONS.

17 **SECTION 3. Applicability.** The provisions of this act apply to
18 acts occurring on or after the effective date of this act.

19 **SECTION 4. Safety clause.** The general assembly hereby finds,
20 determines, and declares that this act is necessary for the immediate
21 preservation of the public peace, health, and safety.