

HOUSE BILL No. 4123

January 31, 2017, Introduced by Reps. Rabhi, Chang, Hammoud, Zemke, Wittenberg, Elder, Lasinski, Jones, Robinson, Liberati, Chirkun, Pagan, Ellison, Lucido, Faris, Durhal, Peterson, Scott, Dianda, Sowerby, Neeley and Hoadley and referred to the Committee on Natural Resources.

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

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

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

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

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

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

9 (e) Remedial action may address contamination at a facility
10 through any combination of subdivisions (a) ~~through~~ **TO** (d).

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

13 (a) ~~Assure~~ **ENSURE** the protection of the public health, safety,
14 and welfare, and the environment with respect to the environmental
15 contamination addressed by the remedial action.

16 (b) Except as otherwise provided in subsections (4) and (5),
17 attain a degree of cleanup and control of the environmental
18 contamination addressed by the remedial action that **MEETS BOTH OF**
19 **THE FOLLOWING REQUIREMENTS:**

20 (i) **TO THE EXTENT TECHNICALLY FEASIBLE, MEETS THE CLEANUP**
21 **CRITERIA FOR UNRESTRICTED RESIDENTIAL USE AND RESTORES ANY AFFECTED**
22 **AQUIFER TO STATE DRINKING WATER STANDARDS AS THAT TERM IS DEFINED**
23 **IN SECTION 2 OF THE SAFE DRINKING WATER ACT, 1976 PA 399, MCL**
24 **325.1002.**

25 (ii) **OTHERWISE** complies with all applicable or relevant and
26 appropriate requirements, rules, criteria, limitations, and
27 standards of state and federal environmental law.

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

5 (4) The department may select or approve of a remedial action
6 meeting the criteria provided for in section 20120a that does not
7 attain a degree of control or cleanup of hazardous substances that
8 complies with R 299.3(5) or R 299.3(6) of the Michigan
9 ~~administrative code,~~ **ADMINISTRATIVE CODE**, or both, if the
10 department makes a finding that the **DEGREE OF CONTROL OR CLEANUP**
11 **THAT WILL BE ACHIEVED IS THE GREATEST TECHNICALLY FEASIBLE AND THAT**
12 **THE SELECTED OR APPROVED** remedial action is protective of the
13 public health, safety, and welfare, and the environment.
14 Notwithstanding any other provision of this subsection, the
15 department shall not approve of a remedial action that does not
16 attain a degree of control or cleanup of hazardous substances that
17 complies with R 299.3(5) or R 299.3(6) of the Michigan
18 ~~administrative code~~ **ADMINISTRATIVE CODE** if the remedial action is
19 being implemented by a person who is liable under section 20126 and
20 the release was grossly negligent or intentional, unless attaining
21 that degree of control is technically infeasible, or the adverse
22 environmental impact of implementing a remedial action to satisfy
23 the rule would exceed the environmental benefit of that remedial
24 action.

25 (5) A remedial action may be selected or approved pursuant to
26 subsection (4) with regard to R 299.3(5) or R 299.3(6), or both, of
27 the Michigan ~~administrative code,~~ **ADMINISTRATIVE CODE**, if the

1 department determines, based on the administrative record, that 1
2 or more of the following conditions are satisfied:

3 (a) Compliance with R 299.3(5) or R 299.3(6), or both, of the
4 Michigan ~~administrative code~~ **ADMINISTRATIVE CODE** is technically
5 ~~impractical~~. **INFEASIBLE**.

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

10 (c) The adverse environmental impact of implementing a
11 remedial action to satisfy R 299.3(5) or R 299.3(6), or both, of
12 the Michigan ~~administrative code~~ **ADMINISTRATIVE CODE** would exceed
13 the environmental benefit of the remedial action.

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

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

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

1 Sec. 20120a. (1) The department may establish cleanup criteria
2 and approve of remedial actions in the categories listed in this
3 subsection. The cleanup category proposed shall be ~~the option of~~
4 ~~the person proposing the remedial action, subject to department~~
5 ~~approval if required, considering the appropriateness of the~~
6 ~~categorical criteria to the facility.~~ **RESIDENTIAL, UNLESS THAT**
7 **CATEGORY IS TECHNICALLY INFEASIBLE, IN WHICH CASE THE CATEGORY**
8 **SHALL BE THE TECHNICALLY FEASIBLE CLEANUP CATEGORY WITH THE MOST**
9 **STRINGENT CLEANUP CRITERIA.** The categories are as follows:

10 (a) Residential.

11 (b) Nonresidential.

12 (c) Limited residential.

13 (d) Limited nonresidential.

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

24 (3) The department shall develop cleanup criteria pursuant to
25 subsection (1) based on generic human health risk assessment
26 assumptions determined by the department to appropriately
27 characterize patterns of human exposure associated with certain

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

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

1 of both cancer and 1 or more adverse health effects other than
2 cancer, cleanup criteria shall be derived under this section for
3 the most sensitive effect.

