

Second Regular Session
Seventy-first General Assembly
STATE OF COLORADO

ENGROSSED

*This Version Includes All Amendments Adopted
on Second Reading in the House of Introduction*

LLS NO. 18-0654.01 Jennifer Berman x3286

HOUSE BILL 18-1093

HOUSE SPONSORSHIP

Arndt, Thurlow, Bridges

SENATE SPONSORSHIP

Coram, Guzman

House Committees

Agriculture, Livestock, & Natural Resources
Appropriations

Senate Committees

A BILL FOR AN ACT

101 **CONCERNING THE ALLOWABLE USES OF RECLAIMED DOMESTIC**
102 **WASTEWATER, AND, IN CONNECTION THEREWITH, ALLOWING**
103 **RECLAIMED DOMESTIC WASTEWATER TO BE USED FOR FOOD**
104 **CROPS AND MAKING AN APPROPRIATION.**

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>.)

The bill codifies rules promulgated by the water quality control commission (commission) of the Colorado department of public health and environment concerning allowable uses of reclaimed domestic

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

HOUSE
Amended 2nd Reading
February 28, 2018

wastewater, which is wastewater that has been treated for subsequent reuses other than drinking water.

Section 3 of the bill defines 3 categories of water quality standards for reclaimed domestic wastewater, sets forth the allowable uses for each water quality standard category, and adds food crop irrigation as an allowable use for reclaimed domestic wastewater. Section 3 also authorizes the commission to establish new categories of water quality standards and to recategorize any use of reclaimed domestic wastewater to a less stringent category of water quality standard. Section 3 also authorizes the division of administration in the department of public health and environment to grant variances for uses of reclaimed domestic wastewater.

Sections 1, 2, and 4 make conforming amendments.

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 (17.5) as follows:

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

6 (17.5) "Reclaimed domestic wastewater" means wastewater that
7 has received treatment IN ACCORDANCE WITH SECTION 25-8-205.7 AND
8 that enables the wastewater to meet the requirements, prohibitions,
9 standards, and concentration limitations adopted by the commission for
10 subsequent reuses other than drinking.

11 **SECTION 2.** In Colorado Revised Statutes, 25-8-205, **amend**
12 (1)(f) as follows:

13 **25-8-205. Control regulations.** (1) The commission may
14 promulgate control regulations for the following purposes:

15 (f) IN ACCORDANCE WITH SECTION 25-8-205.7, to describe
16 requirements, prohibitions, standards, and concentration limitations on the
17 reuse of reclaimed domestic wastewater for purposes other than drinking
18 that will protect public health and encourage the reuse of reclaimed

1 domestic wastewater;

2 **SECTION 3.** In Colorado Revised Statutes, **add 25-8-205.7** as
3 follows:

4 **25-8-205.7. Control regulations for reuse of reclaimed**
5 **domestic wastewater - definitions - rules.** (1) AS USED IN THIS SECTION,
6 UNLESS THE CONTEXT OTHERWISE REQUIRES:

7 (a) "CATEGORY 1 STANDARD" MEANS A WATER QUALITY
8 STANDARD FOR RECLAIMED DOMESTIC WASTEWATER:

9 (I) REQUIRING, AT A MINIMUM, THAT THE WATER HAS RECEIVED
10 SECONDARY TREATMENT WITH DISINFECTION; AND

11 (II) FOR WHICH, AT THE POINT OF COMPLIANCE, THE WATER MEETS
12 THE E. COLI AND TOTAL SUSPENDED SOLIDS STANDARDS PROMULGATED BY
13 THE COMMISSION FOR CATEGORY 1 WATER.

14 (b) "CATEGORY 2 STANDARD" MEANS A WATER QUALITY
15 STANDARD FOR RECLAIMED DOMESTIC WASTEWATER:

16 (I) REQUIRING, AT A MINIMUM, THAT THE WATER HAS RECEIVED
17 SECONDARY TREATMENT WITH FILTRATION AND DISINFECTION; AND

18 (II) FOR WHICH, AT THE POINT OF COMPLIANCE, THE WATER MEETS
19 THE E. COLI AND TURBIDITY STANDARDS PROMULGATED BY THE
20 COMMISSION FOR CATEGORY 2 WATER.

