

# HOUSE BILL NO. 4212

February 19, 2019, Introduced by Reps. Rabhi, Brixie, Pohutsky, Robinson, Tyrone Carter, Wittenberg, Manoogian, Ellison, Hoadley, Neeley, Hood, Lasinski, Warren, LaGrand, Camilleri, Pagan, Sowerby, Gay-Dagnogo, Hammoud, Cynthia Johnson and Tate and referred to the Committee on Natural Resources and Outdoor Recreation.

A bill to amend 1994 PA 451, entitled  
"Natural resources and environmental protection act,"  
by amending sections 20118, 20120a, 20120b, 20120e, and 20121 (MCL  
324.20118, 324.20120a, 324.20120b, 324.20120e, and 324.20121),  
sections 20118, 20120a, and 20120b as amended and section 20121 as  
added by 2014 PA 542 and section 20120e as amended by 2012 PA 190.

**THE PEOPLE OF THE STATE OF MICHIGAN ENACT:**

**1**           Sec. 20118. (1) The department may take response activity or



1 approve of response activity proposed by a person that is  
2 consistent with this part and the rules promulgated under this part  
3 relating to the selection and implementation of response activity  
4 that the department concludes is necessary and appropriate to  
5 protect the public health, safety, or welfare, or the environment.

6 (2) Remedial action undertaken under subsection (1) may  
7 address all or a portion of contamination at a facility as follows:

8 (a) Remedial action may address 1 or more releases at a  
9 facility.

10 (b) Remedial action may address 1 or more hazardous substances  
11 at a facility.

12 (c) Remedial action may address contamination in 1 or more  
13 environmental media at a facility.

14 (d) Remedial action may address contamination within the  
15 entire facility or only a portion of a facility.

16 (e) Remedial action may address contamination at a facility  
17 through any combination of subdivisions (a) ~~through~~ to (d).

18 (3) Remedial action undertaken under subsection (1) shall  
19 accomplish all of the following:

20 (a) ~~Assure~~ **Ensure** the protection of the public health, safety,  
21 and welfare, and the environment with respect to the environmental  
22 contamination addressed by the remedial action.

23 (b) Except as otherwise provided in subsections (4) and (5),  
24 attain a degree of cleanup and control of the environmental  
25 contamination addressed by the remedial action that **meets both of**  
26 **the following requirements:**

27 (i) **To the extent technically feasible, meets the cleanup**  
28 **criteria for unrestricted residential use and restores any affected**  
29 **aquifer to state drinking water standards as that term is defined**



1 in section 2 of the safe drinking water act, 1976 PA 399, MCL  
2 325.1002.

3 (ii) **Otherwise** complies with all applicable or relevant and  
4 appropriate requirements, rules, criteria, limitations, and  
5 standards of state and federal environmental law.

6 (c) Except as otherwise provided in subsections (4) and (5),  
7 be consistent with any cleanup criteria incorporated in rules  
8 promulgated under this part for the environmental contamination  
9 addressed by the remedial action.

10 (4) The department may select or approve of a remedial action  
11 meeting the criteria provided for in section 20120a that does not  
12 attain a degree of control or cleanup of hazardous substances that  
13 complies with R 299.3(5) or R 299.3(6) of the Michigan  
14 ~~administrative code~~, **Administrative Code**, or both, if the  
15 department makes a finding that the **degree of control or cleanup**  
16 **that will be achieved is the greatest technically feasible and that**  
17 **the selected or approved** remedial action is protective of the  
18 public health, safety, and welfare, and the environment.  
19 Notwithstanding any other provision of this subsection, the  
20 department shall not approve of a remedial action that does not  
21 attain a degree of control or cleanup of hazardous substances that  
22 complies with R 299.3(5) or R 299.3(6) of the Michigan  
23 ~~administrative code~~ **Administrative Code** if the remedial action is  
24 being implemented by a person who is liable under section 20126 and  
25 the release was grossly negligent or intentional, unless attaining  
26 that degree of control is technically infeasible, or the adverse  
27 environmental impact of implementing a remedial action to satisfy  
28 the rule would exceed the environmental benefit of that remedial  
29 action.



1 (5) A remedial action may be selected or approved ~~pursuant to~~  
 2 **under** subsection (4) with regard to R 299.3(5) or R 299.3(6), or  
 3 both, of the Michigan ~~administrative code,~~ **Administrative Code**, if  
 4 the department determines, based on the administrative record, that  
 5 1 or more of the following conditions are satisfied:

6 (a) Compliance with R 299.3(5) or R 299.3(6), or both, of the  
 7 Michigan ~~administrative code~~ **Administrative Code** is technically  
 8 ~~impractical.~~ **infeasible.**

9 (b) The remedial action selected or approved will, within a  
 10 reasonable period of time, attain a standard of performance that is  
 11 equivalent to that required under R 299.3(5) or R 299.3(6) of the  
 12 Michigan ~~administrative code.~~ **Administrative Code.**

13 (c) The adverse environmental impact of implementing a  
 14 remedial action to satisfy R 299.3(5) or R 299.3(6), or both, of  
 15 the Michigan ~~administrative code~~ **Administrative Code** would exceed  
 16 the environmental benefit of the remedial action.

17 (d) The remedial action provides for the reduction of  
 18 hazardous substance concentrations in the aquifer through a  
 19 naturally occurring process that is documented to occur at the  
 20 facility and ~~both of the following conditions are met:~~

21 ~~(i) It~~ **it** has been demonstrated that there will be no adverse  
 22 impact on the environment as the result of migration of the  
 23 hazardous substances during the remedial action. ~~, except for that~~  
 24 ~~part of the aquifer approved by the department in connection with~~  
 25 ~~the remedial action.~~

26 ~~(ii) The remedial action includes enforceable land use~~  
 27 ~~restrictions or other institutional controls necessary to prevent~~  
 28 ~~unacceptable risk from exposure to the hazardous substances, as~~  
 29 ~~defined by the cleanup criteria approved as part of the remedial~~



1 ~~action.~~

2       Sec. 20120a. (1) The department may establish cleanup criteria  
3 and approve of remedial actions in the categories listed in this  
4 subsection. The cleanup category proposed shall be ~~the option of~~  
5 ~~the person proposing the remedial action, subject to department~~  
6 ~~approval if required, considering the appropriateness of the~~  
7 ~~categorical criteria to the facility.~~ **residential, unless that**  
8 **category is technically infeasible, in which case the category**  
9 **shall be the technically feasible cleanup category with the most**  
10 **stringent cleanup criteria.** The categories are as follows:

11       (a) Residential.

