

**SUBSTITUTE FOR
SENATE BILL NO. 1052**

A bill to amend 1994 PA 451, entitled
"Natural resources and environmental protection act,"
by amending sections 11102, 11110, 11125, 11132, 11514b, and 62501
(MCL 324.11102, 324.11110, 324.11125, 324.11132, 324.11514b, and
324.62501), 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, and section
62501 as amended by 1998 PA 467, 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



1 **62501.**

2 (3) ~~(1)~~—"Contaminant" means any of the following:

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

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

7 (4) ~~(2)~~—"Corrective action" means an action determined by the
8 department to be necessary to protect the public health, safety, or
9 welfare, or the environment, and includes, but is not limited to,
10 investigation, evaluation, cleanup, removal, remediation,
11 monitoring, containment, isolation, treatment, storage, management,
12 temporary relocation of people, and provision of alternative water
13 supplies, or any corrective action allowed under the solid waste
14 disposal act or regulations promulgated pursuant to that act.

15 (5) ~~(3)~~—"Designated facility" means a hazardous waste
16 treatment, storage, or disposal facility that has received a permit
17 or has interim status under the solid waste disposal act or has a
18 permit from a state authorized under section 3006 of subtitle C of
19 the solid waste disposal act, 42 USC 6926, and which, if located in
20 this state, has an operating license issued under this part, has a
21 legally binding agreement with the department that authorizes
22 operation, or is subject to the requirements of section 11123(8).

23 (6) ~~(4)~~—"Disposal" means the discharge, deposit, injection,
24 dumping, spilling, leaking, or placing of a hazardous waste into or
25 on land or water in a manner that the hazardous waste or a
26 constituent of the hazardous waste may enter the environment, be
27 emitted into the air, or be discharged into water, including
28 groundwater.

29 (7) ~~(5)~~—"Disposal facility" means a facility or a part of a



1 facility where managed hazardous waste, as defined by rule, is
 2 intentionally placed into or on any land or water and at which
 3 hazardous waste will remain after closure.

4 (8) ~~(6)~~—"Failure mode assessment" means an analysis of the
 5 potential major methods by which safe handling of hazardous wastes
 6 may fail at a treatment, storage, or disposal facility.

7 Sec. 11110. (1) ~~Not later than January 1, 1990,~~ **By 5 years**
 8 **after the effective date of the amendatory act that added section**
 9 **11122 and every 5 years thereafter,** the department shall prepare ~~an~~
 10 ~~updated and adopt a comprehensive, updated~~ state hazardous ~~and~~
 11 **radioactive** waste management plan.

12 (2) The updated plan shall **meet all of the following**
 13 **requirements:**

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

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

19 ~~(c) Include information generated by the department of~~
 20 ~~commerce and the department on hazardous waste capacity needs in~~
 21 ~~the state.~~

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

24 (b) ~~(e) Plan for the availability of hazardous waste treatment~~
 25 ~~or disposal facilities that have adequate capacity for the~~
 26 ~~destruction, treatment, or secure disposition of all hazardous~~
 27 ~~wastes that are reasonably expected to~~ **Based on information**
 28 **included in the plan under subdivision (e), specify a maximum**
 29 **licensed capacity for hazardous and radioactive waste treatment,**



1 storage, or disposal facilities. The maximum capacity shall equal
 2 the amount of hazardous and radioactive waste that the department
 3 determines will be generated ~~within the~~ **in this** state during the
 4 ~~20-year succeeding 5-year~~ period. ~~after October 1, 1988, as is~~
 5 ~~described in section 104(c)(9)(A) of title I of the comprehensive~~
 6 ~~environmental response, compensation, and liability act of 1980,~~
 7 ~~Public Law 96-510, 42 U.S.C. 9604.~~ **The maximum capacity shall not be**
 8 **changed until the next 5-year update of the plan is adopted.**

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

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

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

24 **(i) An analysis of all hazardous and radioactive waste streams**
 25 **generated within this state, including waste volumes,**
 26 **classifications, and locations of origin.**

27 **(ii) An inventory and assessment of current in-state hazardous**
 28 **and radioactive waste management capacity using information**
 29 **generated by the department of environment, Great Lakes, and energy**



1 and the department of labor and economic growth.

