

SENATE BILL NO. 1052

October 30, 2024, Introduced by Senator CAMILLERI and referred to the Committee on Energy and Environment.

A bill to amend 1994 PA 451, entitled "Natural resources and environmental protection act," by amending sections 11102, 11110, 11125, 11132, 11514b, 62501, and 62502 (MCL 324.11102, 324.11110, 324.11125, 324.11132, 324.11514b, 324.62501, and 324.62502), sections 11102 and 11125 as amended by 2010 PA 357, section 11110 as amended by 1995 PA 61, section 11132 as added by 2018 PA 688, section 11514b as amended by 2022 PA 245, section 62501 as amended by 1998 PA 467, and section 62502 as added by 1995 PA 57, and by adding sections 11122, 62508b, and 62509d;

and to repeal acts and parts of acts.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1 Sec. 11102. (1) "Class I well" means that term as defined in
2 section 62501.

3 (2) "Class IV well" means that term as defined in section
4 62501.

5 (3) ~~(1)~~—"Contaminant" means any of the following:

6 (a) Hazardous waste as defined in R 299.9203 of the Michigan
7 administrative code.

8 (b) Any hazardous waste or hazardous constituent listed in 40
9 CFR part 261, appendix VIII or 40 CFR part 264, appendix IX.

10 (4) ~~(2)~~—"Corrective action" means an action determined by the
11 department to be necessary to protect the public health, safety, or
12 welfare, or the environment, and includes, but is not limited to,
13 investigation, evaluation, cleanup, removal, remediation,
14 monitoring, containment, isolation, treatment, storage, management,
15 temporary relocation of people, and provision of alternative water
16 supplies, or any corrective action allowed under the solid waste
17 disposal act or regulations promulgated pursuant to that act.

18 (5) ~~(3)~~—"Designated facility" means a hazardous waste
19 treatment, storage, or disposal facility that has received a permit
20 or has interim status under the solid waste disposal act or has a
21 permit from a state authorized under section 3006 of subtitle C of
22 the solid waste disposal act, 42 USC 6926, and which, if located in
23 this state, has an operating license issued under this part, has a
24 legally binding agreement with the department that authorizes
25 operation, or is subject to the requirements of section 11123(8).

26 (6) ~~(4)~~—"Disposal" means the discharge, deposit, injection,
27 dumping, spilling, leaking, or placing of a hazardous waste into or

1 on land or water in a manner that the hazardous waste or a
 2 constituent of the hazardous waste may enter the environment, be
 3 emitted into the air, or be discharged into water, including
 4 groundwater.

5 (7) ~~(5)~~—"Disposal facility" means a facility or a part of a
 6 facility where managed hazardous waste, as defined by rule, is
 7 intentionally placed into or on any land or water and at which
 8 hazardous waste will remain after closure.

9 (8) ~~(6)~~—"Failure mode assessment" means an analysis of the
 10 potential major methods by which safe handling of hazardous wastes
 11 may fail at a treatment, storage, or disposal facility.

12 Sec. 11110. (1) ~~Not later than January 1, 1990, By 5 years~~
 13 **after the effective date of the amendatory act that added section**
 14 **11122 and every 5 years thereafter**, the department shall prepare an
 15 ~~updated and adopt a comprehensive, updated~~ state hazardous **and**
 16 **radioactive** waste management plan.

17 (2) The updated plan shall **meet all of the following**
 18 **requirements:**

19 ~~(a) Update the state hazardous waste management plan adopted~~
 20 ~~by the commission on January 15, 1982.~~

21 **(a)** ~~(b)~~ Be based ~~upon~~ **on the** location of generators, health
 22 and safety, **transportation** economics, ~~of transporting, type~~ **types**
 23 of waste, and existing treatment, storage, or disposal facilities.

24 ~~(c) Include information generated by the department of~~
 25 ~~commerce and the department on hazardous waste capacity needs in~~
 26 ~~the state.~~

27 ~~(d) Include information provided by the office of waste~~
 28 ~~reduction created in part 143.~~

29 **(b)** ~~(e)~~ Plan for the availability of hazardous waste treatment

~~1 or disposal facilities that have adequate capacity for the~~
~~2 destruction, treatment, or secure disposition of all hazardous~~
~~3 wastes that are reasonably~~ **Based on information included in the**
~~4 plan under subdivision (e), specify a maximum permitted capacity~~
~~5 for hazardous or radioactive waste treatment, storage, or disposal~~
~~6 facilities. The maximum capacity shall equal the average amount of~~
~~7 hazardous or radioactive waste expected to be generated within the~~
~~8 in this state during the 20-year~~ **succeeding 5-year** period. ~~after~~
~~9 October 1, 1988, as is described in section 104(c)(9)(A) of title I~~
~~10 of the comprehensive environmental response, compensation, and~~
~~11 liability act of 1980, Public Law 96-510, 42 U.S.C. 9604.~~ **The**
~~12 maximum capacity shall not be changed until the next 5-year update~~
~~13 of the plan is adopted.~~