21 (c) "CATEGORY 3 STANDARD" MEANS A WATER QUALITY
22 STANDARD FOR RECLAIMED DOMESTIC WASTEWATER:

23 (I) REQUIRING, AT A MINIMUM, THAT THE WATER HAS RECEIVED
24 SECONDARY TREATMENT WITH FILTRATION AND DISINFECTION; AND

25 (II) FOR WHICH, AT THE POINT OF COMPLIANCE, THE WATER MEETS
26 THE E. COLI AND TURBIDITY STANDARDS PROMULGATED BY THE
27 COMMISSION FOR CATEGORY 3 WATER.

1 (d) "E. COLI" MEANS THE ESCHERICHIA COLI BACTERIA THAT ARE
2 FOUND IN THE ENVIRONMENT, FOODS, AND THE INTESTINES OF PEOPLE AND
3 ANIMALS.

4 (e) (I) "FOOD CROP" MEANS A CROP PRODUCED FOR DIRECT HUMAN
5 CONSUMPTION OR A TREE THAT PRODUCES NUTS OR FRUIT INTENDED FOR
6 DIRECT HUMAN CONSUMPTION.

7 (II) "FOOD CROP" DOES NOT INCLUDE A CROP PRODUCED FOR
8 ANIMAL CONSUMPTION ONLY; EXCEPT THAT A CROP PRODUCED WHERE
9 LACTATING DAIRY ANIMALS FORAGE IS A FOOD CROP.

10 (f) (I) "POINT OF COMPLIANCE" MEANS, EXCEPT AS PROVIDED IN
11 SUBSECTION (1)(f)(II) OF THIS SECTION, A POINT, AS IDENTIFIED BY THE
12 PERSON THAT TREATS THE WATER, IN THE RECLAIMED DOMESTIC
13 WASTEWATER TREATMENT PROCESS OR THE RECLAIMED DOMESTIC
14 WASTEWATER TRANSPORTATION PROCESS, THAT OCCURS AFTER ALL
15 TREATMENT HAS BEEN COMPLETED BUT BEFORE DILUTION AND BLENDING
16 OF THE WATER HAS OCCURRED.

17 (II) IF RECLAIMED DOMESTIC WASTEWATER IS USED FOR INDOOR
18 NONPOTABLE USES WITHIN A BUILDING WHERE PLUMBING FIXTURES ARE
19 ACCESSIBLE BY THE GENERAL PUBLIC, "POINT OF COMPLIANCE" IS AT THE
20 LOCATION WHERE WATER IS DELIVERED TO THE OCCUPIED PREMISES.

21 (2) RECLAIMED DOMESTIC WASTEWATER MAY BE USED AS
22 FOLLOWS:

23 (a) IN COMPLIANCE WITH THE CATEGORY 1 STANDARD, FOR:

24 (I) EVAPORATIVE INDUSTRIAL PROCESSES;

25 (II) NONEVAPORATIVE INDUSTRIAL PROCESSES;

26 (III) NONDISCHARGING CONSTRUCTION AND ROAD MAINTENANCE;

27 (IV) LANDSCAPE IRRIGATION AT SITES WITH RESTRICTED ACCESS;