2 (iii) Projections of future in-state hazardous and radioactive
3 waste generation.

4 (iv) Recommendations for state policies and programs to
5 minimize hazardous and radioactive waste generation.

6 (v) An evaluation of hazardous and radioactive waste
7 reduction, recycling, and treatment technologies and best
8 practices.

9 (vi) A study and recommendation on whether Michigan should seek
10 membership of an Interstate Low-Level Radioactive Waste Compact.

11 (vii) Necessary legislative, administrative, and economic
12 mechanisms, and a timetable to carry out the **updated** plan.

13 (3) The department shall ~~instruct the office of waste~~
14 ~~reduction created in part 143 to complete~~ **conduct** studies as
15 considered necessary ~~for the completion of~~ **to complete** the updated
16 plan. The studies may include **any of the following**:

17 (a) An inventory and evaluation of the sources of hazardous
18 **and radioactive** waste generation within this state or from other
19 states, including the types, quantities, and chemical and physical
20 characteristics of the ~~hazardous~~ waste.

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

25 (c) A projection or determination of future hazardous **and**
26 **radioactive** waste management needs based on **section 11125(8) and** an
27 evaluation of existing capacities; ~~—~~treatment or disposal
28 capabilities; ~~—~~manufacturing activity, limitations, and
29 constraints; ~~—~~Projection of needs shall consider the types, and



1 sizes, **and general locations** of treatment, storage, or disposal
 2 facilities, ~~general locations within the~~ **this** state; ~~and~~
 3 management control systems. ~~and an identified need for a state~~
 4 ~~owned treatment, storage, or disposal facility.~~

5 (d) An investigation and analysis of methods, incentives, or
 6 technologies for source reduction, reuse, recycling, or recovery of
 7 potentially hazardous **and radioactive** waste and a strategy for
 8 encouraging the utilization or reduction of hazardous **and**
 9 **radioactive** waste.

10 (e) An investigation and analysis of methods and incentives to
 11 encourage interstate and international cooperation in the
 12 management of hazardous **and radioactive** waste.

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

15 (g) An investigation and analysis of alternate methods for
 16 treatment and disposal of hazardous **and radioactive** waste.

17 ~~(4) If the department finds in preparing the updated plan that~~
 18 ~~there is a need for additional treatment or disposal facilities in~~
 19 ~~the state, then the department shall identify incentives the state~~
 20 ~~could offer that would encourage the construction and operation of~~
 21 ~~additional treatment or disposal facilities in the state that are~~
 22 ~~consistent with the updated plan. The department shall propose~~
 23 ~~criteria which could be used in evaluating applicants for the~~
 24 ~~incentives.~~

25 **(4)** ~~(5)~~ Upon completion of the **proposed** updated plan, the
 26 department shall **post the updated plan on its publicly accessible**
 27 **website and** publish a notice in ~~a number of~~ **2 or more** newspapers
 28 having major circulation within ~~the~~ **this** state as determined by the
 29 department, and ~~shall~~ issue a statewide news release announcing the



1 availability of the updated plan for inspection or purchase at cost
 2 by interested persons. The announcement shall indicate where and
 3 how the updated plan may be obtained or reviewed and shall indicate
 4 that not less than 6 public hearings shall be conducted at varying
 5 locations in ~~the~~**this** state before ~~formal adoption.~~**the plan is**
 6 **adopted.** The first public hearing shall ~~not~~ be held ~~until~~**not less**
 7 **than** 60 days ~~have elapsed from~~**after** the date of the notice
 8 announcing the availability of the updated plan. The remaining
 9 public hearings shall be held within 120 days after the first
 10 public hearing at approximately equal time intervals.