~~14 (c) (f) Plan~~ **Provide** for a reasonable geographic distribution
~~15 of treatment, storage, and disposal facilities to meet existing and~~
~~16 future needs~~ **and to comply with section 11125(9)**, including
~~17 proposing criteria for determining acceptable locations for these~~
~~18 facilities. The criteria shall include a consideration of a~~
~~19 location's geology, geography, demography,~~ **and** waste generation
~~20 patterns, along with environmental factors, public health factors,~~
~~21 and other relevant characteristics as determined by the department.~~

~~22 (d) (g) Emphasize~~ **Provide for** a shift away from the practice
~~23 of landfilling hazardous waste and toward~~ **to** the in-plant reduction
~~24 of hazardous waste and the recycling and treatment of hazardous~~
~~25 waste.~~

~~26 (e) (h) Include necessary~~ **all of the following:**

~~27 (i) An analysis of all hazardous or radioactive waste streams~~
~~28 generated within this state, including waste volumes,~~
~~29 classifications, and locations of origin.~~

1 (ii) An inventory and assessment of current in-state hazardous
2 or radioactive waste management capacity using information
3 generated by the department of environment, Great Lakes, and energy
4 and the department of labor and economic growth.

5 (iii) Projections of future in-state waste generation.

6 (iv) A determination of necessary in-state capacity to manage
7 an amount of hazardous or radioactive waste equal to the amount
8 generated in this state.

9 (v) Siting criteria for any facilities determined to be
10 necessary, which shall comply with section 11125(9) and prevent the
11 concentration of facilities in communities overburdened by
12 pollution.

13 (vi) Recommendations for state policies and programs to
14 minimize hazardous or radioactive waste generation.

15 (vii) An evaluation of hazardous or radioactive waste
16 reduction, recycling, and treatment technologies and best
17 practices.

18 (viii) A study and recommendation on whether Michigan should
19 seek membership of an Interstate Low-Level Radioactive Waste
20 Compact.

21 (ix) **Necessary** legislative, administrative, and economic
22 mechanisms, and a timetable to carry out the **updated** plan.

23 (3) The department shall ~~instruct the office of waste~~
24 ~~reduction created in part 143 to complete~~ **conduct** studies as
25 considered necessary for the completion of the updated plan. The
26 studies may include:

27 (a) An inventory and evaluation of the sources of hazardous **or**
28 **radioactive** waste generation within this state or from other
29 states, including the types, quantities, and chemical and physical

1 characteristics of the ~~hazardous~~ waste.

2 (b) An inventory and evaluation of current hazardous **or**
3 **radioactive** waste management, minimization, or reduction practices
4 and costs, including treatment, disposal, on-site recycling,
5 reclamation, and other forms of source reduction within this state.

6 (c) A projection or determination of future hazardous **or**
7 **radioactive** waste management needs based on **section 11125(8) and** an
8 evaluation of existing capacities; ~~7~~ treatment or disposal
9 capabilities; ~~7~~ manufacturing activity, limitations, and
10 constraints; ~~7~~ Projection of needs shall consider the types, and
11 sizes, **and general locations** of treatment, storage, or disposal
12 facilities ~~7~~ general locations within the **this** state; ~~7~~ **and**
13 management control systems. ~~7~~ and an identified need for a state
14 owned treatment, storage, or disposal facility.

15 (d) An investigation and analysis of methods, incentives, or
16 technologies for source reduction, reuse, recycling, or recovery of
17 potentially hazardous **or radioactive** waste and a strategy for
18 encouraging the utilization or reduction of hazardous **or**
19 **radioactive** waste.

20 (e) An investigation and analysis of methods and incentives to
21 encourage interstate and international cooperation in the
22 management of hazardous **or radioactive** waste.

23 (f) An estimate of the public and private cost of treating,
24 storing, or disposing of hazardous **or radioactive** waste.

25 (g) An investigation and analysis of alternate methods for
26 treatment and disposal of hazardous **or radioactive** waste.

