

**First Regular Session  
Seventy-first General Assembly  
STATE OF COLORADO**

**BILL 4**

LLS NO. 17-0121.01 Jennifer Berman x3286

**INTERIM COMMITTEE BILL**

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**Water Resources Review Committee**

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**A BILL FOR AN ACT**

101      **CONCERNING AN EXEMPTION FROM THE WATER QUALITY CONTROL**  
102            **COMMISSION'S GRAYWATER CONTROL REGULATIONS FOR**  
103            **GRAYWATER USED FOR THE PURPOSE OF SCIENTIFIC RESEARCH**  
104            **INVOLVING HUMAN SUBJECTS.**

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**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>.)*

**Water Resources Review Committee.** The water quality control commission in the department of public health and environment (commission) is responsible for developing requirements, prohibitions,

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.*

and standards that protect public health and water quality for the use of graywater for nondrinking purposes. Scientific research on graywater that might involve graywater uses and systems that do not strictly comply with the requirements, prohibitions, and standards developed by the commission would not be permitted under the control regulations.

To facilitate scientific research related to graywater uses and systems, the bill creates an exemption from the commission's graywater control regulations for scientific research involving human subjects whereby a person may collect and use graywater for purposes of scientific research involving human subjects if the person:

- Seeks to conduct the scientific research on behalf of an educational institution;
- Provides a proposed plan of the scientific research to the institutional review board associated with the educational institution for the board's review; and
- If the proposed plan is approved by the institutional review board, collects and uses graywater in accordance with the terms and conditions of the decrees, contracts, and well permits applicable to the use of the source water rights or source water and any return flows.

If a person receives written approval from the institutional review board, the person shall provide a copy of the written approval to the division of administration in the department of public health and environment (division). The person is also required to report to the division on an annual basis the results of periodic monitoring conducted to assess the continued functioning of the graywater treatment works system used in the project and the project's compliance with federal rules concerning the protection of human research subjects.

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

2 **SECTION 1.** In Colorado Revised Statutes, 25-8-103, **amend**  
3 (8.3) as follows:

4 **25-8-103. Definitions.** As used in this ~~article~~ ARTICLE 8, unless  
5 the context otherwise requires:

6 (8.3) (a) "Graywater" means that portion of wastewater that,  
7 before being treated or combined with other wastewater, is collected from  
8 fixtures within residential, commercial, or industrial buildings or  
9 institutional facilities for the purpose of being put to beneficial uses

1 authorized by the commission in accordance with section 25-8-205 (1)(g);  
2 EXCEPT THAT GRAYWATER USE FOR PURPOSES OF SCIENTIFIC RESEARCH  
3 INVOLVING HUMAN SUBJECTS, AS DEFINED IN SECTION 25-8-205.3 (4),  
4 MUST COMPLY WITH THE REQUIREMENTS OF SECTION 25-8-205.3, BUT  
5 NEED NOT COMPLY WITH THE COMMISSION'S CONTROL REGULATIONS  
6 ESTABLISHED UNDER SECTION 25-8-205 (1).

7 (b) Sources of graywater may include discharges from bathroom  
8 and laundry room sinks, bathtubs, showers, laundry machines, and other  
9 sources authorized by rule. Graywater does not include the wastewater  
10 from toilets, urinals, kitchen sinks, dishwashers, or nonlaundry utility  
11 sinks. Graywater must be collected in a manner that minimizes household  
12 wastes, human excreta, animal or vegetable matter, and chemicals that are  
13 hazardous or toxic, as determined by the commission; EXCEPT THAT A  
14 PERSON MAY COLLECT AND USE GRAYWATER IN A MANNER THAT DEPARTS  
15 FROM THE COMMISSION'S REQUIREMENTS IF THE PERSON COLLECTS AND  
16 USES THE GRAYWATER FOR PURPOSES OF SCIENTIFIC RESEARCH INVOLVING  
17 HUMAN SUBJECTS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION  
18 25-8-205.3.

19 **SECTION 2.** In Colorado Revised Statutes, 25-8-205, **amend**  
20 (1)(g)(II) as follows:

21 **25-8-205. Control regulations.** (1) The commission may  
22 promulgate control regulations for the following purposes:

23 (g) (II) EXCEPT AS AUTHORIZED IN SECTION 25-8-205.3, graywater  
24 may be used only in areas where the local city, city and county, or county  
25 has adopted an ordinance or resolution approving the use of graywater  
26 pursuant to section 30-11-107 (1)(kk) or 31-15-601 (1)(m). ~~C.R.S.~~ The  
27 city, city and county, or county that has adopted an ordinance or

1 resolution approving the use of graywater pursuant to section 30-11-107  
2 (1)(kk) or 31-15-601 (1)(m) ~~C.R.S.~~, has exclusive enforcement authority  
3 regarding compliance with the ordinance or resolution.