11 (5) ~~(6)~~After the public hearings, the department shall
 12 prepare a written summary of the comments received, provide
 13 ~~comments on~~**responses to** the major concerns raised, make amendments
 14 to the **proposed** updated plan **that the department considers**
 15 **advisable**, and ~~determine whether the updated plan should be~~
 16 ~~adopted.~~**adopt the proposed updated plan.**

17 **Sec. 11122. Until 5 years after the effective date of the**
 18 **amendatory act that added this section, or until the first updated**
 19 **state hazardous and radioactive waste management plan required**
 20 **under section 11110 after the effective date of the amendatory act**
 21 **that added this section is adopted and implemented, whichever is**
 22 **later, the department shall not do any of the following:**

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

25 (b) **Amend an operating license for an existing hazardous waste**
 26 **treatment, storage, or disposal facility to authorize the expansion**
 27 **of operations, overall capacity, or the facility.**

28 **Sec. 11125. (1) Upon receipt of an operating license**
 29 **application that complies with the requirements of section**



1 11123(2), the department shall do all of the following:

2 (a) Notify the municipality and county in which the treatment,
3 storage, or disposal facility is located or proposed to be located;
4 ~~a-the~~ local soil erosion and sedimentation control agency appointed
5 pursuant to part 91; each division within the department that has
6 responsibility in land, air, or water management; ~~a-the~~ regional
7 planning agency established by executive directive of the governor;
8 and other appropriate agencies. The notice shall describe the
9 procedure by which the license may be approved or denied.

10 (b) Review the plans of the proposed treatment, storage, or
11 disposal facility to determine if the proposed operation complies
12 with this part and the rules promulgated under this part. The
13 review shall be made within the department. The review shall
14 include, but need not be limited to, a review of air quality, water
15 quality, waste management, hydrogeology, and the applicant's
16 disclosure statement. A written and signed review by each person
17 within the department reviewing the application and plans ~~shall~~
18 **must** be received and filed in the department's license application
19 records before an operating license is issued or denied by the
20 department.

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

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

27 (e) Hold a public hearing ~~not more than~~ **within** 60 days. ~~after~~
28 ~~receipt of the application.~~

29 (2) The department may establish operating license conditions



1 specifically applicable to the treatment, storage, or disposal
2 facility and operation at that site to mitigate adverse impacts.

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

6 (4) The department shall make a final decision on an operating
7 license application within 140 days after the department receives a
8 complete application. However, if ~~the~~**this** state's hazardous waste
9 management program is authorized by the United States environmental
10 protection agency under section 3006 of subtitle C of the solid
11 waste disposal act, 42 USC 6926, the department may extend the
12 deadline beyond the limitation provided in this section in order to
13 fulfill the public participation requirements of the solid waste
14 disposal act, **42 USC 6901 to 6922k**. The operating license may
15 contain stipulations specifically applicable to **the** site and
16 operation.

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

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

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

29 **(8) After the moratorium under section 11122 ends, the**



1 department shall not issue an operating license for a new hazardous
2 waste treatment, storage, or disposal facility or the expansion of
3 an existing facility if doing so would cause the total licensed
4 capacity to exceed 1/5 of the limit established in the current
5 state hazardous and radioactive waste management plan under section
6 11110(2)(b). For the purposes of this subsection, "total licensed
7 capacity" means the maximum amount of waste that all treatment,
8 storage, or disposal facilities in this state are authorized to
9 manage annually under their current operating licenses.

10 (9) Subject to subsection (10), the department shall not issue
11 a license or approval to establish or expand a hazardous waste
12 treatment, storage, or disposal facility, including, but not
13 limited to, a class I well, if any of the following apply:

14 (a) The facility is proposed to be located in any city,
15 village, township, or county where a hazardous waste treatment,
16 storage, or disposal facility, class I well, or class IV well is
17 currently operating or has operated within the past 50 years.

18 (b) The facility is proposed to be located within 50 miles of
19 a currently operating treatment, storage, or disposal facility,
20 class I well, or class IV well that manages hazardous waste
21 generated by a person other than the owner or operator.

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

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

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



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

4 (10) Subsection (9) does not apply to the expansion of a class
5 I well if both of the following requirements are met:

6 (a) The class I well is not and will not be used for the
7 disposal of hazardous waste.

8 (b) The owner or operator does not and will not receive
9 payment for the disposal of any waste in the class I well.

10 (11) ~~(8)~~The department shall provide notice of the final
11 decision **on an operating license application** to persons on the
12 organized mailing list for the facility.

