

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

**BILL D**

LLS NO. 17-0121.01 Jennifer Berman x3286

**HOUSE BILL**

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**HOUSE SPONSORSHIP**

**Arndt**, Becker J.

**SENATE SPONSORSHIP**

**Sonnenberg**,

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**House Committees**

**Senate Committees**

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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/bills summaries>.)*

**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 institution of higher education;
- Utilizes a graywater treatment works system that incorporates a secondary water supply to provide an alternative source of water if any portion of the system does not function properly; and
- 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.

The person is required to report to the water resources review committee 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** the  
3 introductory portion and (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  
10 authorized by the commission in accordance with section 25-8-205 (1)(g);  
11 EXCEPT THAT GRAYWATER USE FOR PURPOSES OF SCIENTIFIC RESEARCH

1 INVOLVING HUMAN SUBJECTS, AS DEFINED IN SECTION 25-8-205.3 (3),  
2 MUST COMPLY WITH THE REQUIREMENTS OF SECTION 25-8-205.3, BUT  
3 NEED NOT COMPLY WITH THE COMMISSION'S CONTROL REGULATIONS  
4 ESTABLISHED UNDER SECTION 25-8-205 (1).

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

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

19 **25-8-205. Control regulations.** (1) The commission may  
20 promulgate control regulations for the following purposes:

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

1 regarding compliance with the ordinance or resolution.

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

4 **25-8-205.3. Exemption from control regulations for graywater**  
5 **research - definition.** (1) SUBJECT TO THE CONDITIONS SET FORTH IN  
6 SUBSECTION (2) OF THIS SECTION, A PERSON MAY COLLECT AND USE  
7 GRAYWATER IN A MANNER THAT DEPARTS FROM THE REQUIREMENTS OF  
8 THE COMMISSION'S CONTROL REGULATIONS, AS PROMULGATED PURSUANT  
9 TO SECTION 25-8-205 (1)(g), IF, ON BEHALF OF AN INSTITUTION OF HIGHER  
10 EDUCATION IN COLORADO, OR A PUBLIC OR PRIVATE ENTITY THAT AN  
11 INSTITUTION OF HIGHER EDUCATION IN COLORADO CONTRACTS WITH TO  
12 CONDUCT GRAYWATER RESEARCH ON THE INSTITUTION'S BEHALF, THE  
13 PERSON COLLECTS AND USES THE GRAYWATER FOR PURPOSES OF  
14 SCIENTIFIC RESEARCH INVOLVING HUMAN SUBJECTS.

15 (2) A PERSON COLLECTING AND USING GRAYWATER PURSUANT TO  
16 THIS SECTION:

17 (a) SHALL COLLECT AND USE THE GRAYWATER IN ACCORDANCE  
18 WITH THE TERMS AND CONDITIONS OF THE DECREES, CONTRACTS, AND  
19 WELL PERMITS APPLICABLE TO THE USE OF THE SOURCE WATER RIGHTS OR  
20 SOURCE WATER AND ANY RETURN FLOWS;

21 (b) SHALL UTILIZE A GRAYWATER TREATMENT WORKS SYSTEM  
22 THAT INCORPORATES A SECONDARY WATER SUPPLY, SUCH AS A MUNICIPAL  
23 WATER SUPPLY, TO PROVIDE AN ALTERNATIVE SOURCE OF WATER IF ANY  
24 PORTION OF THE SYSTEM DOES NOT FUNCTION PROPERLY;

25 (c) MAY COLLECT AND USE THE GRAYWATER IN AN AREA THAT IS  
26 NOT WITHIN THE JURISDICTION OF ANY CITY, CITY AND COUNTY, OR  
27 COUNTY THAT HAS ADOPTED AN ORDINANCE OR RESOLUTION

1 AUTHORIZING GRAYWATER USE PURSUANT TO SECTION 25-8-205

2 (1)(g)(II);

3 (d) MAY USE THE GRAYWATER FOR A NONPOTABLE BENEFICIAL  
4 USE INCLUDING SUBSURFACE IRRIGATION OR TOILET FLUSHING IF SUCH USE  
5 IS TIED TO THE PURPOSE OF THE PERSON'S SCIENTIFIC RESEARCH; AND

6 (e) ON AN ANNUAL BASIS, SHALL REPORT TO THE WATER RESOURCE  
7 REVIEW COMMITTEE, CREATED IN SECTION 37-98-102, THE RESULTS OF  
8 PERIODIC MONITORING OF THE PROJECT CONDUCTED TO ASSESS:

9 (I) THE FUNCTIONING OF THE GRAYWATER TREATMENT WORKS  
10 SYSTEM USED TO COLLECT GRAYWATER; AND

11 (II) THE PROJECT'S CONTINUED COMPLIANCE WITH THE  
12 REQUIREMENTS OF THE FEDERAL DEPARTMENT OF HEALTH AND HUMAN  
13 SERVICES' REGULATIONS CONCERNING THE PROTECTION OF HUMAN  
14 RESEARCH SUBJECTS, CODIFIED IN 45 CFR 46.

15 (3) AS USED IN THIS SECTION, "SCIENTIFIC RESEARCH INVOLVING  
16 HUMAN SUBJECTS" MEANS A RESEARCH STUDY IN WHICH:

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

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

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

1 November 2018 and, in such case, will take effect on the date of the  
2 official declaration of the vote thereon by the governor.