12       (b) Nonresidential.

13       (c) Limited residential.

14       (d) Limited nonresidential.

15       (2) ~~As an alternative to~~ **If it is technically infeasible to**  
16 **meet** the categorical criteria under subsection (1), the department  
17 may approve a response activity plan or a no further action report  
18 containing site-specific criteria that satisfy the requirements of  
19 section 20120b and other applicable requirements of this part. The  
20 department shall utilize only reasonable and relevant exposure  
21 pathways in determining the adequacy of a site-specific criterion.  
22 Additionally, the department may approve a remedial action plan for  
23 a designated area-wide zone encompassing more than 1 facility, and  
24 may consolidate remedial actions for more than 1 facility.

25       (3) The department shall develop cleanup criteria pursuant to  
26 subsection (1) based on generic human health risk assessment  
27 assumptions determined by the department to appropriately  
28 characterize patterns of human exposure associated with certain  
29 land uses. The department shall utilize only reasonable and



1 relevant exposure pathways in determining these assumptions. The  
2 department may prescribe more than 1 generic set of exposure  
3 assumptions within each category described in subsection (1). If  
4 the department prescribes more than 1 generic set of exposure  
5 assumptions within a category, each set of exposure assumptions  
6 creates a subcategory within a category described in subsection  
7 (1). The department shall specify facility characteristics that  
8 determine the applicability of criteria derived for these  
9 categories or subcategories.

10 (4) If a hazardous substance poses a carcinogenic risk to  
11 humans, the cleanup criteria derived for cancer risk under this  
12 section shall be the 95% upper bound on the calculated risk of 1  
13 additional cancer above the background cancer rate per 100,000  
14 individuals using the generic set of exposure assumptions  
15 established under subsection (3) for the appropriate category or  
16 subcategory. If the hazardous substance poses a risk of an adverse  
17 health effect other than cancer, cleanup criteria shall be derived  
18 using appropriate human health risk assessment methods for that  
19 adverse health effect and the generic set of exposure assumptions  
20 established under subsection (3) for the appropriate category or  
21 subcategory. A hazard quotient of 1.0 shall be used to derive  
22 noncancer cleanup criteria. For the noncarcinogenic effects of a  
23 hazardous substance present in soils, the intake shall be assumed  
24 to be 100% of the protective level, unless compound and site-  
25 specific data are available to demonstrate that a different source  
26 contribution is appropriate. If a hazardous substance poses a risk  
27 of both cancer and 1 or more adverse health effects other than  
28 cancer, cleanup criteria shall be derived under this section for  
29 the most sensitive effect.



1 (5) If a cleanup criterion derived under subsection (4) for  
2 groundwater in an aquifer differs from either: (a) the state  
3 drinking water standards established ~~pursuant to~~**under** section 5 of  
4 the safe drinking water act, 1976 PA 399, MCL 325.1005, or (b) the  
5 national secondary drinking water regulations established ~~pursuant~~  
6 ~~to~~**under** 42 USC 300g-1, or (c) if there is not national secondary  
7 drinking water regulation for a contaminant, the concentration  
8 determined by the department according to methods approved by the  
9 United States ~~environmental protection agency~~**Environmental**  
10 **Protection Agency** below which taste, odor, appearance, or other  
11 aesthetic characteristics are not adversely affected, the cleanup  
12 criterion shall be the more stringent of (a), (b), or (c) unless  
13 the department determines that compliance with this subsection is  
14 ~~not necessary because the use of the aquifer is reliably restricted~~  
15 ~~or controlled under provisions of a postclosure plan or a~~  
16 ~~postclosure agreement or by site-specific criteria approved by the~~  
17 ~~department under section 20120b.~~**technically infeasible, in which**  
18 **case the cleanup criterion shall be the most stringent criterion**  
19 **that is technically feasible.**

20 (6) The department shall not approve a remedial action plan or  
21 no further action report in categories set forth in subsection  
22 (1)(b) to (d), unless the person documents that the current zoning  
23 of the property is consistent with the categorical criteria being  
24 proposed, or that the governing zoning authority intends to change  
25 the zoning designation so that the proposed criteria are consistent  
26 with the new zoning designation, or the current property use is a  
27 legal nonconforming use. The department shall not grant final  
28 approval for a remedial action plan or no further action report  
29 that relies on a change in zoning designation until a final



1 determination of that zoning change has been made by the local unit  
2 of government. The department may approve of a remedial action plan  
3 or no further action report that achieves categorical criteria that  
4 are based on greater exposure potential than the criteria  
5 applicable to current zoning. In addition, the remedial action plan  
6 or no further action report shall include documentation that the  
7 current property use is consistent with the current zoning or is a  
8 legal nonconforming use. Abandoned or inactive property shall be  
9 considered on the basis of zoning classifications as described  
10 above.

11 (7) Cleanup criteria from 1 or more categories in subsection  
12 (1) may be applied at a facility, if all relevant requirements are  
13 satisfied for application of a pertinent criterion.

14 (8) The need for soil remediation to protect an aquifer from  
15 hazardous substances in soil shall consider the vulnerability of  
16 the aquifer or aquifers potentially affected if the soil remains at  
17 the facility. Migration of hazardous substances in soil to an  
18 aquifer is a pertinent pathway if appropriate based on  
19 consideration of site specific factors.

20 (9) The department may establish cleanup criteria for a  
21 hazardous substance using a biologically based model developed or  
22 identified as appropriate by the United States ~~environmental~~  
23 ~~protection agency~~ **Environmental Protection Agency** if the department  
24 determines all of the following:

25 (a) That application of the model results in a criterion that  
26 more accurately reflects the risk posed.

27 (b) That data of sufficient quantity and quality are available  
28 for a specified hazardous substance to allow the scientifically  
29 valid application of the model.





1 (c) The United States ~~environmental protection agency~~  
2 **Environmental Protection Agency** has determined that application of  
3 the model is appropriate for the hazardous substance in question.