13 (12) ~~(9)~~Following the construction of a new, expanded,
14 enlarged,~~or altered treatment, storage, or disposal facility,~~ the
15 department shall review all information required ~~to be submitted by~~
16 the operating license **to be submitted to the department**. If the
17 department finds that the owner or operator has deviated from the
18 specific conditions established in the operating license, the
19 department shall determine if cause exists for modification or
20 revocation of the operating license, in accordance with provisions
21 established by rule. At a minimum, the ~~postconstruction~~
22 ~~documentation~~**information** shall include all of the following:

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

25 (b) A certification of construction as described in section
26 11123(2) (n) (ii). The department shall require additional
27 certification periodically during the operation or in order to
28 verify proper closure of the site.

29 (c) A certification of capability signed and sealed by a



1 licensed professional engineer as described in section
2 11123(2) (n) (iii) .

3 (d) Information regarding any deviations from the specific
4 conditions in the operating license.

5 (e) Proof of financial responsibility.

6 Sec. 11132. (1) ~~Except as otherwise provided in this section,~~
7 ~~a~~**A** person shall not deliver to a landfill in this state for
8 disposal and the owner or operator of a landfill shall not permit
9 disposal in the landfill of **either of the following:**

10 (a) TENORM with any of the following:

11 (i) ~~(a)~~A concentration of radium-226 more than 50 picocuries
12 per gram.

13 (ii) ~~(b)~~A concentration of radium-228 more than 50 picocuries
14 per gram.

15 (iii) ~~(c)~~A concentration of lead-210 more than 260 picocuries
16 per gram.

17 (b) **Radioactive residue or waste resulting from uranium ore**
18 **processing activities as classified under the North American**
19 **Industry Classification System Codes 212290, 325180, and 331410.**

20 (2) Except as otherwise specified in the landfill operating
21 license, the owner or operator of a landfill shall not permit a
22 delivery of TENORM for disposal at the landfill unless the
23 generator has provided the following information in writing to the
24 owner or operator of the landfill:

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



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

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

4 (d) The proposed date of delivery.

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

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

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

28 ~~(a) A radiation safety program that addresses all of the~~
29 ~~following:~~



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

2 ~~(ii) Worker training.~~

3 ~~(iii) Radiation surveys.~~

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

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

6 ~~(vi) Emergency procedures.~~

7 ~~(vii) Record keeping.~~

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

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

19 ~~(d) A description of an environmental monitoring program under~~
 20 ~~subsection (6).~~

21 **(5)** ~~(6)~~—If TENORM is disposed at a landfill, the operator of
 22 the landfill shall conduct a monitoring program that complies with
 23 all of the following:

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

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



1 (c) Penetrating radiation, radioactivity in air, and radon in
2 air are measured as specified in the operating license if the
3 landfill ~~is~~**was** used to dispose of TENORM with a concentration of
4 radium-226 more than 50 picocuries per gram, radium-228 more than
5 50 picocuries per gram, or lead-210 more than 260 picocuries per
6 gram.

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

11 **(6) ~~(7)~~**—The owner or operator of a landfill shall submit to
12 the department by March 15 each year a report that summarizes the
13 information obtained under subsection (2) for all TENORM disposed
14 at the landfill during the previous calendar year.

15 **(7) ~~(8)~~**—The owner or operator of a landfill shall do both of
16 the following:

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

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

21 **(8) A person shall not mix TENORM with any material for the**
22 **purposes of reducing the concentration of radium-226, radium-228,**
23 **or lead-210, if the regulation of the resulting material under this**
24 **part or part 115 is affected. A person shall not store or dispose**
25 **of the resulting material except in compliance with the provisions**
26 **of this part or part 115 applicable to the TENORM before the mixing**
27 **occurred.**

28 **(9) This part does not apply to materials or activities listed**
29 **in section 1(2) of 1978 PA 113, MCL 325.491.**



1 Sec. 11514b. (1) A person shall not deliver to a type II
2 landfill in this state for disposal and the owner or operator of a
3 type II landfill shall not permit disposal in the landfill of
4 ~~technologically~~ **either of the following:**

5 **(a) Technologically** enhanced naturally occurring radioactive
6 material with any of the following:

7 **(i)** ~~(a)~~—A concentration of radium-226 more than 50 picocuries
8 per gram.

