

Second Regular Session  
Seventy-first General Assembly  
STATE OF COLORADO

**REENGROSSED**

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

LLS NO. 18-0075.02 Thomas Morris x4218

**HOUSE BILL 18-1215**

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**HOUSE SPONSORSHIP**

**Arndt,**

**SENATE SPONSORSHIP**

**Jones,**

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**House Committees**

Health, Insurance, & Environment  
Finance  
Appropriations

**Senate Committees**

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**A BILL FOR AN ACT**

101 **CONCERNING ENHANCED PROTECTIONS REGARDING THE DISPOSAL OF**  
102 **NATURALLY OCCURRING RADIOACTIVE MATERIALS, AND, IN**  
103 **CONNECTION THEREWITH, MAKING AN APPROPRIATION.**

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

Current law allows the state board of health to adopt rules concerning the disposal of naturally occurring radioactive materials (NORM) only after the federal environmental protection agency (EPA) has adopted rules concerning the disposal of NORM. The EPA has not adopted the rules. The bill:

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  
3rd Reading Unamended  
April 25, 2018

HOUSE  
Amended 2nd Reading  
April 24, 2018

- ! Requires the state board to adopt rules for the disposal of NORM and technologically enhanced NORM (TENORM); and
  - ! While the state board is conducting its rule-making investigation, temporarily prohibits the disposal of oil and gas exploration and production waste (EP waste) with potentially high concentrations of radionuclides at a facility that is not specifically approved and designated to receive the waste unless:
    - ! The generator of the waste has sampled and tested the EP waste on a per-shipment basis or in a representative and statistically valid manner approved by the state board; and
    - ! The results of the test indicate that the EP waste contains low levels of TENORM.
- A generator of EP waste must file reports with the state board.

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

2 **SECTION 1.** In Colorado Revised Statutes, 25-11-104, **amend**  
 3 (1) as follows:

4 **25-11-104. Rules to be adopted - fees - fund created -**  
 5 **definitions - repeal.** (1) (a) The state board shall formulate, adopt, and  
 6 promulgate rules as provided in subsection (2) of this section that cover  
 7 subject matter relative to radiation machines and radioactive materials,  
 8 including naturally occurring radioactive materials, TENORM, and other  
 9 sources of radiation. The subject matter of the rules must include:  
 10 Licenses and registration; records; permissible levels of exposure;  
 11 notification and reports of accidents; technical qualifications of  
 12 personnel; technical qualifications of mammographers; handling,  
 13 transportation, and storage; waste disposal; posting and labeling of  
 14 hazardous sources and areas; surveys; monitoring; security of materials;  
 15 and financial assurance warranties.

16 (b) The state board, ~~may~~ IN CONSULTATION WITH THE WATER

1 QUALITY CONTROL COMMISSION, THE SOLID AND HAZARDOUS WASTE  
2 COMMISSION, AND THE COLORADO OIL AND GAS CONSERVATION  
3 COMMISSION, SHALL adopt rules concerning the disposal of naturally  
4 occurring radioactive materials, ~~at any time after the promulgation by the~~  
5 ~~federal environmental protection agency or its successor of rules for the~~  
6 ~~disposal of naturally occurring radioactive materials~~ INCLUDING  
7 TENORM. THE RULES MUST INCLUDE REQUIREMENTS FOR GROUNDWATER  
8 AND LEACHATE MONITORING FOR RADIONUCLIDES AT EACH DISPOSAL  
9 FACILITY THAT ACCEPTS TENORM WASTE.

