



HB18-1215

SHORT TITLE: Safe Disposal Naturally Occur Radioactive Material

LONG TITLE: Concerning enhanced protections regarding the disposal of naturally occurring radioactive materials.

SPONSORS: Rep. Arndt

COMMITTEES: House Committees – Health, Insurance, & Environment

PURPOSE OF THE BILL: To allow the Colorado Board of Health to regulate disposal of naturally occurring radioactive waste materials including TENORM and NORM

PROponents OF THE BILL: Rep. Arndt; Pawnee Buttes landfill; Colorado Dept. of Public Health & Environment wants regulatory authority but not the rest of the bill. Some stakeholders are accepting of portions of the bill, but may (or may not) be considered proponents since they did not seek legislation.

POTENTIAL STAKEHOLDERS: Landfill operators, any industrial activity that generates waste material that may contain naturally occurring radioactivity. Stakeholders identified in bill include oil/gas, mining, power generation, public water providers, public wastewater treatment providers, solid waste landfills (including counties?) and other affected parties.

BACKGROUND: In 1994 legislation was enacted which deferred regulation of the disposal of naturally occurring radioactive material (NORM) and a subset of technologically enhanced radioactive material (TENORM) until EPA promulgates standards. "Naturally occurring radioactive material" means any nuclide that is radioactive in its natural physical state and is not manufactured. "Naturally occurring radioactive material" does not include source material, special nuclear material, byproduct material, or by-products of fossil fuel combustion, including bottom ash, fly ash, and flue-gas emission by-products. "Technologically enhanced naturally occurring radioactive material" or "tenorm" means naturally occurring radioactive material whose radionuclide concentrations are increased by or as a result of past or present human practices "Tenorm" does not include "(I) Background radiation or the natural radioactivity of rocks or soils; (II) "Byproduct material" or "source material", as defined by Colorado statute or rule; or (III) Enriched or depleted uranium as defined by Colorado or federal statute or rule. To date that EPA has not set a standard. The CDPHE has been operating under levels set by Interim Guidance and wishes to set disposal standards beginning with wastes from oil/gas production (pipe scale, etc.) and directs generators of these wastes to dispose only in special permitted facilities pending adoption of regulations by CDPHE. To avoid the restriction on disposal methods, the generator of the oil/gas waste must test the level of radionuclides to verify that it is below the level set in Interim Guidance and file that report with CDPHE.

Is this bill necessary this year? The current restriction has been in statute since 1994; there does not appear to be a deadline to be met.

How does the bill change current law? Current law restricts the ability of CDPHE to regulate until EPA sets standards for disposal. This bill removes the restriction altogether and removes a separate exemption for sludges, soils or pipe scale from oil/gas operations. Other exemptions (e.g. wastes from drinking water or wastewater treatment operations) remain in statute; however, the bill title and language of the bill suggest that these exemptions will be repealed. CDPHE testified that levels of NORM and TENORM at or above the level for regulated disposal may exist in a variety of sources including rocks, soils, drill cuttings, and other materials from the earth's crust. The Board of Health is specifically directed to investigate what levels of TENORM in EP wastes must be disposed of only at specifically approved sites and what levels may be disposed of at solid waste sites, on land or to water. Generators of EP wastes must, pending the rules, dispose of only at specifically approved sites unless they can show that their wastes fall below an acceptable level by characterizing (testing) the waste and filing a report with the Board of Health. CDPHE testified that levels of NORM and TENORM at or above the level for regulated disposal may exist in a variety of sources including rocks, soils, drill cuttings, and other materials from the earth's crust. All EP wastes are treated as having potentially high levels of TENORM unless tests on specific shipments of waste prove otherwise. The strike below amendment requires all generators to have their waste streams tested for radioactivity levels, report to the state, and submit representative samples to the CDPHE to determine classifications prior to rulemaking. Potential stakeholders identified in the bill would be invited to participate in discussions prior to rulemaking with a report prepared by a contracted third party. Pre-rulemaking activities may take up to two years.

Does the bill affect the prior appropriations system? No

How is the bill implemented? Generators of identified waste must only dispose of the material in approved facilities pending a full rulemaking by the Board of Health to determine levels of radionuclides that may be disposed of other than in an approved facility.

Practical considerations: How many approved sites exist at present and what levels can they accept? What is the cost of testing for the generator to conduct required testing? What is the background level of radioactivity in the test area (will it influence the characterization)? How far must material be transported to reach an approved site? How long will rulemaking take and what will be the basis for standards? The Fiscal Note (introduced bill) estimates 25 sites would need to be licensed to handle these materials; what will be the delay in licensing if the public raises concerns about potential radioactivity in their community? (Based on legislative committee members' discussion.)

Fiscal Impact. A new Fiscal Note is not yet available for the strike-below. The Fiscal Note for the introduced bill estimated fee revenues of \$425,000 for the next two fiscal years. As introduced, the estimated state expenditure by CDPHE is \$370,053 the first year and \$416,701 the second year. However, the CDPHE witness suggested the cost for the strike below could run between \$500,000 and one million dollars. Cost to generators for testing is separate cost which is not calculated.