9 **(ii)** ~~(b)~~—A concentration of radium-228 more than 50 picocuries
10 per gram.

11 **(iii)** ~~(c)~~—A concentration of lead-210 more than 260 picocuries
12 per gram.

13 **(b) Radioactive residue or waste resulting from uranium ore**
14 **processing activities as classified under the North American**
15 **Industry Classification System Codes 212290, 325180, and 331410.**

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

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

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

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

28 (d) The proposed date of delivery.

29 (3) The department may test TENORM proposed to be delivered to



1 a landfill.

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

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

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

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

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

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

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

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

27 (6) **A person shall not mix TENORM with any material for the**
28 **purposes of reducing the concentration of radium-226, radium-228,**
29 **or lead-210, if the regulation of the resulting material under this**



1 part or part 111 is affected. A person shall not store or dispose
 2 of the resulting material except in compliance with the provisions
 3 of this part or part 111 applicable to the TENORM before the mixing
 4 occurred.

5 (7) This part does not apply to materials or activities listed
 6 in section 1(2) of 1978 PA 113, MCL 325.491.

7 (8) ~~(6)~~—As used in this section, "technologically enhanced
 8 naturally occurring radioactive material" or "TENORM" means
 9 naturally occurring radioactive material whose radionuclide
 10 concentrations have been increased as a result of human practices.
 11 TENORM does not include any of the following:

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

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

16 Sec. 62501. As used in this part:

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

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

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

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

27 (ii) An industrial and municipal disposal well that injects
 28 fluids beneath the lowermost formation that contains all or part of
 29 an underground source of drinking water within 1/4 mile of the well



1 bore.

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

6 (d) "Class III well" means a well that is used for the
7 extraction of minerals including, but not limited to, the
8 following:

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

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

12 (iii) Solution mining of salts or potash.

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

14 (i) A well that is used by a generator of hazardous waste or
15 radioactive waste, by the owner or operator of a hazardous waste
16 management facility, or by the owner or operator of a radioactive
17 waste disposal site to dispose of hazardous waste or radioactive
18 waste into a formation that contains all or part of an underground
19 source of drinking water within 1/4 mile of the well bore.

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

26 (iii) A well that is used by a generator of hazardous waste or
27 the owner or operators of a hazardous waste management facility to
28 dispose of hazardous waste and that is not described by 40 CFR
29 146.5(a) (1) or 146.5(d) (1) .



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

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

6 **(h)** ~~(e)~~—"Exploratory purposes" means ~~test well drilling for~~
7 the specific purpose of discovering or outlining an orebody or
8 mineable mineral resource.

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

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

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

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

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

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

23 **(o)** ~~(l)~~—"Storage well" means a well drilled into a subsurface
24 formation to develop an underground storage cavity for subsequent
25 use in storage operations. Storage well does not include a storage
26 well drilled pursuant to part 615.

27 **(p)** ~~(m)~~—"Supervisor of mineral wells" means the state
28 geologist.

29 **(q)** ~~(n)~~—"Surface waste" means damage to, injury to, or



1 destruction of surface ~~waters, soils,~~ **water, of soil, of** animal,
 2 fish, ~~and or~~ aquatic life, or **of** surface property from unnecessary
 3 seepage or loss incidental to or resulting from drilling,
 4 equipping, or operating a well or wells subject to this part.

5 **(r)** ~~(e)~~—"Test well" means a well, core hole, core test,
 6 observation well, or other well drilled from the surface to
 7 determine the presence of a mineral, mineral resource, ore, or rock
 8 unit, or to obtain geological or geophysical information or other
 9 subsurface data related to mineral exploration and extraction. Test
 10 well does not include holes drilled in the operation of a quarry,
 11 open pit, or underground mine, or any wells not related to mineral
 12 exploration or extraction.