4 (5) If a cleanup criterion derived under subsection (4) for
5 groundwater in an aquifer differs from either: (a) the state
6 drinking water standards established pursuant to section 5 of the
7 safe drinking water act, 1976 PA 399, MCL 325.1005, or (b) the
8 national secondary drinking water regulations established pursuant
9 to 42 USC 300g-1, or (c) if there is not national secondary

10 drinking water regulation for a contaminant, the concentration
11 determined by the department according to methods approved by the
12 United States ~~environmental protection agency~~ **ENVIRONMENTAL**

13 **PROTECTION AGENCY** below which taste, odor, appearance, or other
14 aesthetic characteristics are not adversely affected, the cleanup
15 criterion shall be the more stringent of (a), (b), or (c) unless
16 the department determines that compliance with this subsection is
17 ~~not necessary because the use of the aquifer is reliably restricted~~
18 ~~or controlled under provisions of a postclosure plan or a~~
19 ~~postclosure agreement or by site-specific criteria approved by the~~
20 ~~department under section 20120b.~~ **TECHNICALLY INFEASIBLE, IN WHICH**

21 **CASE THE CLEANUP CRITERION SHALL BE THE MOST STRINGENT CRITERION**
22 **THAT IS TECHNICALLY FEASIBLE.**

23 (6) The department shall not approve a remedial action plan or
24 no further action report in categories set forth in subsection
25 (1)(b) to (d), unless the person documents that the current zoning
26 of the property is consistent with the categorical criteria being
27 proposed, or that the governing zoning authority intends to change

1 the zoning designation so that the proposed criteria are consistent
2 with the new zoning designation, or the current property use is a
3 legal nonconforming use. The department shall not grant final
4 approval for a remedial action plan or no further action report
5 that relies on a change in zoning designation until a final
6 determination of that zoning change has been made by the local unit
7 of government. The department may approve of a remedial action plan
8 or no further action report that achieves categorical criteria that
9 are based on greater exposure potential than the criteria
10 applicable to current zoning. In addition, the remedial action plan
11 or no further action report shall include documentation that the
12 current property use is consistent with the current zoning or is a
13 legal nonconforming use. Abandoned or inactive property shall be
14 considered on the basis of zoning classifications as described
15 above.

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

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

25 (9) The department may establish cleanup criteria for a
26 hazardous substance using a biologically based model developed or
27 identified as appropriate by the United States ~~environmental~~

1 ~~protection agency~~ **ENVIRONMENTAL PROTECTION AGENCY** if the department
2 determines all of the following:

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

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

8 (c) The United States ~~environmental protection agency~~
9 **ENVIRONMENTAL PROTECTION AGENCY** has determined that application of
10 the model is appropriate for the hazardous substance in question.

11 (10) If the target detection limit or the background
12 concentration for a hazardous substance is greater than a cleanup
13 criterion developed for a category pursuant to subsection (1), the
14 criterion shall be the target detection limit or background
15 concentration, whichever is larger, for that hazardous substance in
16 that category.

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

25 (12) In determining the adequacy of a land-use based response
26 activity to address sites contaminated by polychlorinated
27 biphenyls, the department shall not require response activity in

1 addition to that which is subject to and complies with applicable
2 federal regulations and policies that implement the toxic
3 substances control act, 15 USC 2601 to ~~2692-2697~~.

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

8 (14) Approval by the department of remedial action based on
9 the categorical standard in subsection (1)(a) or (b) shall be
10 granted only if the pertinent criteria are satisfied in the
11 affected media. The department shall approve the use of
12 probabilistic or statistical methods or other scientific methods of
13 evaluating environmental data when determining compliance with a
14 pertinent cleanup criterion if the methods are determined by the
15 department to be reliable, **BE** scientifically valid, and best
16 represent actual site conditions and exposure potential.

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

19 (16) Remedial actions that rely on categorical cleanup
20 criteria developed pursuant to subsection (1) shall also consider
21 other factors necessary to protect the public health, safety, and
22 welfare, and the environment as specified by the department, if the
23 department determines based on data and existing information that
24 such considerations are relevant to a specific facility. These
25 factors include, but are not limited to, the protection of surface
26 water quality and consideration of ecological risks if pertinent to
27 the facility based on the requirements of this part.

1 (17) Not later than December 31, 2013, the department shall
2 evaluate and revise the cleanup criteria derived under this
3 section. The evaluation and any revisions shall incorporate
4 knowledge gained through research and studies in the areas of fate
5 and transport and risk assessment and shall take into account best
6 practices from other states, reasonable and realistic conditions,
7 and sound science. Following this revision, the department shall
8 periodically evaluate whether new information is available
9 regarding the cleanup criteria and shall make revisions as
10 appropriate. The department shall prepare and submit to the
11 legislature a report detailing any revisions made to cleanup
12 criteria under this section.

