

**NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT)**  
**Act 451 of 1994**

**324.11514b Disposal of certain technologically enhanced naturally occurring radioactive material (TENORM) in type II landfill prohibited; annual report; disposal requirements; TENORM defined.**

Sec. 11514b.

(1) A person shall not deliver to a type II landfill in this state for disposal and the owner or operator of a type II landfill shall not permit disposal in the landfill of technologically enhanced naturally occurring radioactive material with any of the following:

- (a) A concentration of radium-226 more than 50 picocuries per gram.
- (b) A concentration of radium-228 more than 50 picocuries per gram.
- (c) A concentration of lead-210 more than 260 picocuries per gram.

(2) The owner or operator of a type II landfill shall not permit a delivery of TENORM for disposal at the landfill unless the generator has provided the following information in writing to the owner or operator of the landfill:

(a) The concentrations of radium-226, radium-228, lead-210, and any other radionuclide identified using gamma spectroscopy, or an equivalent analytical method, in the TENORM based on techniques for representative sampling and waste characterization approved by the department.

(b) An estimate of the total mass of the TENORM.

(c) An estimate of the total radium-226 activity, the total radium-228 activity, and the total lead-210 activity of the TENORM.

(d) The proposed date of delivery.

(3) The department may test TENORM proposed to be delivered to a landfill.

(4) Within 45 days after the end of each state fiscal year, the owner or operator of a type II landfill shall submit to the department an annual report that summarizes the information obtained under subsection (2) for all TENORM disposed at the landfill during the previous state fiscal year.

(5) The owner or operator of a type II landfill that disposes of TENORM with a concentration of radium-226 more than 25 picocuries per gram, a concentration of radium-228 more than 25 picocuries per gram, or a concentration of lead-210 more than 25 picocuries per gram shall do all of the following:

(a) Ensure that all TENORM is deposited at least 10 feet below the bottom of the future landfill cap.

(b) Maintain records of the location and elevation of TENORM disposed of at the landfill.

(c) Conduct a monitoring program that complies with all of the following:

(i) Radiological monitoring of site workers and at the landfill property boundary are conducted as specified in the license.

(ii) Radium-226, radium-228, and lead-210 are included among the parameters analyzed in leachate and groundwater at the frequency specified in the license.

(iii) Results of all monitoring required under this subsection are included in the environmental monitoring reports required under rules promulgated under this part and the facility operating license.

(6) As used in this section, "technologically enhanced naturally occurring radioactive material" or "TENORM" means naturally occurring radioactive material whose radionuclide concentrations have been increased as a result of human practices. TENORM does not include any of the following:

(a) Source material, as defined in section 11 of the atomic energy act of 1954, 42 USC 2014, and its progeny in equilibrium.

(b) Material with concentrations of radium-226, radium-228, and lead-210 each less than 5 picocuries per gram.

**History:** Add. 2018, Act 688, Eff. Mar. 28, 2019 ;-- Am. 2022, Act 245, Eff. Mar. 29, 2023

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