27 ~~(4) If the department finds in preparing the updated plan that~~
28 ~~there is a need for additional treatment or disposal facilities in~~
29 ~~the state, then the department shall identify incentives the state~~

1 ~~could offer that would encourage the construction and operation of~~
2 ~~additional treatment or disposal facilities in the state that are~~
3 ~~consistent with the updated plan. The department shall propose~~
4 ~~criteria which could be used in evaluating applicants for the~~
5 ~~incentives.~~

6 (4) ~~(5)~~ Upon completion of the updated plan, the department
7 shall **post the updated plan on its publicly available website and**
8 publish a notice in ~~a number of 2 or more~~ newspapers having major
9 circulation within ~~the~~**this** state as determined by the department,
10 and ~~shall~~ issue a statewide news release announcing the
11 availability of the updated plan for inspection or purchase at cost
12 by interested persons. The announcement shall indicate where and
13 how the updated plan may be obtained or reviewed and shall indicate
14 that not less than 6 public hearings shall be conducted at varying
15 locations in ~~the~~**this** state before formal adoption. The first
16 public hearing ~~shall not be held until~~**not less than** 60 days ~~have~~
17 ~~elapsed from~~**after** the date of the notice announcing the
18 availability of the updated plan. The remaining public hearings
19 shall be held within 120 days after the first public hearing at
20 approximately equal time intervals.

21 (5) ~~(6)~~ After the public hearings, the department shall
22 prepare a written summary of the comments received, provide
23 ~~comments on~~**responses to** the major concerns raised, make amendments
24 to the updated plan **that the department considers advisable**, and
25 ~~determine whether the updated plan should be adopted.~~**adopt the**
26 **updated plan.**

27 **Sec. 11122. Until 5 years after the effective date of the**
28 **amendatory act that added this section, or until the first updated**
29 **state hazardous and radioactive waste management plan required**

1 under section 11110 after the effective date of the amendatory act
2 that added this section is adopted and implemented, whichever is
3 later, the department shall not do any of the following:

4 (a) Issue an operating license for a new hazardous waste
5 treatment, storage, or disposal facility under section 11125.

6 (b) Amend an operating license for an existing hazardous waste
7 treatment, storage, or disposal facility to authorize the expansion
8 of operations, overall capacity, or the facility.

9 (c) Issue a permit for a new radioactive waste management
10 facility.

11 (d) Amend a permit for an existing radioactive waste
12 management facility to authorize the expansion of operations,
13 overall capacity, or the facility.

14 Sec. 11125. (1) Upon receipt of an operating license
15 application that complies with the requirements of section
16 11123(2), the department shall do all of the following:

17 (a) Notify the municipality and county in which the treatment,
18 storage, or disposal facility is located or proposed to be located;
19 a local soil erosion and sedimentation control agency appointed
20 pursuant to part 91; each division within the department that has
21 responsibility in land, air, or water management; a regional
22 planning agency established by executive directive of the governor;
23 and other appropriate agencies. The notice shall describe the
24 procedure by which the license may be approved or denied.

25 (b) Review the plans of the proposed treatment, storage, or
26 disposal facility to determine if the proposed operation complies
27 with this part and the rules promulgated under this part. The
28 review shall be made within the department. The review shall
29 include, but need not be limited to, a review of air quality, water

1 quality, waste management, hydrogeology, and the applicant's
2 disclosure statement. A written and signed review by each person
3 within the department reviewing the application and plans ~~shall~~
4 **must** be received and filed in the department's license application
5 records before an operating license is issued or denied by the
6 department.

7 (c) Integrate the relevant provisions of all permits that the
8 applicant is required to obtain from the department to construct
9 the proposed treatment, storage, or disposal facility into the
10 operating license required by this part.

11 (d) Consider the mitigation measures proposed to be
12 implemented as identified in section 11123(2)(m).

13 (e) Hold a public hearing not more than 60 days after receipt
14 of the application.

15 (2) The department may establish operating license conditions
16 specifically applicable to the treatment, storage, or disposal
17 facility and operation at that site to mitigate adverse impacts.

18 (3) The department shall provide notice and an opportunity for
19 a public hearing before making a final decision on an operating
20 license application.

21 (4) The department shall make a final decision on an operating
22 license application within 140 days after the department receives a
23 complete application. However, if ~~the~~**this** state's hazardous waste
24 management program is authorized by the United States environmental
25 protection agency under section 3006 of subtitle C of the solid
26 waste disposal act, 42 USC 6926, the department may extend the
27 deadline beyond the limitation provided in this section in order to
28 fulfill the public participation requirements of the solid waste
29 disposal act, **42 USC 6901 to 6922k**. The operating license may

1 contain stipulations specifically applicable to **the** site and
2 operation.