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

16 (a) The facility is an establishment covered by the
17 classifications provided by sector 31-33 - manufacturing, of the
18 North American ~~industry classification system~~, **INDUSTRY**
19 **CLASSIFICATION SYSTEM**, United States, 2012, published by the ~~office~~
20 ~~of management and budget~~. **OFFICE OF MANAGEMENT AND BUDGET.**

21 (b) The person complies with the Michigan occupational safety
22 and health act, 1974 PA 154, MCL 408.1001 to 408.1094, and the
23 rules promulgated under that act applicable to the exposure to the
24 hazardous substance, including, but not limited to, the
25 occupational health standards, ~~for~~ **PART 301**, air contaminants **FOR**
26 **GENERAL INDUSTRY**, R 325.51101 to R 325.51108 of the Michigan
27 ~~administrative code~~. **ADMINISTRATIVE CODE.**

1 (c) The hazardous substance is included in the facility's
2 hazard communication program under section 14a of the Michigan
3 occupational safety and health act, 1974 PA 154, MCL 408.1014a, and
4 the **OCCUPATIONAL HEALTH STANDARDS, PART 430**, hazard communication,
5 ~~rules,~~ R 325.77001 to R 325.77004 of the Michigan ~~administrative~~
6 ~~code,~~ **ADMINISTRATIVE CODE**, except that unless the hazardous
7 substance is in use in the facility, the requirement to have a
8 material safety data sheet in the workplace requires only a generic
9 material safety data sheet for the hazardous substance and the
10 labeling requirements do not apply.

11 (19) The department shall make available the algorithms used
12 to calculate all residential and nonresidential generic cleanup
13 criteria, and tables listing, by hazardous substance, all toxicity,
14 exposure, and other algorithm factors or variables used in the
15 department's calculations.

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

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

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

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

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

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

7 (e) Use probabilistic methods of calculation.

8 (f) Use nonlinear-threshold-based calculations where
9 scientifically justified.

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

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

15 (a) Eliminate exposure to the hazardous substance through
16 removal, containment, exposure barriers, or land use or resource
17 use restrictions.

18 (b) If another hazardous substance is expected to have similar
19 fate, mobility, bioaccumulation, and toxicity characteristics,
20 apply the cleanup criteria for that hazardous substance as a
21 surrogate. Before using a surrogate, the person shall notify the
22 department, provide a written explanation why the surrogate is
23 suitable, and request approval. If the department does not notify
24 the person that it disapproves the use of the chosen surrogate
25 within 90 days after receipt of the notice, the surrogate is
26 considered approved. A hazardous substance may be used as a
27 surrogate for a single hazardous substance or for a class or

1 category of hazardous substances.

2 (c) For venting groundwater, use ~~a modeling~~ **AN ECOLOGICAL**
3 demonstration, ~~an ecological~~ **A MODELING** demonstration, or a
4 combination of both, consistent with section 20120e(9) and (10), to
5 demonstrate that the hazardous substance is not likely to migrate
6 to a surface water body or has not or will not impair the existing
7 or designated uses for a surface water body.

8 (d) If toxicity information is available for the hazardous
9 substance, develop site-specific cleanup criteria for the hazardous
10 substance pursuant to subsections (1) and (2), or develop
11 simplified site-specific screening criteria based upon toxicity and
12 concentrations found on site, and request department approval. If
13 the department does not notify the person that it disapproves the
14 site-specific criteria or screening criteria within 90 days after
15 receipt of the request, the criteria are considered approved.

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

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

22 (a) Generic GSI criteria, which are the water quality
23 standards for surface waters developed by the department pursuant
24 to part 31. The use of surface water quality standards or variances
25 ~~shall be~~ **IS** allowable in any of the cleanup categories provided for
26 in section 20120a(1).

27 (b) A variance from the surface water quality standards as

1 approved by the department under part 31. A variance shall be used
2 only if the variance is requested by a person performing response
3 activities with respect to venting groundwater.

4 (c) Mixing zone-based GSI criteria established under this
5 part, which are consistent with part 31. The use of mixing zone-
6 based GSI criteria ~~shall be~~ **ARE** allowable in any of the categories
7 provided for in section 20120a(1) and (2) and ~~shall be~~ **ARE**
8 allowable for criteria based on chronic-based or acute-based
9 surface water quality criteria.

10 (d) Site-specific criteria established under section 20120b or
11 this subdivision or a combination of both. The use of mixing zones
12 established under this part may be applied to, or included as,
13 site-specific criteria. Biological criteria may be used as site-
14 specific criteria. If biological criteria are used, then sentinel
15 wells shall be used for a period as needed to determine if the
16 biological criteria may be exceeded due to future increased mass
17 loading to the surface water from the venting plume. Numerical
18 evaluations of analyses of the samples from the sentinel wells
19 shall be performed in connection with this determination.