4 (10) If the target detection limit or the background  
5 concentration for a hazardous substance is greater than a cleanup  
6 criterion developed for a category ~~pursuant to~~ **under** subsection  
7 (1), the criterion shall be the target detection limit or  
8 background concentration, whichever is larger, for that hazardous  
9 substance in that category.

10 (11) The department may also approve cleanup criteria if  
11 necessary to address conditions that prevent a hazardous substance  
12 from being reliably measured at levels that are consistently  
13 achievable in samples from the facility in order to allow for  
14 comparison with generic cleanup criteria. A person seeking approval  
15 of a criterion under this subsection shall document the basis for  
16 determining that the relevant published target detection limit  
17 cannot be achieved in samples from the facility.

18 (12) In determining the adequacy of a land-use based response  
19 activity to address sites contaminated by polychlorinated  
20 biphenyls, the department shall not require response activity in  
21 addition to that which is subject to and complies with applicable  
22 federal regulations and policies that implement the toxic  
23 substances control act, 15 USC 2601 to ~~2692~~ **2697**.

24 (13) Remedial action to address the release of uncontaminated  
25 mineral oil satisfies cleanup criteria under this part for  
26 groundwater or for soil if all visible traces of mineral oil are  
27 removed from groundwater and soil.

28 (14) Approval by the department of remedial action based on  
29 the categorical standard in subsection (1) (a) or (b) shall be



1 granted only if the pertinent criteria are satisfied in the  
2 affected media. The department shall approve the use of  
3 probabilistic or statistical methods or other scientific methods of  
4 evaluating environmental data when determining compliance with a  
5 pertinent cleanup criterion if the methods are determined by the  
6 department to be reliable, **be** scientifically valid, and best  
7 represent actual site conditions and exposure potential.

8 (15) If a discharge of venting groundwater complies with this  
9 part, a permit for the discharge is not required.

10 (16) Remedial actions that rely on categorical cleanup  
11 criteria developed ~~pursuant to~~ **under** subsection (1) shall also  
12 consider other factors necessary to protect the public health,  
13 safety, and welfare, and the environment as specified by the  
14 department, if the department determines based on data and existing  
15 information that such considerations are relevant to a specific  
16 facility. These factors include, but are not limited to, the  
17 protection of surface water quality and consideration of ecological  
18 risks if pertinent to the facility based on the requirements of  
19 this part.

20 (17) Not later than December 31, 2013, the department shall  
21 evaluate and revise the cleanup criteria derived under this  
22 section. The evaluation and any revisions ~~shall~~ **must** incorporate  
23 knowledge gained through research and studies in the areas of fate  
24 and transport and risk assessment and ~~shall~~ **must** take into account  
25 best practices from other states, reasonable and realistic  
26 conditions, and sound science. Following this revision, the  
27 department ~~shall~~ **must** periodically evaluate whether new information  
28 is available regarding the cleanup criteria and ~~shall~~ **must** make  
29 revisions as appropriate. The department shall prepare and submit



1 to the legislature a report detailing any revisions made to cleanup  
2 criteria under this section.

3 (18) A person demonstrates compliance with indoor air  
4 inhalation criteria for a hazardous substance at a facility under  
5 this part if all of the following conditions are met:

6 (a) The facility is an establishment covered by the  
7 classifications provided by sector 31-33 - manufacturing, of the  
8 North American ~~industry classification system~~, **Industry**  
9 **Classification System**, United States, ~~2012~~, **2017**, published by the  
10 ~~office of management and budget~~. **Office of Management and Budget**.

11 (b) The person complies with the Michigan occupational safety  
12 and health act, 1974 PA 154, MCL 408.1001 to 408.1094, and the  
13 rules promulgated under that act applicable to the exposure to the  
14 hazardous substance, including, but not limited to, the  
15 occupational health standards, ~~for part 301~~, air contaminants **for**  
16 **general industry**, R 325.51101 to R 325.51108 of the Michigan  
17 ~~administrative code~~. **Administrative Code**.

18 (c) The hazardous substance is included in the facility's  
19 hazard communication program under section 14a of the Michigan  
20 occupational safety and health act, 1974 PA 154, MCL 408.1014a, and  
21 the **occupational health standards, part 430**, hazard communication,  
22 ~~rules~~, R 325.77001 to R 325.77004 of the Michigan ~~administrative~~  
23 ~~code~~, **Administrative Code**, except that unless the hazardous  
24 substance is in use in the facility, the requirement to have a  
25 material safety data sheet in the workplace requires only a generic  
26 material safety data sheet for the hazardous substance and the  
27 labeling requirements do not apply.

28 (19) The department shall make available the algorithms used  
29 to calculate all residential and nonresidential generic cleanup



1 criteria, and tables listing, by hazardous substance, all toxicity,  
2 exposure, and other algorithm factors or variables used in the  
3 department's calculations.

4 Sec. 20120b. (1) The department shall approve numeric or  
5 nonnumeric site-specific criteria in a response activity under  
6 section 20120a if such criteria, in comparison to generic criteria,  
7 better reflect best available information concerning the toxicity  
8 or exposure risk posed by the hazardous substance or other factors.

9 (2) Site-specific criteria approved under subsection (1) may,  
10 as appropriate:

11 (a) Use the algorithms for calculating generic criteria  
12 established by rule or propose and use different algorithms.

13 (b) Alter any value, parameter, or assumption used to  
14 calculate generic criteria, with the exception of the risk targets  
15 specified in section 20120a(4).

16 (c) Take into consideration the depth below the ground surface  
17 of contamination, which may reduce the potential for exposure and  
18 serve as an exposure barrier.

19 (d) Be based on information related to the specific facility  
20 or information of general applicability, including peer-reviewed  
21 scientific literature.

22 (e) Use probabilistic methods of calculation.

23 (f) Use nonlinear-threshold-based calculations where  
24 scientifically justified.

25 ~~(g) Take into account a land use or resource use restriction.~~

26 (3) If there is not a generic cleanup criterion for a  
27 hazardous substance in regard to a relevant exposure pathway,  
28 releases of the hazardous substance may be addressed through any of  
29 the following means, singly or in combination:



1 (a) Eliminate exposure to the hazardous substance through  
2 removal, containment, exposure barriers, or land use or resource  
3 use restrictions.