10 (c) BEFORE ADOPTING THE RULES SPECIFIED IN SUBSECTION (1)(b)  
11 OF THIS SECTION, THE DEPARTMENT SHALL:

12 (I) CONVENE A STAKEHOLDER GROUP TO FACILITATE DECISIONS  
13 AND APPROACHES TO THE HANDLING, TRANSPORTATION, BENEFICIAL USE,  
14 AND DISPOSAL OF NATURALLY OCCURRING RADIOACTIVE MATERIALS AND  
15 TENORM THAT ARE BASED ON A REASONABLE RELATIONSHIP TO THE  
16 ECONOMIC, ENVIRONMENTAL, ENERGY, AND PUBLIC HEALTH COSTS AND  
17 BENEFITS OF THE DECISIONS AND APPROACHES AND TO DISCUSS THE  
18 DEVELOPMENT OF PROPOSED RULES AND THE IMPACTS THE RULES MIGHT  
19 HAVE ON THE REGULATED COMMUNITY AND THE PUBLIC;

20 (II) INVITE REPRESENTATIVES OF AT LEAST THE FOLLOWING  
21 INTEREST GROUPS TO PARTICIPATE IN THE STAKEHOLDER GROUP: THE OIL  
22 AND GAS INDUSTRY, MINING INDUSTRY, POWER GENERATORS AND  
23 SUPPLIERS, PUBLIC WATER PROVIDERS, PUBLIC WASTEWATER TREATMENT  
24 PROVIDERS, SOLID WASTE LANDFILL OPERATORS, AND OTHER INTERESTED  
25 OR AFFECTED PARTIES;

26 (III) REQUIRE ALL GENERATORS OF TENORM WASTE TO:

27 (A) REPORT TO THE DEPARTMENT THE VOLUMES AND TYPES OF

1 TENORM WASTE THEY GENERATE AND THE LOCATIONS AT WHICH THEY  
2 DISPOSE OF THE WASTE; AND

3 (B) MAKE ALL TENORM WASTE STREAMS AVAILABLE FOR  
4 REPRESENTATIVE SAMPLING AND DATA COLLECTION BY AN INDEPENDENT  
5 THIRD PARTY CONTRACTED WITH BY THE STATE;

6 (IV) CONTRACT WITH AN INDEPENDENT THIRD PARTY TO PREPARE  
7 A COMPREHENSIVE REPORT, WITH INPUT PROVIDED BY THE STAKEHOLDER  
8 GROUP SPECIFIED IN SUBSECTION (1)(c)(I) OF THIS SECTION, THAT  
9 ASSESSES THE MEASURABLE PUBLIC HEALTH IMPACTS FROM NATURALLY  
10 OCCURRING RADIOACTIVE MATERIALS AND TENORM. THE REPORT MUST:

11 (A) ESTABLISH BACKGROUND RADIATION LEVELS IN VARIOUS  
12 REGIONS OF THE STATE, IDENTIFY AND QUANTIFY WASTE STREAMS,  
13 ANALYZE HISTORICAL BENEFICIAL USE AND DISPOSAL PRACTICES, AND  
14 EVALUATE CURRENT ENGINEERING PRACTICES AND APPROPRIATE TEST  
15 METHODS;

16 (B) IDENTIFY DATA GAPS AND ESTIMATED ECONOMIC IMPACTS  
17 FROM REGULATING NATURALLY OCCURRING RADIOACTIVE MATERIALS  
18 AND TENORM GENERATED BY THE INTEREST GROUPS SPECIFIED IN  
19 SUBSECTION (1)(c)(II) OF THIS SECTION; AND

20 (C) INCLUDE A DETAILED REGULATORY REVIEW OF HOW OTHER  
21 STATES REGULATE THE HANDLING, TRANSPORTATION, BENEFICIAL USE,  
22 AND DISPOSAL OF NATURALLY OCCURRING RADIOACTIVE MATERIALS AND  
23 TENORM.

