



Legislative
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HB 18-1215

**REVISED
FISCAL NOTE**

(replaces fiscal note dated March 21, 2018)

Drafting Number: LLS 18-0075
Prime Sponsors: Rep. Arndt

Date: April 17, 2018
Bill Status: House Finance
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Bill Topic: SAFE DISPOSAL NATURALLY OCCUR RADIOACTIVE MATERIAL

Summary of Fiscal Impact:

<input type="checkbox"/> State Revenue	<input type="checkbox"/> TABOR Refund
<input checked="" type="checkbox"/> State Expenditure	<input checked="" type="checkbox"/> Local Government
<input type="checkbox"/> State Transfer	<input type="checkbox"/> Statutory Public Entity

This bill requires the State Board of Health to adopt rules concerning the disposal of naturally occurring radioactive material and technologically enhanced naturally occurring radioactive material. The bill increases state expenditures through FY 2020-21.

Appropriation Summary: For FY 2018-19, the bill requires an appropriation of \$16,596,405 to the Department of Public Health and Environment.

Fiscal Note Status: The revised fiscal note reflects the introduced bill as amended by the House Health Insurance and Environment Committee.

**Table 1
State Fiscal Impacts Under HB 18-1215**

		FY 2018-19	FY 2019-20	FY 2020-21
Revenue		-	-	-
Expenditures	General Fund	\$16,596,405	\$33,192,810	\$840,000
Transfers		-	-	-
TABOR Refund		-	-	-

Summary of Legislation

Under current law, the State Board of Health in the Department of Public Health and Environment (CDPHE) cannot adopt rules concerning the disposal of naturally occurring radioactive materials (NORM) until the Environmental Protection Agency (EPA) has adopted rules concerning the disposal of NORM. This bill requires the state board, in consultation with the Water Quality Control Commission, Solid and Hazardous Waste Commission, and the Colorado Oil and Gas Conservation Commission to adopt rules concerning both the disposal of NORM and technologically enhanced naturally occurring radioactive materials (TENORM). The rules must include requirements for groundwater and leachate monitoring for radionuclides at each disposal site that accepts TENORM waste.

Prior to adopting the rules, the board is required to convene a stakeholder group that includes representatives from the oil and gas industry, mining industry, power generators and suppliers, public water providers, public wastewater treatment providers, solid waste landfill operators, and other affected parties.

The bill requires all generators of TENORM waste to report the volumes and type of TENORM wastes generated by location to the CDPHE, and to make all TENORM waste streams available for representative sampling by an independent third party contracted with by the state. CDPHE is required to contract with an independent third party to prepare a comprehensive report utilizing input from the stakeholder group that measures the public health impact of TENORM. This report will establish background radiation levels, identify and quantify waste streams, identify data gaps and economic impacts of regulation, and include a regulatory review of other states. The report must be submitted to the General Assembly's committees of reference for public health and natural resources by December 31, 2020.

Based on the feedback from the stakeholder group and the comprehensive report, the CDPHE will propose draft rules concerning where TENORM containing waste can be disposed of according to the concentration of radionuclides in the solid waste. Until the rules are adopted, a facility is required to comply with the *Interim Policy and Guidance Pending Rulemaking for the Control and Disposition of Technologically Enhanced Naturally Occurring Radioactive Materials in Colorado*, issued by CDPHE in February 2007. If the solid waste was generated from oil and gas exploration and production (EP waste), the facility must also comply with CDPHE letters dated November 7, 2017, and November 14, 2017.

Background

TENORM is naturally occurring radioactive material whose radionuclide concentrations have been increased as a result of human activities such as manufacturing, mineral extraction, or water treatment. CDPHE currently prohibits EP waste streams with the potential for high levels of TENORM from disposal in a Colorado landfill not specifically approved and designated to take them unless the material is tested and found to be below a level specified by CDPHE in its November 7, 2017 modification to the *Interim Policy and Guidance Pending Rulemaking for the Control and Disposition of Technologically Enhanced Naturally Occurring Radioactive Materials in Colorado*, dated February 2007.

The EPA is currently studying TENORM material and its disposal but has not developed TENORM regulations. The EPA will provide its results in a series of reports on individual industries on its website as the reports become available.

State Expenditures

This bill will increase General Fund expenditures by \$16,596,405 in FY 2018-19, \$33,192,810 in FY 2019-20, and \$840,000 in FY 2020-21. These costs are shown in Table 2 and explained below.

**Table 2
Expenditures Under HB 18-1215**

	FY 2018-19	FY 2019-20	FY 2020-21
Department of Public Health and Environment			
Contract Labor for Sampling	\$1,406,475	\$2,812,950	
Lab Analysis	\$15,189,930	\$30,379,860	
Comprehensive Report Preparation			\$840,000
Total Cost	\$16,596,405	\$33,192,810	\$840,000

Department of Public Health and Environment. Each facility that produces TENORM will have three samples taken by a contractor and analyzed at a cost of \$885. This includes one hour of contractor time at a cost of \$75 to collect the samples and three tests of four radionuclides (Radium-226, Radium-228, Thorium, and Uranium) at \$270 per sample and \$810 for all three samples. The costs for FY 2018-19 assume that samples will be collected beginning January 2019; costs for FY 2019-20 are for a full year of sampling. There are 56,259 facilities subject to testing which includes:

- 54,369 - oil and gas well sites;
- 1,390 - active mining sites;
- 400 - drinking water treatment facilities that produce sludge; and
- 100 - wastewater treatment facilities accepting drinking water sludge.

In FY 2020-21, the comprehensive report based on the results of the sampling will be produced at an estimated cost of \$840,000, which includes \$300,000 to analyze the sampling data and \$540,000 to assess the public health impacts of TENORM.

The CDPHE will also have an increase in workload to conduct a stakeholder process to develop regulations for TENORM management and disposal and to conduct rulemaking hearings. This workload can be addressed within existing appropriations.

Local Government

This bill may impact some local governments that operate landfills or water treatment plants. These impacts will depend on the results of the rulemaking on TENORM handling and disposal and have not been estimated for the fiscal note.

Effective Date

The bill takes effect August 8, 2018, if the General Assembly adjourns on May 9, 2018, as scheduled, and no referendum petition is filed, and applies to conduct occurring on or after that date.

State Appropriations

For FY 2018-19, the bill requires a General Fund appropriation of \$16,596,405 to the Department of Public Health and Environment.

State and Local Government Contacts

Counties

Natural Resources

Information Technology

Public Health and Environment