3 (5) A local ordinance, permit, or other requirement shall not
4 prohibit the operation of a licensed treatment, storage, or
5 disposal facility.

6 (6) If any information required to be included in the
7 disclosure statement required under section 11123 changes or is
8 supplemented after the filing of the statement, the applicant or
9 licensee shall provide that information to the department in
10 writing within 30 days after the change or addition.

11 (7) The department may deny an operating license application
12 submitted pursuant to section 11123 if any information described in
13 section 11123(2)(k)(ii) to (iv) was not disclosed as required in
14 section 11123(2) or this section.

15 (8) **After the moratorium under section 11122 ends, the**
16 **department shall not issue an operating license or permit for a new**
17 **hazardous waste treatment, storage, or disposal facility or**
18 **hazardous waste management facility or the expansion of an existing**
19 **facility if doing so would cause the total permitted capacity to**
20 **exceed the limit established in the current state hazardous and**
21 **radioactive waste management plan under section 11110(2)(b). For**
22 **the purposes of this subsection, "total permitted capacity" means**
23 **the maximum amount of waste that all permitted facilities in this**
24 **state are authorized to manage annually under their current**
25 **permits.**

26 (9) The department shall not issue a permit or approval to
27 establish or expand a hazardous waste treatment, storage, or
28 disposal facility or radioactive waste management facility if any
29 of the following apply:

1 (a) The facility is proposed to be located in any city,
2 village, township, or county where a hazardous waste treatment,
3 storage, or disposal facility, radioactive waste management
4 facility, class I well, or class IV well is currently operating or
5 has operated within the past 50 years.

6 (b) The facility is proposed to be located within 100 miles of
7 a currently operating hazardous waste treatment, storage, or
8 disposal facility, radioactive waste management facility, class I
9 well, or class IV well.

10 (c) Any of the following apply to a census tract within a 3-
11 mile radius of the facility's proposed location:

12 (i) The population density exceeds the state average population
13 density by 50% or more, based on the most recent census data.

14 (ii) The percentage of population in households where the
15 household income is less than or equal to twice the federal poverty
16 level equals or exceeds the eightieth percentile for census tracts
17 in this state.

18 (iii) The overall score, as measured by MiEJScreen or its
19 equivalent, for any census tract within a 3-mile radius meets or
20 exceeds the eightieth percentile of census tracts in this state.

21 (10) ~~(8)~~—The department shall provide notice of the final
22 decision **on an operating license application** to persons on the
23 organized mailing list for the facility.

24 (11) ~~(9)~~—Following the construction of a new, expanded,
25 enlarged, or altered treatment, storage, or disposal facility, the
26 department shall review all information required to be submitted by
27 the operating license. If the department finds that the owner or
28 operator has deviated from the specific conditions established in
29 the operating license, the department shall determine if cause

1 exists for modification or revocation of the operating license, in
 2 accordance with provisions established by rule. At a minimum, the
 3 postconstruction documentation shall include all of the following:

4 (a) Updated disclosure information or a certification as
 5 described in section 11123(2)(n)(i).

6 (b) A certification of construction as described in section
 7 11123(2)(n)(ii). The department shall require additional
 8 certification periodically during the operation or in order to
 9 verify proper closure of the site.

10 (c) A certification of capability signed and sealed by a
 11 licensed professional engineer as described in section
 12 11123(2)(n)(iii).

13 (d) Information regarding any deviations from the specific
 14 conditions in the operating license.

15 (e) Proof of financial responsibility.

16 Sec. 11132. (1) ~~Except as otherwise provided in this section,~~
 17 ~~a~~A person shall not deliver to a landfill in this state for
 18 disposal and the owner or operator of a landfill shall not permit
 19 disposal in the landfill of TENORM. ~~with any of the following:~~

20 ~~(a) A concentration of radium-226 more than 50 picocuries per~~
 21 ~~gram.~~

22 ~~(b) A concentration of radium 228 more than 50 picocuries per~~
 23 ~~gram.~~

24 ~~(c) A concentration of lead 210 more than 260 picocuries per~~
 25 ~~gram.~~

26 ~~(2) Except as otherwise specified in the landfill operating~~
 27 ~~license, the owner or operator of a landfill shall not permit a~~
 28 ~~delivery of TENORM for disposal at the landfill unless the~~
 29 ~~generator has provided the following information in writing to the~~