1 (V) ZOO OPERATIONS;
2 (VI) NONFOOD CROPS; AND
3 (VII) SILVICULTURE;
4 (b) IN COMPLIANCE WITH THE CATEGORY 2 STANDARD, FOR:
5 (I) ALL OF THE USES FOR WHICH RECLAIMED DOMESTIC
6 WASTEWATER MAY BE USED IN COMPLIANCE WITH THE CATEGORY 1
7 STANDARD;
8 (II) WASHWATER APPLICATIONS;
9 (III) LANDSCAPE IRRIGATION AT SITES WITHOUT RESTRICTED
10 ACCESS;
11 (IV) COMMERCIAL LAUNDRIES;
12 (V) AUTOMATED VEHICLE WASHING;
13 (VI) MANUAL, NONPUBLIC VEHICLE WASHING;
14 (VII) NONRESIDENTIAL FIRE PROTECTION; AND
15 (VIII) IF USED IN ACCORDANCE WITH SUBSECTION (4) OF THIS
16 SECTION, IRRIGATION OF FOOD CROPS FOR COMMERCIAL USE;
17 (c) IN COMPLIANCE WITH THE CATEGORY 3 STANDARD, FOR:
18 (I) ALL OF THE USES FOR WHICH RECLAIMED DOMESTIC
19 WASTEWATER MAY BE USED IN COMPLIANCE WITH THE CATEGORY 1
20 STANDARD AND THE CATEGORY 2 STANDARD;
21 (II) LANDSCAPE IRRIGATION AT SITES THAT ARE CONTROLLED BY
22 RESIDENTS; ■
23 (III) RESIDENTIAL FIRE PROTECTION; AND
24 (IV) IF USED IN ACCORDANCE WITH SUBSECTION (3) OF THIS
25 SECTION, IRRIGATION OF FOOD CROPS FOR NONCOMMERCIAL USE.
26 (3) ALL RECLAIMED DOMESTIC WASTEWATER SYSTEMS MUST BE
27 COMPLIANT WITH AND INSTALLED IN ACCORDANCE WITH ARTICLE 58 OF

1 TITLE 12 AND ANY RULES PROMULGATED PURSUANT TO THAT ARTICLE.

2 (4) IN ADDITION TO COMPLYING WITH THE CATEGORY 2 STANDARD
3 PURSUANT TO SUBSECTION (2)(b)(VIII) OF THIS SECTION OR THE
4 CATEGORY 3 STANDARD PURSUANT TO SUBSECTION (2)(c)(IV) OF THIS
5 SECTION AND REGARDLESS OF WHETHER THE USE IS FOR FOOD CROPS
6 PRODUCED FOR COMMERCIAL USE OR NONCOMMERCIAL USE, RECLAIMED
7 DOMESTIC WASTEWATER MAY BE USED FOR IRRIGATION OF FOOD CROPS
8 ONLY IF THE USE MEETS THE WATER QUALITY STANDARDS FOR
9 COMMERCIAL CROPS SET FORTH IN THE FEDERAL "FDA FOOD SAFETY
10 MODERNIZATION ACT", PUB.L. 111-353, AS AMENDED. IN PROMULGATING
11 RULES FOR THE CATEGORY 2 AND CATEGORY 3 STANDARDS AT THE POINT
12 OF COMPLIANCE FOR USE OF RECLAIMED DOMESTIC WASTEWATER FOR
13 IRRIGATION OF FOOD CROPS, THE COMMISSION SHALL NOT PROMULGATE
14 ANY RULE THAT IS MORE STRINGENT THAN THE RELEVANT STANDARDS SET
15 FORTH IN THE FEDERAL "FDA FOOD SAFETY MODERNIZATION ACT",
16 PUB.L. 111-353, AS AMENDED.

17 (5) (a) ON OR BEFORE DECEMBER 31, 2019, THE COMMISSION MAY
18 PROMULGATE RULES IN ACCORDANCE WITH THIS SECTION.

19 (b) IN PROMULGATING RULES IN ACCORDANCE WITH THIS SECTION,
20 THE COMMISSION:

21 (I) MAY CREATE NEW CATEGORIES OF WATER QUALITY
22 STANDARDS BEYOND THE THREE CATEGORIES SET FORTH IN THIS SECTION;
23 AND

24 (II) MAY RECATEGORIZE ANY OF THE USES SET FORTH IN
25 SUBSECTION (2) OF THIS SECTION TO A LESS STRINGENT CATEGORY OF
26 WATER QUALITY STANDARD.

27 (c) THE COMMISSION, BY RULE, MAY AUTHORIZE ADDITIONAL USES

1 OF RECLAIMED DOMESTIC WASTEWATER FOR ANY OF THE CATEGORIES OF
2 WATER QUALITY STANDARDS SET FORTH IN SUBSECTION (2) OF THIS
3 SECTION OR MAY CREATE A NEW CATEGORY OF WATER QUALITY
4 STANDARD FOR ONE OR MORE ADDITIONAL USES OF RECLAIMED DOMESTIC
5 WASTEWATER.