24 (V) SUBMIT A DETAILED SUMMARY OF THE REPORT REQUIRED BY  
25 SUBSECTION (1)(c)(IV) OF THIS SECTION TO THE GENERAL ASSEMBLY'S  
26 COMMITTEES OF REFERENCE WITH JURISDICTION OVER PUBLIC HEALTH AND  
27 NATURAL RESOURCES NO LATER THAN DECEMBER 31, 2020, WHICH

1 SUMMARY INCLUDES A DESCRIPTION OF THE STAKEHOLDER PROCESS,  
2 INCLUDING THE DEPARTMENT'S OUTREACH EFFORTS, THE NUMBER OF  
3 MEETINGS HELD, AND ANY DISSENTING COMMENTS SUBMITTED BY  
4 PARTICIPANTS IN THE STAKEHOLDER PROCESS. THE COMMITTEES OF  
5 REFERENCE SHALL HOLD A HEARING ON THE ISSUES ADDRESSED IN THE  
6 SUMMARY BY MARCH 1, 2021.

7 (VI) BASED ON THE FEEDBACK OF THE STAKEHOLDER GROUP, THE  
8 REPORT PREPARED PURSUANT TO SUBSECTION (1)(c)(IV) OF THIS SECTION,  
9 AND THE HEARING HELD PURSUANT TO SUBSECTION (1)(c)(V) OF THIS  
10 SECTION, PROPOSE DRAFT RULES CONCERNING:

11 (A) THE CONCENTRATION OF RADIONUCLIDES IN SOLID WASTE  
12 BELOW WHICH TENORM-CONTAINING WASTE MAY BE DISPOSED OF AT A  
13 SOLID WASTES DISPOSAL SITE AND FACILITY, AT AN EP WASTE DISPOSAL  
14 FACILITY, BY ANY OTHER MEANS OF LAND DISPOSAL THAT IS NOT  
15 SPECIFICALLY APPROVED AND DESIGNATED TO RECEIVE THE WASTE, OR BY  
16 DISCHARGE INTO STATE WATERS;

17 (B) THE CONCENTRATION OF RADIONUCLIDES IN SOLID WASTE  
18 ABOVE WHICH TENORM-CONTAINING WASTE MUST BE DISPOSED OF AT  
19 A FACILITY SPECIFICALLY APPROVED AND DESIGNATED TO RECEIVE THE  
20 WASTE; AND

21 (C) THE MINIMUM TECHNICAL SPECIFICATIONS NECESSARY FOR  
22 THE SAFE DISPOSAL OF TENORM-CONTAINING WASTE AND OTHER  
23 SUBJECTS RELATED TO THE CHARACTERIZATION AND SAFE DISPOSAL OF  
24 TENORM-CONTAINING WASTES.

25 (d) UNTIL THE STATE BOARD ADOPTS THE RULES SPECIFIED IN  
26 SUBSECTION (1)(b) OF THIS SECTION:

27 (I) A PERSON SHALL COMPLY WITH THE "INTERIM POLICY AND

1 GUIDANCE PENDING RULEMAKING FOR THE CONTROL AND DISPOSITION  
2 OF TECHNOLOGICALLY-ENHANCED NATURALLY OCCURRING  
3 RADIOACTIVE MATERIALS IN COLORADO", ISSUED BY THE DEPARTMENT,  
4 DATED FEBRUARY 2007; AND

5 (II) IF THE SOLID WASTE WAS GENERATED FROM OIL AND GAS  
6 EXPLORATION AND PRODUCTION, THE PERSON SHALL ALSO COMPLY WITH  
7 THE LETTERS DATED NOVEMBER 7, 2017, AND NOVEMBER 14, 2017, FROM  
8 THE MANAGER OF THE DEPARTMENT'S SOLID WASTE AND MATERIALS  
9 MANAGEMENT PROGRAM REGARDING MANAGEMENT AND DISPOSAL OF  
10 TENORM WASTES GENERATED BY OIL AND GAS EXPLORATION AND  
11 PRODUCTION.