1 ~~owner or operator of the landfill:~~

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

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

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

10 ~~(d) The proposed date of delivery.~~

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

13 ~~(2) (4) If requested by the owner or operator of a landfill in~~
 14 ~~an application for the renewal of or a major modification to an~~
 15 ~~operating license, If the department may authorize with conditions~~
 16 ~~and limits authorized in the an operating license the disposal of~~
 17 ~~TENORM with concentrations of radium-226 more than 50 picocuries~~
 18 ~~per gram, radium-228 more than 50 picocuries per gram, or lead-210~~
 19 ~~more than 260 picocuries per gram, or any combination thereof, but~~
 20 ~~not more than 500 picocuries per gram for each radionuclide, An~~
 21 ~~the operating license under this part with such an authorization~~
 22 ~~constitutes a license from the this state's radiation control~~
 23 ~~authority under part 135 of the public health code, 1978 PA 368,~~
 24 ~~MCL 333.13501 to 333.13537, to possess the TENORM, but not to~~
 25 ~~acquire additional TENORM after the effective date of the~~
 26 ~~amendatory act that added section 11122. This subsection applies~~
 27 ~~only if the conditions and procedures for issuance of the operating~~
 28 ~~license under this part are were sufficient to satisfy the~~
 29 ~~licensing requirements of part 135 of the public health code, 1978~~

1 PA 368, MCL 333.13501 to 333.13537.

2 ~~(5) A request under subsection (4) shall include all of the~~
3 ~~following:~~

4 ~~(a) A radiation safety program that addresses all of the~~
5 ~~following:~~

6 ~~(i) Personnel radiation protection.~~

7 ~~(ii) Worker training.~~

8 ~~(iii) Radiation surveys.~~

9 ~~(iv) Radiation instrument calibration.~~

10 ~~(v) Receipt and disposal of radioactive material.~~

11 ~~(vi) Emergency procedures.~~

12 ~~(vii) Record keeping.~~

13 ~~(b) A report evaluating the risks of exposure to residual~~
14 ~~radioactivity through all relevant pathways using a generally~~
15 ~~accepted industry model such as the Argonne National Laboratory~~
16 ~~RESRAD family of codes or, if approved by the department, another~~
17 ~~model. The report shall evaluate potential radiation doses to site~~
18 ~~workers and members of the public during site operation and after~~
19 ~~site closure. The report shall use reasonable scenarios to evaluate~~
20 ~~the dose to members of the public.~~

21 ~~(c) A description of any steps necessary to ensure the annual~~
22 ~~dose to members of the public during landfill operation and after~~
23 ~~site closure will be less than 25 millirem.~~

24 ~~(d) A description of an environmental monitoring program under~~
25 ~~subsection (6).~~

26 **(3) (6) If TENORM is was disposed at a landfill before the**
27 **effective date of the amendatory act that added section 11122, the**
28 **operator of the landfill shall conduct a monitoring program that**
29 **complies with all of the following:**

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

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

7 (c) Penetrating radiation, radioactivity in air, and radon in
8 air are measured as specified in the operating license if the
9 landfill ~~is~~ **was** used to dispose of TENORM with a concentration of
10 radium-226 more than 50 picocuries per gram, radium-228 more than
11 50 picocuries per gram, or lead-210 more than 260 picocuries per
12 gram.

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

17 **(4) ~~(7)~~**—The owner or operator of a landfill shall submit to
18 the department by March 15, ~~each of the year following the year in~~
19 **which the amendatory act that added subdivisions (a) to (d) to this**
20 **subsection took effect**, a report that summarizes the **following**
21 ~~information obtained under subsection (2)~~ for all TENORM disposed
22 at the landfill during the ~~previous calendar year~~ **in which that**
23 **amendatory act took effect:**

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

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

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

3 (d) The dates of delivery.

4 (5) ~~(8)~~—The owner or operator of a landfill shall ~~do both of~~
5 ~~the following:~~

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

8 (b) ~~Maintain~~ **maintain** records of the location and elevation of
9 TENORM disposed of at the landfill **before the effective date of the**
10 **amendatory act that added section 11122.**

11 Sec. 11514b. (1) A person shall not deliver to a type II
12 landfill in this state for disposal and the owner or operator of a
13 type II landfill shall not permit disposal in the landfill of
14 technologically enhanced naturally occurring radioactive material.
15 ~~with any of the following:~~

16 (a) ~~A concentration of radium-226 more than 50 picocuries per~~
17 ~~gram.~~

18 (b) ~~A concentration of radium-228 more than 50 picocuries per~~
19 ~~gram.~~