4 (b) If another hazardous substance is expected to have similar  
5 fate, mobility, bioaccumulation, and toxicity characteristics,  
6 apply the cleanup criteria for that hazardous substance as a  
7 surrogate. Before using a surrogate, the person shall notify the  
8 department, provide a written explanation why the surrogate is  
9 suitable, and request approval. If the department does not notify  
10 the person that it disapproves the use of the chosen surrogate  
11 within 90 days after receipt of the notice, the surrogate is  
12 considered approved. A hazardous substance may be used as a  
13 surrogate for a single hazardous substance or for a class or  
14 category of hazardous substances.

15 (c) For venting groundwater, use ~~a modeling~~ **an ecological**  
16 demonstration, ~~an ecological~~ **a modeling** demonstration, or a  
17 combination of both, consistent with section 20120e(9) and (10), to  
18 demonstrate that the hazardous substance is not likely to migrate  
19 to a surface water body or has not or will not impair the existing  
20 or designated uses for a surface water body.

21 (d) If toxicity information is available for the hazardous  
22 substance, develop site-specific cleanup criteria for the hazardous  
23 substance ~~pursuant to~~ **under** subsections (1) and (2), or develop  
24 simplified site-specific screening criteria based upon toxicity and  
25 concentrations found on site, and request department approval. If  
26 the department does not notify the person that it disapproves the  
27 site-specific criteria or screening criteria within 90 days after  
28 receipt of the request, the criteria are considered approved.

29 (e) Any other method approved by the department.



1           Sec. 20120e. (1) Subject to other requirements of this  
 2 section, a person may demonstrate compliance with requirements  
 3 under this part for a response activity providing for venting  
 4 groundwater by meeting any of the following, singly or in  
 5 combination:

6           (a) Generic GSI criteria, which are the water quality  
 7 standards for surface waters developed by the department ~~pursuant~~  
 8 ~~to~~~~under~~ part 31. The use of surface water quality standards or  
 9 variances ~~shall be~~~~is~~ allowable in any of the cleanup categories  
 10 provided for in section 20120a(1).

11           (b) A variance from the surface water quality standards as  
 12 approved by the department under part 31. A variance shall be used  
 13 only if the variance is requested by a person performing response  
 14 activities with respect to venting groundwater.

15           (c) Mixing zone-based GSI criteria established under this  
 16 part, which are consistent with part 31. The use of mixing zone-  
 17 based GSI criteria ~~shall be~~~~are~~ allowable in any of the categories  
 18 provided for in section 20120a(1) and (2) and ~~shall be~~~~are~~  
 19 allowable for criteria based on chronic-based or acute-based  
 20 surface water quality criteria.

21           (d) Site-specific criteria established under section 20120b or  
 22 this subdivision or a combination of both. The use of mixing zones  
 23 established under this part may be applied to, or included as,  
 24 site-specific criteria. Biological criteria may be used as site-  
 25 specific criteria. If biological criteria are used, then sentinel  
 26 wells ~~shall~~~~must~~ be used for a period as needed to determine if the  
 27 biological criteria may be exceeded due to future increased mass  
 28 loading to the surface water from the venting plume. Numerical  
 29 evaluations of analyses of the samples from the sentinel wells



1 ~~shall~~**must** be performed in connection with this determination.

2 (e) An ecological demonstration under subsection (9).

3 (f) A modeling demonstration under subsection (10).

4 (2) Whole effluent toxicity testing shall not be required or  
5 be a criterion or be the basis for any criteria under subsection  
6 (1) for venting groundwater except for samples taken at the GSI.

7 (3) The pathway addressed by GSI criteria under subsection (1)  
8 shall be considered a relevant pathway when a remedial  
9 investigation or application of best professional judgment leads to  
10 the conclusion that a hazardous substance in groundwater is  
11 reasonably expected to vent to surface water in concentrations that  
12 exceed the generic GSI criteria. The factors to be considered in  
13 determining whether the pathway is relevant include all of the  
14 following:

15 (a) Whether there is a hydraulic connection between  
16 groundwater and the surface water in question.

17 (b) The proximity of surface water to source areas and areas  
18 of the groundwater contaminant plume that currently, or may in the  
19 future be expected to, exceed the generic GSI criteria.

20 (c) Subject to subsection (23)(g), whether the receiving  
21 surface water is a surface water of the state as that term is  
22 defined in ~~part 31~~**section 3101** and rules promulgated under ~~that~~  
23 **part 31**.

24 (d) The direction of groundwater movement.

25 (e) The presence of artificial structures or natural features  
26 that would alter hydraulic pathways. This includes, but is not  
27 limited to, highly permeable zones, utility corridors, and  
28 seawalls.

29 (f) The mass of hazardous substances present at the facility



1 that may affect groundwater.

2 (g) Documented facility-specific evidence of natural  
3 attenuation, if any.

4 (h) Whether ~~or not~~ a sewer that has an outfall to surface  
5 water has openings in the portion of the sewer where the sewer and  
6 the groundwater contaminant plume intersect that allows the  
7 groundwater contaminant plume to migrate into the sewer. If it can  
8 be demonstrated that the sewer is sufficiently tight to prevent  
9 inflow to the sewer where the groundwater contaminant plume  
10 intersects the sewer or if the sewer is otherwise impervious, based  
11 on accepted industry standards, to prevent inflow from groundwater  
12 into the sewer at that location, then the GSI pathway with respect  
13 to the sewer is not relevant and shall not apply.

14 (4) For purposes of determining the relevance of a pathway  
15 under subsection (3), both of the following apply:

16 (a) GSI monitoring wells are not required in order to make a  
17 determination if other information is sufficient to make a judgment  
18 that the pathway is not relevant.

19 (b) Fate and transport modeling may be used, if appropriate,  
20 to support a professional judgment.

21 (5) A person may proceed under section 20114a to undertake the  
22 following response activities involving venting groundwater:

23 (a) Evaluation activities associated with a response activity  
24 providing for venting groundwater using alternative monitoring  
25 points, an ecological demonstration, a modeling demonstration, or  
26 any combination of these. If a person who is liable under section  
27 20126 decides not to take additional response activities to address  
28 the GSI pathway based on alternative monitoring points, an  
29 ecological demonstration, a modeling demonstration, or a





1 determination under subsection (14), or any combination of these,  
2 the person shall notify the department and request department  
3 approval. A notification and request for approval under this  
4 subdivision shall not be considered an admission of liability under  
5 section 20126.