4 **SECTION 3.** In Colorado Revised Statutes, **add** 25-8-205.3 as  
5 follows:

6 **25-8-205.3. Exemption from control regulations for graywater**  
7 **research - definition.** (1) SUBJECT TO THE CONDITIONS SET FORTH IN  
8 SUBSECTIONS (2) AND (3) OF THIS SECTION, A PERSON MAY COLLECT AND  
9 USE GRAYWATER IN A MANNER THAT DEPARTS FROM THE REQUIREMENTS  
10 OF THE COMMISSION'S CONTROL REGULATIONS, AS PROMULGATED  
11 PURSUANT TO SECTION 25-8-205 (1)(g), IF, ON BEHALF OF AN  
12 EDUCATIONAL INSTITUTION, THE PERSON COLLECTS AND USES THE  
13 GRAYWATER FOR PURPOSES OF SCIENTIFIC RESEARCH INVOLVING HUMAN  
14 SUBJECTS.

15 (2) (a) A PERSON WHO, ON BEHALF OF AN EDUCATIONAL  
16 INSTITUTION, COLLECTS AND USES GRAYWATER FOR PURPOSES OF  
17 SCIENTIFIC RESEARCH INVOLVING HUMAN SUBJECTS MUST FIRST SUBMIT  
18 FOR APPROVAL A PROPOSED PLAN FOR THE SCIENTIFIC RESEARCH  
19 INVOLVING HUMAN SUBJECTS TO THE INSTITUTIONAL REVIEW BOARD  
20 ASSOCIATED WITH THE EDUCATIONAL INSTITUTION. THE PLAN MUST  
21 INCLUDE A DESCRIPTION OF THE METHOD BY WHICH THE PROPOSED  
22 PROJECT WILL BE MONITORED TO ENSURE THE PROPER FUNCTIONING OF  
23 THE GRAYWATER TREATMENT WORKS SYSTEM INVOLVED IN THE PROPOSED  
24 PROJECT.

25 (b) THE PERSON MUST SUBMIT WITH THE PROPOSED PLAN A  
26 SUMMARY OF THE PROPOSED PLAN THAT OMITTS ANY TRADE SECRETS AND  
27 OTHERWISE MAINTAINS CONFIDENTIALITY CONCERNING ANY DETAILS OF

1 THE PROPOSED PLAN THAT SHOULD NOT BE DISCLOSED TO THE PUBLIC. TO  
2 ALLOW FOR PUBLIC COMMENT ON THE PROPOSED PLAN, THE  
3 INSTITUTIONAL REVIEW BOARD SHALL POST ON THE EDUCATIONAL  
4 INSTITUTION'S WEBSITE THE SUMMARY OF THE PROPOSED PLAN AND  
5 INSTRUCTIONS ON HOW TO SUBMIT A COMMENT ON THE PROPOSED PLAN.  
6 THE INSTITUTIONAL REVIEW BOARD SHALL ALSO PROVIDE A COPY OF THE  
7 PROPOSED PLAN TO THE COMMISSION. WITHIN SIXTY DAYS AFTER THE  
8 SUMMARY OF THE PROPOSED PLAN HAS BEEN POSTED AND A COPY OF THE  
9 PROPOSED PLAN HAS BEEN SENT TO THE COMMISSION, ANY PERSON,  
10 INCLUDING THE COMMISSION, MAY PROVIDE COMMENTS ON THE PROPOSED  
11 PLAN TO THE INSTITUTIONAL REVIEW BOARD.

12 (c) WITHIN THIRTY DAYS AFTER THE EXPIRATION OF THE  
13 SIXTY-DAY COMMENT PERIOD, THE INSTITUTIONAL REVIEW BOARD SHALL  
14 REVIEW THE PROPOSED PLAN AND ANY COMMENTS RECEIVED ON THE PLAN  
15 AND DETERMINE WHETHER TO APPROVE OR DENY THE PROPOSED PLAN.  
16 THE INSTITUTIONAL REVIEW BOARD MAY APPROVE THE PROPOSED PLAN  
17 ONLY IF THE PROPOSED PLAN COMPLIES WITH THE REQUIREMENTS OF THE  
18 FEDERAL DEPARTMENT OF HEALTH AND HUMAN SERVICES' REGULATIONS  
19 CONCERNING THE PROTECTION OF HUMAN RESEARCH SUBJECTS, CODIFIED  
20 IN 45 CFR 46.