20 (c) ~~A concentration of lead-210 more than 260 picocuries per~~
21 ~~gram.~~

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

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

1 ~~the department.~~

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

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

5 ~~(d) The proposed date of delivery.~~

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

8 **(2) (4)** Within 45 days after the end of each state fiscal
 9 year, **through the state fiscal year in which the amendatory act**
 10 **that added subdivisions (a) to (d) to this subsection took effect,**
 11 the owner or operator of a type II landfill shall submit to the
 12 department ~~an annual~~ a report that summarizes the ~~information~~
 13 ~~obtained under subsection (2)~~ **following** for all TENORM disposed at
 14 the landfill during the previous state fiscal year:

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

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

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

23 **(d) The proposed date of delivery.**

24 **(3) (5)** The owner or operator of a type II landfill that
 25 disposes of TENORM with a concentration of radium-226 more than 25
 26 picocuries per gram, a concentration of radium-228 more than 25
 27 picocuries per gram, or a concentration of lead-210 more than 25
 28 picocuries per gram shall do all of the following:

29 **(a) Ensure that all TENORM is deposited at least 10 feet below**

1 the bottom of the future landfill cap.

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

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

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

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

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

15 (4) ~~(6)~~—As used in this section, "technologically enhanced
16 naturally occurring radioactive material" or "TENORM" means
17 naturally occurring radioactive material whose radionuclide
18 concentrations have been increased as a result of human practices.
19 TENORM does not include any of the following:

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

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

24 Sec. 62501. As used in this part:

25 (a) "Artificial brine" means mineralized water formed by
26 dissolving rock salt or other readily soluble rocks or minerals.

27 (b) "Brine well" means a well drilled or converted for the
28 purpose of producing natural or artificial brine.

29 (c) **"Class I well" means any of the following:**

1 (i) A well used by a generator of hazardous waste or the owner
2 or operator of a hazardous waste management facility to inject
3 hazardous waste beneath the lowermost formation that contains all
4 or part of an underground source of drinking water within 1/4 mile
5 of the well bore.

6 (ii) An industrial and municipal disposal well that injects
7 fluids beneath the lowermost formation that contains all or part of
8 an underground source of drinking water within 1/4 mile of the well
9 bore.

10 (iii) A radioactive waste disposal well that injects fluids
11 below the lowermost formation that contains all or part of an
12 underground source of drinking water within 1/4 mile of the well
13 bore.

14 (d) "Class III well" means a well used for the extraction of
15 minerals including, but not limited to, the following:

16 (i) Mining of sulfur by the Frasch process.

17 (ii) In situ production of uranium or other metals, not
18 including solution mining of conventional mines.

19 (iii) Solution mining of salts or potash.

20 (e) "Class IV well" means any of the following:

21 (i) A well used by a generator of hazardous waste or
22 radioactive waste, by the owner or operator of a hazardous waste
23 management facility, or by the owner or operator of a radioactive
24 waste disposal site to dispose of hazardous waste or radioactive
25 waste into a formation that contains all or part of an underground
26 source of drinking water within 1/4 mile of the well bore.

27 (ii) A well used by a generator of hazardous waste or
28 radioactive waste, by the owner or operator of a hazardous waste
29 management facility, or by the owner or operator of a radioactive

1 waste disposal site to dispose of hazardous waste or radioactive
2 waste above a formation that contains all or part of an underground
3 source of drinking water within 1/4 mile of the well bore.

4 (iii) A well that is used by a generator of hazardous waste or
5 the owner or operators of a hazardous waste management facility to
6 dispose of hazardous waste and that is not described by 40 CFR
7 146.5(a) (1) or 146.5(d) (1) .

8 (f) ~~(e)~~—"Department" means the department of ~~environmental~~
9 ~~quality~~. **environment, Great Lakes, and energy.**

10 (g) ~~(d)~~—"Disposal well" means a well drilled or converted for
11 subsurface disposal of waste products or processed brine and its
12 related surface facilities.

13 (h) ~~(e)~~—"Exploratory purposes" means ~~test well drilling for~~
14 the specific purpose of discovering or outlining an orebody or
15 mineable mineral resource.

16 (i) ~~(f)~~—"Fund" means the mineral well regulatory fund created
17 in section 62509b.

18 (j) ~~(g)~~—"Mineral well" means any well subject to this part.

19 (k) ~~(h)~~—"Natural brine" means naturally occurring mineralized
20 water other than potable or fresh water.