6 (b) Response activities that rely on GSI monitoring wells to  
7 demonstrate compliance under subsection (1)(a).

8 (c) ~~Except~~ **Subject to subdivision (a) and except** as provided  
9 in ~~subdivision (a) and~~ subsection (6), response activities that  
10 rely on monitoring from alternative monitoring points to  
11 demonstrate compliance with subsection (1)(a) if the person submits  
12 to the department a notice of alternative monitoring points at  
13 least 30 days ~~prior to~~ **before** relying on those alternative  
14 monitoring points that contains substantiating evidence that the  
15 alternative monitoring points comply with this section.

16 (d) Response activities implemented by a person who is not  
17 liable under section 20126 that rely on a modeling demonstration,  
18 or rely on an ecological demonstration, or a combination of these,  
19 to demonstrate compliance with subsection (1)(a).

20 (6) A person shall proceed under section 20114b to undertake  
21 response activities that rely on monitoring from alternative  
22 monitoring points or rely on an ecological demonstration, a  
23 modeling demonstration, or a combination of these, to demonstrate  
24 compliance with subsection (1)(a) if 1 or more of the following  
25 conditions apply to the venting groundwater:

26 (a) An applicable criterion is based on acute toxicity  
27 endpoints.

28 (b) The venting groundwater contains a bioaccumulative  
29 chemical of concern as identified in the water quality standards



1 for surface waters developed ~~pursuant to~~**under** part 31 and for  
2 which the person is liable under this part.

3 (c) The venting groundwater is entering a surface water body  
4 protected for coldwater fisheries identified in the following  
5 publications:

6 (i) "Coldwater Lakes of Michigan," as published in 1976 by the  
7 department of natural resources.

8 (ii) "Designated Trout Lakes and Regulations," issued September  
9 10, 1998, by the director of the department of natural resources  
10 under the authority of part 411.

11 (iii) "Designated Trout Streams for the State of Michigan," as  
12 issued under order of the director of the department of natural  
13 resources, FO-210.08, on November 8, 2007.

14 (d) The venting groundwater is entering a surface water body  
15 designated as an outstanding state resource water or outstanding  
16 international resource water as identified in the water quality  
17 standards for surface waters developed pursuant to part 31.

18 (7) A person shall proceed under section 20114b to undertake  
19 response activities that rely on monitoring from alternative  
20 monitoring points, or rely on an ecological demonstration, or rely  
21 on a modeling demonstration or that use mixing zone-based GSI  
22 criteria, or any combination of these, as applicable, to  
23 demonstrate compliance with subsection (1)(b), (c), (d), (e), or  
24 (f).

25 (8) Alternative monitoring points may be used to demonstrate  
26 compliance with subsection (1) if the alternative monitoring points  
27 meet the following standards:

28 (a) The locations where venting groundwater enters surface  
29 water have been reasonably identified to allow monitoring for the



1 evaluation of compliance with criteria. This identification shall  
2 include all of the following:

3 (i) Identification of the location of alternative monitoring  
4 points within areas of venting groundwater.

5 (ii) Documentation of the approximate boundaries of the areas  
6 where the groundwater plume vents to surface water. This  
7 documentation ~~shall~~**must** include information about the substrate  
8 character and geology in the areas where groundwater vents to  
9 surface water.

10 (iii) Documentation that the venting area identified and  
11 alternative monitoring points include points that are reasonably  
12 representative of the higher concentrations of hazardous substances  
13 present in the groundwater at the GSI.

14 (b) The alternative monitoring points allow for venting  
15 groundwater to be sampled at the GSI. Devices used for sampling at  
16 alternative monitoring points may be beyond the water's edge and on  
17 top of or into the sediments, at the GSI.

18 (c) Sentinel monitoring points are used in conjunction with  
19 the alternative monitoring points for a period as needed to ~~assure~~  
20 **ensure** that any potential exceedance of an applicable surface water  
21 quality standard can be identified with sufficient notice to allow  
22 additional response activity, if needed, to be implemented that  
23 will address the exceedance. Sentinel monitoring points ~~shall~~**must**  
24 include, at a minimum, monitoring points upland of the surface  
25 water body.

26 (9) An ecological demonstration may be used to demonstrate  
27 compliance with subsection (1) if the ecological demonstration  
28 meets the following:

29 (a) The boundaries of the area where the groundwater plume



1 vents to surface water are documented as provided in subsection  
2 (8) (a) (ii) .

3 (b) Sampling data for the area described in subdivision (a),  
4 when compared to other reasonably proximate areas of that surface  
5 water body, do not show an impairment of existing or designated  
6 uses for that surface water body caused by, or contributed to by,  
7 the venting plume, or do not show that the venting plume will  
8 cause, or contribute, to impairment of existing or designated uses  
9 of that surface water body in a situation where the area of the  
10 surface water immediately outside the venting area of the venting  
11 plume shows an impairment of existing or designated uses.

12 (c) Sampling data for the area described in subdivision (a) do  
13 not show exceedances of applicable criteria under subsection (1) in  
14 the surface water body caused by, or contributed to by, the venting  
15 plume.

16 (d) The sampling data in subdivisions (b) and (c) may be data  
17 on benthic organisms, fish, and the water column of the surface  
18 water, which data may be in the form of an in situ bioassay or a  
19 biological community assessment.

20 (e) Sentinel monitoring in on-land wells is performed for a  
21 period as needed to show that the groundwater plume is not likely  
22 to migrate to the surface water body and vent in the future in a  
23 mass amount and rate that would impair the existing or designated  
24 uses for that surface water body, or cause or contribute to  
25 exceedances of surface water quality standards in the surface water  
26 body.

27 (10) A modeling demonstration may be used to demonstrate  
28 compliance with subsection (1) if the modeling demonstration meets  
29 all of the following:



1 (a) The modeling methodology is generally recognized as a  
2 means to model venting groundwater plumes or is an innovative  
3 method that is scientifically justifiable.