6 (d) THE COMMISSION MAY PROMULGATE RULES MORE STRINGENT
7 THAN THE STANDARDS AND CATEGORIES SET FORTH IN SUBSECTION (2) OF
8 THIS SECTION ONLY IF THE COMMISSION:

9 (I) DETERMINES THAT THE STANDARDS AND CATEGORIES SET
10 FORTH IN SUBSECTION (2) OF THIS SECTION ARE NOT PROTECTIVE OF
11 PUBLIC HEALTH; AND

12 (II) IDENTIFIES:

13 (A) A DOCUMENTED INCIDENT OF MICROBIAL DISEASE THAT THE
14 COMMISSION DETERMINES HAS A REASONABLE POTENTIAL TO AFFECT
15 PUBLIC HEALTH AND FOR WHICH THE COMMISSION HAS IDENTIFIED AS
16 LIKELY ORIGINATING FROM RECLAIMED DOMESTIC WASTEWATER; OR

17 (B) A PEER-REVIEWED PUBLISHED ARTICLE THAT IDENTIFIES A
18 POTENTIAL PUBLIC HEALTH RISK POSED BY THE USE OF RECLAIMED
19 DOMESTIC WASTEWATER UNDER THE STANDARDS ESTABLISHED IN
20 SUBSECTION (2) OF THIS SECTION.

21 (6) FOLLOWING A PUBLIC STAKEHOLDERS PROCESS, THE WATER
22 QUALITY CONTROL DIVISION MAY DEVELOP POLICY, GUIDANCE, OR BEST
23 MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH THIS SECTION, AS
24 THE DIVISION DEEMS NECESSARY TO IMPLEMENT THIS SECTION.

25 (7) IN ADDITION TO THE RELIEF AVAILABLE UNDER SECTION
26 25-8-205 (7), THE DIVISION MAY GRANT A USER OF RECLAIMED DOMESTIC
27 WASTEWATER A VARIANCE FROM THE WATER QUALITY STANDARDS SET

1 FORTH IN SUBSECTION (2) OF THIS SECTION OR ESTABLISHED BY RULE BY
2 THE COMMISSION PURSUANT TO SUBSECTION (5) OF THIS SECTION IF THE
3 USER DEMONSTRATES TO THE DIVISION'S SATISFACTION THAT THE
4 PROPOSED USAGE OF RECLAIMED DOMESTIC WASTEWATER WILL
5 SUFFICIENTLY PROTECT PUBLIC HEALTH AND THE ENVIRONMENT.

6 (8) USE OF RECLAIMED DOMESTIC WASTEWATER IS ALLOWED ONLY
7 IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE DECREES,
8 CONTRACTS, AND WELL PERMITS APPLICABLE TO THE USE OF THE SOURCE
9 WATER RIGHTS OR SOURCE WATER AND ANY RETURN FLOWS THEREFROM.

10 **SECTION 4.** In Colorado Revised Statutes, 25-8-308, **amend** (1)
11 introductory portion and (1)(h) as follows:

12 **25-8-308. Additional authority and duties of division -**
13 **penalties.** (1) In addition to the authority specified elsewhere in this
14 ~~article~~ ARTICLE 8, the division has the power to:

15 (h) Implement a program, in accordance with SECTION 25-8-205.7
16 AND rules and orders of the commission, for the reuse of reclaimed
17 domestic wastewater for purposes other than drinking.

18 **SECTION 5. Appropriation.** For the 2018-19 state fiscal year,
19 \$14,399 is appropriated to the department of public health and
20 environment for use by the water quality control division. This
21 appropriation is from the general fund and is based on an assumption that
22 the division will require an additional 0.1 FTE. To implement this act, the
23 division may use this appropriation for public and private utilities sector
24 related to the clean water sectors.

25 **SECTION 6. Act subject to petition - effective date.** This act
26 takes effect at 12:01 a.m. on the day following the expiration of the
27 ninety-day period after final adjournment of the general assembly (August

1 8, 2018, if adjournment sine die is on May 9, 2018); except that, if a
2 referendum petition is filed pursuant to section 1 (3) of article V of the
3 state constitution against this act or an item, section, or part of this act
4 within such period, then the act, item, section, or part will not take effect
5 unless approved by the people at the general election to be held in
6 November 2018 and, in such case, will take effect on the date of the
7 official declaration of the vote thereon by the governor.