21 (l) ~~(i)~~—"Operator" means the person ~~, whether owner or not,~~
22 supervising or responsible for the drilling, operating, repairing,
23 abandoning, or plugging of ~~wells~~ **a well** subject to this part,
24 **whether or not that person is the owner.**

25 (m) ~~(j)~~—"Owner" means the person who has the right to drill,
26 convert, or operate any well subject to this part.

27 (n) ~~(k)~~—"Pollution" means damage or injury from the loss,
28 escape, or unapproved disposal of any substance at any well subject
29 to this part.

1 (o) ~~(h)~~ "Storage well" means a well drilled into a subsurface
 2 formation to develop an underground storage cavity for subsequent
 3 use in storage operations. Storage well does not include a storage
 4 well drilled pursuant to part 615.

5 (p) ~~(m)~~ "Supervisor of mineral wells" means the state
 6 geologist.

7 (q) ~~(n)~~ "Surface waste" means damage to, injury to, or
 8 destruction of surface ~~waters, soils, water, of soil, of~~ animal,
 9 fish, ~~and or~~ aquatic life, or **of** surface property from unnecessary
 10 seepage or loss incidental to or resulting from drilling,
 11 equipping, or operating a well or wells subject to this part.

12 (r) ~~(o)~~ "Test well" means a well, core hole, core test,
 13 observation well, or other well drilled from the surface to
 14 determine the presence of a mineral, mineral resource, ore, or rock
 15 unit, or to obtain geological or geophysical information or other
 16 subsurface data related to mineral exploration and extraction. Test
 17 well does not include holes drilled in the operation of a quarry,
 18 open pit, or underground mine, or any wells not related to mineral
 19 exploration or extraction.

20 (s) ~~(p)~~ "Underground storage cavity" means a cavity formed by
 21 dissolving rock salt or other readily soluble rock or mineral, by
 22 nuclear explosion, or by any other method for the purpose of
 23 storage or disposal.

24 (t) ~~(q)~~ "Underground waste" means damage or injury to potable
 25 water, mineralized water, or other subsurface resources **incidental**
 26 **to or resulting from drilling, equipping, or operating a well**
 27 **subject to this part.**

28 (u) ~~(r)~~ "Waste product" means waste or by-product resulting
 29 from municipal or industrial operations or waste from any trade,

1 manufacture, business, or private pursuit that could cause
2 pollution and for which underground disposal may be feasible or
3 practical.

4 Sec. 62502. (1) A person shall not cause surface or
5 underground waste in the drilling, development, production,
6 operation, or plugging of wells subject to this part.

7 (2) A person shall not deliver TENORM to a class I well or
8 class IV well in this state for disposal. The owner or operator of
9 a class I well or class IV well shall not permit disposal of TENORM
10 in the well.

11 (3) As used in this section, "TENORM" means that term as
12 defined in section 11104.

13 Sec. 62508b. (1) Subject to subsection (2), the construction,
14 expansion, or installation of a new or converted class I or class
15 IV well is prohibited.

16 (2) Subsection (1) does not apply to a class IV well that
17 either 40 CFR 144.13(c) provides is not prohibited by 40 CFR 144.13
18 or that 40 CFR 144.23(c) provides is authorized by rule.

19 (3) Subsection (1) does not prohibit any of the following:

20 (a) Maintenance, repair, or like-for-like replacement of
21 equipment necessary for the safe operation of an existing well.

22 (b) Subject to subsections (4) and (5), an equipment change at
23 an existing well that demonstrably reduces the amount of hazardous
24 or radioactive materials stored or emitted due to improved
25 treatment methods or technologies, if the change does not increase
26 the well's overall capacity or extend its operational lifespan.

27 (c) Subject to subsections (4) and (5), an expansion of an
28 existing well's footprint that does not increase its overall
29 capacity but is solely for the purpose of creating or enlarging a

1 buffer zone between well operations and the public or a sensitive
2 environmental area.

3 (4) A proposed change under subsection (3)(b) or (c) must be
4 approved by the department. The well operator shall submit to the
5 department documentation demonstrating how the proposed change will
6 meet the requirements of subsection (3)(b) or (c). The department
7 shall make the documentation publicly available and provide for a
8 public comment period of not less than 60 days before deciding to
9 approve or reject the proposed change.

10 (5) In reviewing proposals under subsection (4), the
11 department shall prioritize changes that provide the greatest
12 reduction in risk to public health and the environment. The
13 department shall not approve any changes that could result in
14 increased exposure or risk to overburdened communities.

15 Sec. 62509d. (1) Within 180 days after the effective date of
16 the amendatory act that added this section and annually thereafter,
17 an operator of a class I well or a class III well shall, for each
18 well, file proof of financial responsibility, as described in
19 subsections (2) and (4), for which this state is the sole
20 beneficiary.