4 (b) The results of the modeling show that the venting plume at  
5 the GSI complies with the applicable criteria under subsection (1)  
6 or supports the ecological demonstration, as applicable.

7 (c) The model is supported by site-specific information and  
8 appropriate field measurements.

9 (11) If alternative monitoring points or an ecological  
10 demonstration or a modeling demonstration or a combination of these  
11 is used for the response activity and sentinel wells are installed,  
12 a contingency plan for potential additional response activity may  
13 be required.

14 (12) If a person intends to utilize mixing zone-based GSI  
15 criteria under subsection (1)(c) or site-specific criteria under  
16 subsection (1)(d) in conjunction with alternative monitoring  
17 points, an ecological demonstration, or a modeling demonstration,  
18 or a combination of these, the person shall submit to the  
19 department a response activity plan that includes the following:

20 (a) A demonstration of compliance with the standards in  
21 subsection (6), (7), or (8), as applicable.

22 (b) If compliance with a mixing zone-based groundwater-surface  
23 water interface criterion under subsection (1)(c) is to be  
24 determined with data from the alternative monitoring points,  
25 documentation that it is possible to reasonably estimate the volume  
26 and rate of venting groundwater.

27 (c) A site-specific monitoring plan that takes into account  
28 the basis for the site-specific criterion or mixing zone criterion.

29 (13) If there is an exceedance of an applicable GSI criterion



1 based on acute toxicity at a compliance monitoring point applicable  
 2 at a particular facility, then action shall be taken as follows:

3 (a) A person that is implementing the response activity at  
 4 that facility and that determines that there is an exceedance shall  
 5 notify the department of that condition within 7 days of ~~obtaining~~  
 6 ~~knowledge~~**-discovering** that the exceedance is occurring.

7 (b) If the person described in subdivision (a) is a person  
 8 liable under section 20126, then that person shall, within 30 days  
 9 of the date on which notice is required under subdivision (a), do 1  
 10 or more of the following:

11 (i) Commence response activity to address the exceedance at the  
 12 applicable compliance monitoring point and submit a schedule to the  
 13 department for the response activity.

14 (ii) Submit a notice of intent to the department to propose an  
 15 alternative monitoring point or perform an ecological demonstration  
 16 or perform a modeling demonstration or a combination of these. The  
 17 notice shall include a schedule for submission of the proposal.

18 (iii) Submit a notice of intent to the department to propose a  
 19 site-specific criterion or a mixing zone criterion under sections  
 20 20120a and 20120b. The notice ~~shall~~**-must** include a schedule for  
 21 submission of the proposal.

22 (c) The department may approve a schedule as submitted under  
 23 subdivision (b) or ~~direct~~**-require** reasonable modifications in the  
 24 schedule. The department may grant extensions of time for actions  
 25 required under subdivision (b) and for activities in an approved or  
 26 department-modified schedule if the person is acting in good faith  
 27 and site conditions inhibit progress or completion of the activity.  
 28 The department's decision to grant an extension or impose a  
 29 schedule modification ~~shall~~**-must** consider the practical problems



1 associated with carrying out the response activity and the nature  
2 and extent of the exceedances of applicable GSI criteria.

3 (14) Response activity beyond evaluations shall not be  
4 required if venting groundwater has no effect or only a de minimis  
5 effect on a surface water body. A determination under this  
6 subsection may be based on mass flow and rate of groundwater  
7 movement calculations. A person evaluating a venting plume that  
8 determines that the plume has no effect or only a de minimis effect  
9 on a surface water body shall notify the department of the  
10 determination. The department may, within 90 days after receipt of  
11 the determination, disapprove the determination. If the department  
12 does not notify the person that it disapproves the determination  
13 within the 90-day period, then the person's determination ~~shall be~~  
14 **is** final.

15 (15) If a person has controlled the source of groundwater  
16 contamination and has demonstrated that compliance with GSI  
17 criteria developed under this part is unachievable, that person may  
18 file a technical impracticability waiver request with the  
19 department. The technical impracticability waiver shall document  
20 the reasons why compliance is unachievable. The department shall  
21 respond to the waiver within 180 days with an approval, request for  
22 additional information, or denial that provides a detailed  
23 description of the reasons for denial.

24 (16) Natural attenuation of hazardous substances in venting  
25 groundwater upgradient of the GSI is an acceptable form of  
26 remediation and may be relied upon in lieu of any active  
27 remediation of the groundwater. Natural attenuation may be  
28 occurring by way of ~~dispersion, diffusion, sorption,~~ degradation,  
29 transformative reactions, and other methods. **Natural attenuation**



1 **may occur by dispersion or diffusion if it is technically**  
 2 **infeasible to prevent the dispersion or diffusion.**

3 (17) A permit ~~shall~~**is** not ~~be~~ required under part 31 for any  
 4 venting groundwater contamination plume that is addressed under  
 5 this section.

6 (18) Wetlands shall be protected for the groundwater surface  
 7 water pathway to the extent that particular designated uses, as  
 8 defined by part 31, ~~which~~**that** are specific to that wetland would  
 9 otherwise be impaired by a groundwater contamination plume venting  
 10 to surface water in the wetland.

11 (19) If a groundwater contamination plume is entering a sewer  
 12 that discharges to surface water, and the GSI pathway is relevant,  
 13 all of the following apply:

14 (a) If the groundwater enters a storm sewer that is owned or  
 15 operated by an entity that is subject to federal municipal separate  
 16 storm sewer system regulations and a part 31 permit for the  
 17 discharges from the system, the contaminated groundwater entering  
 18 the sewer is subject to regulation by the entity's ordinance  
 19 regarding illicit discharges, but the regulation of the  
 20 contaminated groundwater ~~shall~~**does** not prevent the use of  
 21 subdivision (b) or other provisions of this section to determine  
 22 the need for response activity under this part.

23 (b) All of the following apply:

24 (i) The compliance monitoring point may be a groundwater  
 25 monitoring well, if proposed by the person performing the response  
 26 action, or that person may choose another point for measuring  
 27 compliance under this subparagraph.

28 (ii) A mixing zone may be applied that accounts for the mixing  
 29 ~~which~~**that** occurs in the receiving surface water into which the





1 sewer system discharges.