12 (e) SUBSECTIONS (1)(c) AND (1)(d) OF THIS SECTION AND THIS  
13 SUBSECTION (1)(e) WILL BE REPEALED IF THE STATE BOARD ADOPTS THE  
14 RULES SPECIFIED IN SUBSECTION (1)(b) OF THIS SECTION. THE STATE  
15 BOARD SHALL NOTIFY THE REVISOR OF STATUTES IN WRITING OF THE DATE  
16 ON WHICH THE RULES SPECIFIED IN THIS SUBSECTION (1)(e) BECOME  
17 EFFECTIVE BY E-MAILING THE NOTICE TO  
18 REVISOROFSTATUTES.GA@STATE.CO.US. SUBSECTIONS (1)(c) AND (1)(d)  
19 OF THIS SECTION AND THIS SUBSECTION (1)(e) ARE REPEALED, EFFECTIVE  
20 UPON THE DATE IDENTIFIED IN THE NOTICE THAT THE RULES BECAME  
21 EFFECTIVE OR, IF THE NOTICE DOES NOT SPECIFY THAT DATE, UPON THE  
22 DATE OF THE NOTICE TO THE REVISOR OF STATUTES.

23 (f) THIS SUBSECTION (1) IS ENFORCEABLE PURSUANT TO SECTIONS  
24 30-20-113 AND 30-20-114.

25 (g) FOR PURPOSES OF THIS SUBSECTION (1):

26 (I) "EP WASTE DISPOSAL FACILITY" HAS THE MEANING  
27 ESTABLISHED IN SECTION 30-20-109 (1.5)(a)(II).

1 (II) "RADIONUCLIDES" INCLUDES RADIUM 226 AND RADIUM 228,  
2 COMBINED; NATURAL THORIUM; AND NATURAL URANIUM.

3 (III) "SOLID WASTE" HAS THE MEANING ESTABLISHED IN SECTION  
4 30-20-101 (6).

5 (IV) "SOLID WASTES DISPOSAL SITE AND FACILITY" HAS THE  
6 MEANING ESTABLISHED IN SECTION 30-20-101 (8).

7 (V) "STATE WATERS" HAS THE MEANING ESTABLISHED IN SECTION  
8 25-8-103 (19).

9 (VI) "TENORM" MEANS NATURALLY OCCURRING RADIOACTIVE  
10 MATERIALS THAT HAVE BEEN CONCENTRATED OR EXPOSED TO THE  
11 ACCESSIBLE ENVIRONMENT AS A RESULT OF HUMAN ACTIVITIES SUCH AS  
12 MANUFACTURING, MINERAL EXTRACTION, OR WATER PROCESSING.  
13 "TENORM" DOES NOT INCLUDE BACKGROUND RADIATION OF THE  
14 ACCESSIBLE ENVIRONMENT; "BYPRODUCT MATERIAL" OR "SOURCE  
15 MATERIAL", AS DEFINED BY COLORADO STATUTE OR RULE; OR ENRICHED  
16 OR DEPLETED URANIUM AS DEFINED BY COLORADO OR FEDERAL STATUTE  
17 OR RULE.

18 (e)(h) Notwithstanding any provision of section 25-11-103 (7)(h),  
19 it is not necessary that a governmental entity own any site that is used for  
20 the concentration, storage, or disposal of radioactive material if the owner  
21 of the site complies with rules promulgated by the STATE board in  
22 accordance with this section. The rules must ensure the long-term  
23 protection of the public health and safety and may include financial  
24 assurance warranties pursuant to this part 1, deed annotations and  
25 restrictions, easement provisions, restrictive covenants, and adequate  
26 markers to warn of the presence of radioactive materials.

27 **SECTION 2. Appropriation.** For the 2018-19 state fiscal year,

1 \$16,596,405 is appropriated to the department of public health and  
2 environment for use by the hazardous materials and waste management  
3 division. This appropriation is from the general fund. To implement this  
4 act, the division may use this appropriation for personal services related  
5 to radiation management.

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

16 (2) This act applies to conduct occurring on or after the applicable  
17 effective date of this act.