21 (2) The financial responsibility under subsection (1) shall
22 include a surety bond issued by an authorized insurer whose
23 certificate of authority is in good standing, a cash account, or an
24 automatically annually renewing certificate of deposit. The surety
25 bond shall comply, and shall be interpreted to comply, with all of
26 the following, as applicable:

27 (a) The amount meets both of the following requirements:

28 (i) Is at least \$1,000,000.00 for a class I well or \$250,000.00
29 for a class III well.

1 (ii) Is sufficient to cover the costs of well plugging and
2 reclamation, as determined by the department based on engineering,
3 geotechnical, environmental, or location conditions.

4 (b) The terms of the instrument shall not be altered without
5 the approval of the department.

6 (c) A cash account is managed by an independent financial
7 institution.

8 (d) Cancellation of a bond or letter of credit requires at
9 least 120 days' advance notice.

10 (e) The instrument remains in effect until the department
11 determines that all of the following apply:

12 (i) The operator's class I well or class III well has been
13 permanently plugged and abandoned in compliance with law and in a
14 manner that protects underground sources of drinking water.

15 (ii) All contamination has been remediated.

16 (iii) The soil at the site has been stabilized and
17 rehabilitated.

18 (iv) The ecosystem has been restored.

19 (3) Payment under an instrument required by subsection (2)
20 does not relieve the operator from any other legal requirements.
21 Assets under the instrument revert to the operator's control, at
22 the operator's request, only after the operator has adequately
23 plugged the wells, reclaimed the well site, and complied with all
24 orders of the supervisor or department under this act.

25 (4) The financial responsibility under subsection (1) shall
26 also include environmental pollution insurance coverage that
27 complies with all of the following:

28 (a) The amount of coverage meets both of the following
29 requirements:

1 (i) Is at least \$5,000,000.00 per occurrence for a class I well
2 or \$2,500,000.00 per occurrence for a class III well.

3 (ii) Is sufficient to cover the worst-case costs of damage to
4 private property, health, and natural resources, of replacing
5 drinking water supplies in case of water contamination, and of
6 injuries, damages, or loss related to pollution or diminution of a
7 water supply, as determined by the department based on engineering,
8 geotechnical, environmental, or location conditions.

9 (b) After the well is plugged, the insurance remains in effect
10 for 30 years for a class I well or 5 years for a class III well.

11 (c) The insurance is provided by an insurance carrier
12 authorized, licensed, or permitted to conduct such insurance
13 business in this state and that holds at least an A- rating by AM
14 Best or any comparable rating service.

15 (d) The insurance is not issued by a captive insurer, surplus
16 line insurer, or risk retention group.

17 (5) Within 180 days after the effective date of the amendatory
18 act that added this section and annually thereafter, an operator of
19 a test well shall, for each well, file proof of financial
20 responsibility for which this state is the sole beneficiary. The
21 financial responsibility shall be a surety bond issued by an
22 authorized insurer whose certificate of authority is in good
23 standing, a cash account, or an automatically annually renewing
24 certificate of deposit. The financial responsibility shall comply,
25 and shall be interpreted to comply, with the following, as
26 applicable:

27 (a) The amount meets both of the following requirements:

28 (i) Is at least \$2,500.00.

29 (ii) Is sufficient to cover the costs of well plugging and

1 reclamation, as determined by the department based on engineering,
2 geotechnical, environmental, or location conditions.

3 (b) The terms of the instrument shall not be altered without
4 the approval of the department.

5 (c) A cash account is managed by an independent financial
6 institution.

7 (d) Cancellation of a bond or letter of credit requires at
8 least 120 days' advance notice.

9 (e) The instrument remains in effect until the department
10 determines that all of the following apply:

11 (i) The test well has been permanently plugged and abandoned in
12 compliance with law and in a manner that protects underground
13 sources of drinking water.

14 (ii) All contamination has been remediated.

15 (iii) The soil at the site has been stabilized and
16 rehabilitated.

17 (iv) The ecosystem has been restored.

18 (6) Payment under an instrument required by subsection (5)
19 does not relieve the operator from any other legal requirements.
20 Assets under the instrument revert to the operator's control, at
21 the operators request, only after the operator has adequately
22 plugged the wells, reclaimed the well site, and complied with all
23 orders of the supervisor or department under this act.

24 Enacting section 1. Sections 11111 and 11112 of the natural
25 resources and environmental protection act, 1994 PA 451, MCL
26 324.11111 and 324.11112, are repealed.