2 (iii) Attenuation that occurs in the sewer system ~~prior to~~  
3 **before** the sewer system outfall to surface water shall be  
4 considered.

5 (iv) The compliance point is at the sewer system outfall to  
6 surface water, which shall account for any applicable mixing zone  
7 for the sewer system outfall.

8 (v) Monitoring to determine compliance may be performed at a  
9 location where the contaminated groundwater enters the sewer or  
10 downstream from that location but upstream of the sewer outfall at  
11 the surface water, if practicable and representative. Appropriate  
12 back calculation from the compliance point to the monitoring point  
13 may be applied to account for mixing and other attenuation that  
14 occurs in the sewer system before the compliance point. As  
15 appropriate, ~~such a~~ monitoring point **described in this subparagraph**  
16 may require another monitoring point in the sewer system upstream  
17 from the area where the contaminated groundwater enters the sewer.  
18 Upstream sampling in the sewer may be performed to determine source  
19 contribution.

20 (vi) The contaminant mass flow, and the rate and amount of  
21 groundwater flow, into the sewer may be considered and may result  
22 in a determination that the migration into the sewer is de minimis  
23 and does not require any response activity in addition to the  
24 evaluation that leads to such determination.

25 (c) Factors in subdivision (b) may be considered and applied  
26 to determine if an illicit discharge is occurring and how to  
27 regulate the discharge.

28 (20) If the department denies a response activity plan  
29 containing a proposal for alternative monitoring points, an



1 ecological demonstration, or a modeling demonstration, or a  
2 combination of these, the department ~~shall~~**must** state the reasons  
3 for denial, including the scientific and technical basis for the  
4 denial. A person may appeal a decision of the department in a  
5 response activity plan or no further action report regarding  
6 venting groundwater as a scientific or technical dispute under  
7 section 20114e.

8 (21) This section is intended to allow a person to demonstrate  
9 compliance with requirements under this part for a response  
10 activity involving venting groundwater, and, for this purpose, this  
11 section ~~shall be given retroactive application and shall be~~**applies**  
12 **retroactively and is** available for use by such person. A person  
13 performing response activity involving venting groundwater under  
14 any judgment, consent judgment, order, consent order, or agreement  
15 that was entered ~~prior to the effective date of the 2012 amendatory~~  
16 ~~act that amended this section~~**before June 20, 2012** may pursue,  
17 alter, or terminate such response activity based on any provision  
18 of this section subject to any necessary entry or approval by the  
19 court in a case of a judgment, consent judgment, or court order or  
20 any necessary amendment procedure to amend an agreement. The  
21 department shall not oppose use of any provision of this section as  
22 grounds to amend an agreement or for a court to modify or terminate  
23 response activity obligations involving venting groundwater under a  
24 judgment, consent judgment, or court order. A person performing  
25 response activity involving venting groundwater under any remedial  
26 action plan, interim response plan designed to meet criteria,  
27 interim response action plan, or response activity plan that was  
28 approved by the department ~~prior to the effective date of the 2012~~  
29 ~~amendatory act that amended this section~~**before June 20, 2012** may



1 submit an amended plan to the department for approval that pursues,  
2 alters, or terminates response activity based on any provision of  
3 this section. The department shall not oppose use of any provision  
4 of this section in approving an amended plan.

5 (22) A person that undertakes response activity under  
6 subsection ~~(4)~~-(5) or that takes action under subsection (13) (b)  
7 shall not be considered to be making an admission of liability by  
8 undertaking such response activities or taking such action.

9 (23) As used in this section:

10 (a) "Alternative monitoring points" means alternative  
11 monitoring points authorized under subsection (8).

12 (b) "Ecological demonstration" means an ecological  
13 demonstration authorized under subsection (1) (e).

14 (c) "GSI" means groundwater-surface water interface, which is  
15 the location at which groundwater enters surface water.

16 (d) "GSI monitoring well" means a vertical well installed in  
17 the saturated zone as close as practicable to surface water with a  
18 screened interval or intervals that are representative of the  
19 groundwater venting to the surface water.

20 (e) "Mixing zone-based GSI criteria" means mixing zone-based  
21 GSI criteria authorized under subsection (1) (c).

22 (f) "Modeling demonstration" means a modeling demonstration  
23 authorized under subsection (1) (f).

24 (g) "Surface water" does not include any of the following:

25 (i) Groundwater.

26 (ii) Hyporheic zone water.

27 (iii) Water in enclosed sewers.

28 (iv) Water in drainage ways and ponds used solely for  
29 wastewater or storm water conveyance, treatment, or control.



1 (v) Water in subgrade utility runs and utility lines and  
2 permeable fill in and around them.

3 Sec. 20121. (1) ~~A~~**If meeting the cleanup criteria for**  
4 **unrestricted residential use and restoring any affected aquifer to**  
5 **state drinking water standards as that term is defined in section 2**  
6 **of the safe drinking water act, 1976 PA 399, MCL 325.1002, is**  
7 **technically infeasible, a person may impose land or resource use**  
8 **restrictions ~~to~~for any of the following purposes:**

9 (a) **To** reduce or restrict exposure to hazardous substances. ~~τ~~  
10 ~~to~~

11 (b) **To** eliminate a potential exposure pathway. ~~τ~~~~to assure~~

12 (c) **To ensure** the effectiveness and integrity of containment  
13 or exposure barriers. ~~τ~~~~to~~

14 (d) **To** provide for access. ~~τ~~~~or to~~

15 (e) **To** otherwise ~~assure~~**ensure** the effectiveness and integrity  
16 of response activities undertaken at a property.

17 (2) A restrictive covenant used to impose land or resource use  
18 restrictions under subsection (1) shall, at a minimum, include all  
19 of the following:

20 (a) A legal description of the property that is subject to the  
21 restrictions that is sufficient to identify the property and is  
22 sufficient to record the document with the register of deeds for  
23 the county where the property is located. If the property being  
24 restricted constitutes a portion of a parcel, the restrictive  
25 covenant ~~shall~~**must** also include 1 of the following:

26 (i) A legal description and a scaled drawing of the portion  
27 that is restricted.

28 (ii) A survey of the portion that is restricted.

29 (iii) Another type of description or drawing approved by the



1 department.