13 **(s)** ~~(p)~~—"Underground storage cavity" means a cavity formed by
 14 dissolving rock salt or other readily soluble rock or mineral, by
 15 nuclear explosion, or by any other method for the purpose of
 16 storage or disposal.

17 **(t)** ~~(q)~~—"Underground waste" means damage or injury to potable
 18 water, mineralized water, or other subsurface resources **incidental**
 19 **to or resulting from drilling, equipping, or operating a well**
 20 **subject to this part.**

21 **(u)** ~~(r)~~—"Waste product" means waste or by-product resulting
 22 from municipal or industrial operations or waste from any trade,
 23 manufacture, business, or private pursuit that could cause
 24 pollution and for which underground disposal may be feasible or
 25 practical.

26 **Sec. 62508b. (1) Subject to subsection (2), the construction,**
 27 **expansion, or installation of either of the following is**
 28 **prohibited:**

29 **(a) A new or converted class I well if the owner or operator**



1 receives or will receive payment for the disposal of hazardous
2 waste in the well.

3 (b) A new or converted class IV well.

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

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

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

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

15 (c) Subject to subsections (4) and (5), an expansion of an
16 existing well's footprint that does not increase its overall
17 capacity but is solely for the purpose of creating or enlarging a
18 buffer zone between well operations and the public or a sensitive
19 environmental area.

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

27 (5) In reviewing proposals under subsection (4), the
28 department shall prioritize changes that provide the greatest
29 reduction in risk to public health and the environment. The



1 department shall not approve any changes that could result in
2 increased exposure or risk to overburdened communities.

3 Sec. 62509d. (1) Within 2 years after the effective date of
4 the amendatory act that added this section and annually thereafter,
5 an operator of a class I well or a class III well shall, for each
6 well, file proof of financial responsibility, as described in
7 subsections (2) and (4), for which this state is the sole
8 beneficiary.

9 (2) The financial responsibility under subsection (1) shall be
10 a surety bond issued by an authorized insurer whose certificate of
11 authority is in good standing, a cash account, or an automatically
12 annually renewing certificate of deposit. The surety bond, cash
13 account, or certificate of deposit shall comply, and shall be
14 interpreted to comply, with all of the following, as applicable:

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

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

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

21 (b) The terms of the instrument cannot be altered without the
22 approval of the department.

23 (c) A cash account is managed by an independent financial
24 institution.

25 (d) Cancellation of a bond requires at least 120 days' advance
26 notice.

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

29 (i) The class I well or class III well has been permanently



1 plugged and abandoned in compliance with law and in a manner that
2 protects underground sources of drinking water.

3 (ii) All contamination at the site has been remediated.

4 (iii) The soil at the site has been stabilized and
5 rehabilitated.

6 (iv) The ecosystem has been restored.

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

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

16 (a) The amount of coverage meets both of the following
17 requirements:

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

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

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

28 (c) The insurance is provided by an insurance carrier
29 authorized, licensed, or permitted to conduct such insurance



1 business in this state and that holds at least an A- rating by AM
2 Best or any comparable rating service.

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

5 (5) Within 2 years after the effective date of the amendatory
6 act that added this section and annually thereafter, an operator of
7 a test well shall, for each well, file proof of financial
8 responsibility for which this state is the sole beneficiary. The
9 financial responsibility shall be a surety bond issued by an
10 authorized insurer whose certificate of authority is in good
11 standing, a cash account, or an automatically annually renewing
12 certificate of deposit. The financial responsibility shall comply,
13 and shall be interpreted to comply, with the following, as
14 applicable:

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

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

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

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

22 (c) A cash account is managed by an independent financial
23 institution.

24 (d) Cancellation of a bond requires at least 120 days' advance
25 notice.

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

28 (i) The test well has been permanently plugged and abandoned in
29 compliance with law and in a manner that protects underground



1 sources of drinking water.

2 (ii) All contamination at the site has been remediated.

3 (iii) The soil at the site has been stabilized and
4 rehabilitated.

5 (iv) The ecosystem has been restored.

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

12 Enacting section 1. Sections 11111 and 11112 of the natural
13 resources and environmental protection act, 1994 PA 451, MCL
14 324.11111 and 324.11112, are repealed.