21 (d) THE INSTITUTIONAL REVIEW BOARD MAY CONDITIONALLY  
22 APPROVE A PROPOSED PLAN BY RECOMMENDING MODIFICATIONS TO THE  
23 PLAN, WHICH DETERMINATION OPERATES AS:

24 (I) AN APPROVAL OF THE PROPOSED PLAN IF THE PERSON  
25 PROPOSING THE PLAN AGREES IN WRITING TO IMPLEMENT THE  
26 RECOMMENDED MODIFICATIONS; OR

27 (II) A DENIAL OF THE PROPOSED PLAN IF THE PERSON PROPOSING

1 THE PLAN DOES NOT AGREE IN WRITING TO IMPLEMENT THE  
2 RECOMMENDED MODIFICATIONS.

3 (e) THE INSTITUTIONAL REVIEW BOARD SHALL INFORM THE PERSON  
4 IN WRITING OF ITS APPROVAL, RECOMMENDED MODIFICATIONS, OR DENIAL  
5 OF THE PROPOSED PLAN.

6 (3) IF A PERSON RECEIVES WRITTEN APPROVAL FROM THE  
7 INSTITUTIONAL REVIEW BOARD, THE PERSON:

8 (a) SHALL PROVIDE A COPY OF THE WRITTEN APPROVAL TO THE  
9 DIVISION, IN THE FORM AND MANNER DETERMINED BY THE DIVISION, TO  
10 DEMONSTRATE COMPLIANCE WITH THIS SECTION;

11 (b) SHALL COLLECT AND USE THE GRAYWATER IN ACCORDANCE  
12 WITH THE TERMS AND CONDITIONS OF THE DECREES, CONTRACTS, AND  
13 WELL PERMITS APPLICABLE TO THE USE OF THE SOURCE WATER RIGHTS OR  
14 SOURCE WATER AND ANY RETURN FLOWS;

15 (c) SHALL UTILIZE A GRAYWATER TREATMENT WORKS SYSTEM  
16 THAT INCORPORATES A SECONDARY WATER SUPPLY, SUCH AS A MUNICIPAL  
17 WATER SUPPLY, TO PROVIDE AN ALTERNATIVE SOURCE OF WATER IF ANY  
18 PORTION OF THE SYSTEM DOES NOT FUNCTION PROPERLY;

19 (d) MAY COLLECT AND USE THE GRAYWATER IN AN AREA THAT IS  
20 NOT WITHIN THE JURISDICTION OF ANY CITY, CITY AND COUNTY, OR  
21 COUNTY THAT HAS ADOPTED AN ORDINANCE OR RESOLUTION  
22 AUTHORIZING GRAYWATER USE PURSUANT TO SECTION 25-8-205  
23 (1)(g)(II);

24 (e) MAY USE THE GRAYWATER FOR A NONPOTABLE BENEFICIAL USE  
25 INCLUDING SUBSURFACE IRRIGATION OR TOILET FLUSHING IF SUCH USE IS  
26 TIED TO THE PURPOSE OF THE PERSON'S SCIENTIFIC RESEARCH; AND

27 (f) ON AN ANNUAL BASIS, SHALL REPORT TO THE DIVISION, IN THE

1 FORM AND MANNER DETERMINED BY THE DIVISION, THE RESULTS OF  
2 PERIODIC MONITORING OF THE PROJECT CONDUCTED TO ASSESS:

3 (I) THE FUNCTIONING OF THE GRAYWATER TREATMENT WORKS  
4 SYSTEM USED TO COLLECT GRAYWATER; AND

5 (II) THE PROJECT'S CONTINUED COMPLIANCE WITH THE  
6 REQUIREMENTS OF THE FEDERAL DEPARTMENT OF HEALTH AND HUMAN  
7 SERVICES' REGULATIONS CONCERNING THE PROTECTION OF HUMAN  
8 RESEARCH SUBJECTS, CODIFIED IN 45 CFR 46.

9 (4) AS USED IN THIS SECTION, "SCIENTIFIC RESEARCH INVOLVING  
10 HUMAN SUBJECTS" MEANS A RESEARCH STUDY IN WHICH:

11 (a) EMPIRICAL DATA IS COLLECTED AND ANALYZED ABOUT  
12 WASTEWATER COLLECTION, TREATMENT, OR USE; AND

13 (b) HUMANS PARTICIPATE AS SUBJECTS IN THE STUDY.

14 **SECTION 4. Act subject to petition - effective date.** This act  
15 takes effect at 12:01 a.m. on the day following the expiration of the  
16 ninety-day period after final adjournment of the general assembly (August  
17 9, 2017, if adjournment sine die is on May 10, 2017); except that, if a  
18 referendum petition is filed pursuant to section 1 (3) of article V of the  
19 state constitution against this act or an item, section, or part of this act  
20 within such period, then the act, item, section, or part will not take effect  
21 unless approved by the people at the general election to be held in  
22 November 2018 and, in such case, will take effect on the date of the  
23 official declaration of the vote thereon by the governor.