2 (b) A brief narrative description of response activities and  
3 environmental contamination at the property or identify a publicly  
4 accessible information repository where that information may be  
5 obtained, such as a public library.

6 (c) A description of the activity and use limitations imposed  
7 on the property. The description should be drafted, to the extent  
8 practicable, using plain, everyday language in an effort to make  
9 the activity and use limitations understandable to the reader  
10 without having to reference statutory or regulatory text or  
11 department guidance.

12 (d) A grant to the department of the ability to enforce the  
13 restrictive covenant by legal action in a court of appropriate  
14 jurisdiction.

15 (e) A signature of the property owner or someone with the  
16 express written consent of the property owner unless the  
17 restrictive covenant has been ordered by a court of competent  
18 jurisdiction. For condominium common elements and similar commonly  
19 owned property, the restrictive covenant may be signed by an  
20 authorized person.

21 (3) In addition to the requirements of subsection (2), a  
22 restrictive covenant may contain other information, restrictions,  
23 requirements, and rights agreed to by the persons signing it,  
24 including, but not limited to, 1 or more of the following:

25 (a) A provision requiring notice to the department or other  
26 persons upon transfer or before construction or changes in use that  
27 could affect environmental contamination or increase exposure at  
28 the property.

29 (b) A provision granting rights of access to the department or



1 other persons. These rights may include, but are not limited to,  
 2 the right to enter the property for the purpose of monitoring  
 3 compliance with the restrictive covenant, the right to take  
 4 samples, and the right to implement response activities.

5 (c) A provision subordinating a property interest that has  
 6 priority, if agreed to by the person that owns the superior  
 7 interest.

8 (d) A provision granting the right to enforce the restrictive  
 9 covenant to persons in addition to the department, including, but  
 10 not limited to, the local unit of government in which the property  
 11 is located or the United States ~~environmental protection~~  
 12 ~~agency.~~ **Environmental Protection Agency.**

13 (e) A provision obligating the owner of the land subject to  
 14 the restrictive covenant to inspect or maintain exposure barriers,  
 15 permanent markers, fences, or other aspects of the response action  
 16 or remedy.

17 (f) A provision limiting the restrictive covenant to a  
 18 specific duration, or terminating the restrictive covenant upon the  
 19 occurrence of a specific event or condition, such as the completion  
 20 of additional response activities that are approved by the  
 21 department.

22 (g) A provision providing notice of hazardous substances that  
 23 exceed aesthetic-based cleanup criteria.

24 (4) A restrictive covenant used to impose land or resource use  
 25 restrictions under this section shall be recorded with the register  
 26 of deeds for the county where the property is located.

27 (5) A restrictive covenant under this section that is recorded  
 28 under subsection (4) does both of the following:

29 (a) Runs with the land.



1 (b) Is perpetual unless, by its terms, it is limited to a  
 2 specific duration or is terminated by the occurrence of a specific  
 3 event.

4 (6) Upon recording, a copy of the restrictive covenant shall  
 5 be provided to the department together with a notice that includes  
 6 the street address or parcel number for the property or properties  
 7 subject to the covenant. A restrictive covenant that meets the  
 8 requirements of this section need not be approved by the department  
 9 except as expressly required elsewhere in this part.

10 (7) The following instruments may impose the land or resource  
 11 use restrictions described in subsection (1) if they meet the  
 12 requirements of a restrictive covenant under this section:

13 (a) A conservation easement.

14 (b) A court order or judicially approved settlement involving  
 15 the property.

16 (8) An institutional control may be used to impose the land or  
 17 resource use restrictions described in subsection (1) instead of or  
 18 in addition to a restrictive covenant. Institutional controls that  
 19 may be considered include, but are not limited to, local ordinances  
 20 or state laws and regulations that limit or prohibit the use of  
 21 contaminated groundwater, prohibit the raising of livestock,  
 22 prohibit development in certain locations, or restrict property to  
 23 certain uses, such as a zoning ordinance. A local ordinance that  
 24 serves as an institutional control under this section shall be  
 25 published and maintained in the same manner as a zoning ordinance  
 26 and shall include a requirement that the local unit of government  
 27 notify the department at least 30 days ~~prior to~~ **before** adopting a  
 28 modification to the ordinance or ~~prior to~~ **before** the lapsing or  
 29 revocation of the ordinance.



1 (9) Alternative instruments and means may be used, with  
 2 department approval, to impose the land or resource use  
 3 restrictions described in subsection (1), including, but not  
 4 limited to, licenses and license agreements, contracts with local,  
 5 state, or federal units of government, health codes or regulations,  
 6 or government permitting requirements.

7 (10) The department, with the approval of the state  
 8 administrative board, may place restrictive covenants described in  
 9 this section on deeds of state-owned property.

10 (11) A restrictive covenant recorded pursuant to this part,  
 11 whether recorded **on**, before, or after ~~the effective date of the~~  
 12 ~~amendatory act that added this section,~~ **January 15, 2015**, is valid  
 13 and enforceable even if 1 or more of the following situations  
 14 exist:

15 (a) It is not appurtenant to an interest in real property.

16 (b) The right to enforce it can be or has been assigned.

17 (c) It is not of a character that has been recognized  
 18 traditionally at common law.

19 (d) It imposes a negative burden.

20 (e) It imposes an affirmative obligation on a person having an  
 21 interest in the real property.

22 (f) The benefit or burden does not touch or concern real  
 23 property.

24 (g) There is no privity of estate or contract.

25 (h) The owner of the land subject to the restrictive covenant  
 26 and the person benefited or burdened are the same person.

27 (12) Restrictive covenants or other instruments that impose  
 28 land or resource use restrictions that were recorded before ~~the~~  
 29 ~~effective date of the amendatory act that added this section~~





1 **January 15, 2015** are not invalidated or made unenforceable by this  
2 section. Except as provided in subsection (11), this section only  
3 applies to a restrictive covenant or other instrument recorded  
4 after ~~the effective date of the amendatory act that added this~~  
5 ~~section.~~ **January 15, 2015**. This section does not invalidate or  
6 render unenforceable any instrument or interest that is otherwise  
7 enforceable under the law of this state.

8 Enacting section 1. This amendatory act takes effect 90 days  
9 after the date it is enacted into law.

