

First Regular Session  
Seventy-first General Assembly  
STATE OF COLORADO

**REREVISED**

*This Version Includes All Amendments  
Adopted in the Second House*

LLS NO. 17-0121.01 Jennifer Berman x3286

**HOUSE BILL 17-1008**

**HOUSE SPONSORSHIP**

**Arndt**, Becker J.

**SENATE SPONSORSHIP**

**Sonnenberg**,

**House Committees**

Agriculture, Livestock, & Natural Resources

**Senate Committees**

Agriculture, Natural Resources, & Energy

**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 EXPOSURE.**

**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://leg.colorado.gov/>.)*

**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.*

SENATE  
3rd Reading Unamended  
April 12, 2017

SENATE  
2nd Reading Unamended  
April 11, 2017

HOUSE  
3rd Reading Unamended  
March 21, 2017

HOUSE  
Amended 2nd Reading  
March 20, 2017

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

4 (b) Sources of graywater may include discharges from bathroom  
5 and laundry room sinks, bathtubs, showers, laundry machines, and other  
6 sources authorized by rule. Graywater does not include the wastewater  
7 from toilets, urinals, kitchen sinks, dishwashers, or nonlaundry utility  
8 sinks. Graywater must be collected in a manner that minimizes household  
9 wastes, human excreta, animal or vegetable matter, and chemicals that are  
10 hazardous or toxic, as determined by the commission; EXCEPT THAT A  
11 PERSON MAY COLLECT, TREAT, AND USE GRAYWATER IN A MANNER THAT  
12 DEPARTS FROM THE COMMISSION'S CONTROL REGULATIONS ESTABLISHED  
13 UNDER SECTION 25-8-205 (1) IF THE PERSON COLLECTS, TREATS, AND USES  
14 GRAYWATER FOR PURPOSES OF SCIENTIFIC RESEARCH IN ACCORDANCE  
15 WITH THE REQUIREMENTS OF SECTION 25-8-205.3.

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

18 **25-8-205. Control regulations.** (1) The commission may  
19 promulgate control regulations for the following purposes:

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

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

3           **25-8-205.3. Exemption from control regulations for graywater**  
4 **research - definition.** (1) SUBJECT TO THE CONDITIONS SET FORTH IN  
5 SUBSECTION (2) OF THIS SECTION, A WATER UTILITY, AN INSTITUTION OF  
6 HIGHER EDUCATION IN COLORADO, OR A PUBLIC OR PRIVATE ENTITY THAT  
7 A WATER UTILITY OR AN INSTITUTION OF HIGHER EDUCATION IN  
8 COLORADO CONTRACTS WITH TO CONDUCT GRAYWATER RESEARCH ON  
9 THE UTILITY'S OR INSTITUTION'S BEHALF, MAY COLLECT, TREAT, AND USE  
10 GRAYWATER IN A MANNER THAT DEPARTS FROM THE REQUIREMENTS OF  
11 THE COMMISSION'S CONTROL REGULATIONS, AS PROMULGATED PURSUANT  
12 TO SECTION 25-8-205 (1)(g), FOR THE PURPOSE OF CONDUCTING SCIENTIFIC  
13 RESEARCH ON THE COLLECTION, TREATMENT, AND USE OF GRAYWATER.

14           (2) A PERSON COLLECTING, TREATING, OR USING GRAYWATER  
15 PURSUANT TO THIS SECTION:

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

20           (b) SHALL UTILIZE A GRAYWATER TREATMENT WORKS SYSTEM  
21 THAT INCORPORATES A SECONDARY WATER SUPPLY, SUCH AS A MUNICIPAL  
22 WATER SUPPLY, TO PROVIDE AN ALTERNATIVE SOURCE OF WATER IF ANY  
23 PORTION OF THE SYSTEM DOES NOT FUNCTION PROPERLY; HOWEVER, THIS  
24 SUBSECTION (2)(b) DOES NOT APPLY TO SCIENTIFIC RESEARCH INVOLVING  
25 THE USE OF GRAYWATER EXCLUSIVELY FOR IRRIGATION PURPOSES;

26           (c) MAY COLLECT, TREAT, AND USE THE GRAYWATER IN AN AREA  
27 THAT IS NOT WITHIN THE JURISDICTION OF ANY CITY, CITY AND COUNTY,

1 OR COUNTY THAT HAS ADOPTED AN ORDINANCE OR RESOLUTION  
2 AUTHORIZING GRAYWATER USE PURSUANT TO SECTION 25-8-205  
3 (1)(g)(II);

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

7 (e) MUST COMPLY WITH 45 CFR 46 AND OTHER APPLICABLE  
8 STATUTES AND REGULATIONS FOR SCIENTIFIC RESEARCH INVOLVING  
9 HUMAN EXPOSURE TO GRAYWATER; AND

10 (f) ON AN ANNUAL BASIS, SHALL REPORT TO THE WATER RESOURCE  
11 REVIEW COMMITTEE, CREATED IN SECTION 37-98-102, THE RESULTS OF  
12 PERIODIC MONITORING OF THE PROJECT CONDUCTED TO ASSESS:

13 (I) THE FUNCTIONING OF THE GRAYWATER TREATMENT WORKS  
14 SYSTEM USED TO COLLECT GRAYWATER; AND

15 (II) FOR SCIENTIFIC RESEARCH INVOLVING HUMAN EXPOSURE, THE  
16 PROJECT'S CONTINUED COMPLIANCE WITH THE REQUIREMENTS OF THE  
17 FEDERAL DEPARTMENT OF HEALTH AND HUMAN SERVICES' REGULATIONS  
18 CONCERNING THE PROTECTION OF HUMAN RESEARCH SUBJECTS, CODIFIED  
19 IN 45 CFR 46.

20 (3) ONLY AN INSTITUTION OF HIGHER EDUCATION OR A PERSON  
21 CONTRACTING WITH AN INSTITUTION OF HIGHER EDUCATION MAY  
22 COLLECT, TREAT, AND USE GRAYWATER FOR RESEARCH INVOLVING HUMAN  
23 EXPOSURE.

24 (4) AS USED IN THIS SECTION, "SCIENTIFIC RESEARCH INVOLVING  
25 HUMAN EXPOSURE" MEANS A RESEARCH STUDY IN WHICH:

26 (a) EMPIRICAL DATA IS COLLECTED AND ANALYZED ABOUT  
27 COLLECTION, TREATMENT, OR USE OF GRAYWATER; AND

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

2 **SECTION 4. Act subject to petition - effective date.** This act  
3 takes effect at 12:01 a.m. on the day following the expiration of the  
4 ninety-day period after final adjournment of the general assembly (August  
5 9, 2017, if adjournment sine die is on May 10, 2017); except that, if a  
6 referendum petition is filed pursuant to section 1 (3) of article V of the  
7 state constitution against this act or an item, section, or part of this act  
8 within such period, then the act, item, section, or part will not take effect  
9 unless approved by the people at the general election to be held in  
10 November 2018 and, in such case, will take effect on the date of the  
11 official declaration of the vote thereon by the governor.