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

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

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

25 (3) The pathway addressed by GSI criteria under subsection (1)
26 shall be considered a relevant pathway when a remedial
27 investigation or application of best professional judgment leads to

1 the conclusion that a hazardous substance in groundwater is
2 reasonably expected to vent to surface water in concentrations that
3 exceed the generic GSI criteria. The factors to be considered in
4 determining whether the pathway is relevant include all of the
5 following:

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

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

11 (c) Subject to subsection (23)(g), whether the receiving
12 surface water is a surface water of the state as that term is
13 defined in ~~part 31~~ **SECTION 3101** and rules promulgated under ~~that~~
14 **part 31**.

15 (d) The direction of groundwater movement.

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

20 (f) The mass of hazardous substances present at the facility
21 that may affect groundwater.

22 (g) Documented facility-specific evidence of natural
23 attenuation, if any.

24 (h) Whether ~~or not~~ a sewer that has an outfall to surface
25 water has openings in the portion of the sewer where the sewer and
26 the groundwater contaminant plume intersect that allows the
27 groundwater contaminant plume to migrate into the sewer. If it can

1 be demonstrated that the sewer is sufficiently tight to prevent
2 inflow to the sewer where the groundwater contaminant plume
3 intersects the sewer or if the sewer is otherwise impervious, based
4 on accepted industry standards, to prevent inflow from groundwater
5 into the sewer at that location, then the GSI pathway with respect
6 to the sewer is not relevant and shall not apply.

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

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

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

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

16 (a) Evaluation activities associated with a response activity
17 providing for venting groundwater using alternative monitoring
18 points, an ecological demonstration, a modeling demonstration, or
19 any combination of these. If a person who is liable under section
20 20126 decides not to take additional response activities to address
21 the GSI pathway based on alternative monitoring points, an
22 ecological demonstration, a modeling demonstration, or a
23 determination under subsection (14), or any combination of these,
24 the person shall notify the department and request department
25 approval. A notification and request for approval under this
26 subdivision shall not be considered an admission of liability under
27 section 20126.

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

3 (c) ~~Except~~ **SUBJECT TO SUBDIVISION (A) AND EXCEPT** as provided
4 in ~~subdivision (a) and~~ subsection (6), response activities that
5 rely on monitoring from alternative monitoring points to
6 demonstrate compliance with subsection (1)(a) if the person submits
7 to the department a notice of alternative monitoring points at
8 least 30 days ~~prior to~~ **BEFORE** relying on those alternative
9 monitoring points that contains substantiating evidence that the
10 alternative monitoring points comply with this section.

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

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

21 (a) An applicable criterion is based on acute toxicity
22 endpoints.

23 (b) The venting groundwater contains a bioaccumulative
24 chemical of concern as identified in the water quality standards
25 for surface waters developed pursuant to part 31 and for which the
26 person is liable under this part.

27 (c) The venting groundwater is entering a surface water body

1 protected for coldwater fisheries identified in the following
2 publications:

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

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

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

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

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

22 (8) Alternative monitoring points may be used to demonstrate
23 compliance with subsection (1) if the alternative monitoring points
24 meet the following standards:

25 (a) The locations where venting groundwater enters surface
26 water have been reasonably identified to allow monitoring for the
27 evaluation of compliance with criteria. This identification shall

1 include all of the following:

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

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

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

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

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

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

1 (a) The boundaries of the area where the groundwater plume
2 vents to surface water are documented as provided in subsection
3 (8) (a) (ii) .

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

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

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

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

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

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

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

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

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

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

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

25 (b) If compliance with a mixing zone-based groundwater-surface
26 water interface criterion under subsection (1)(c) is to be
27 determined with data from the alternative monitoring points,

1 documentation that it is possible to reasonably estimate the volume
2 and rate of venting groundwater.

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

5 (13) If there is an exceedance of an applicable GSI criterion
6 based on acute toxicity at a compliance monitoring point applicable
7 at a particular facility, then action shall be taken as follows:

8 (a) A person that is implementing the response activity at
9 that facility and that determines that there is an exceedance shall
10 notify the department of that condition within 7 days of obtaining
11 knowledge that the exceedance is occurring.

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

16 (i) Commence response activity to address the exceedance at
17 the applicable compliance monitoring point and submit a schedule to
18 the department for the response activity.

19 (ii) Submit a notice of intent to the department to propose an
20 alternative monitoring point or perform an ecological demonstration
21 or perform a modeling demonstration or a combination of these. The
22 notice shall include a schedule for submission of the proposal.

23 (iii) Submit a notice of intent to the department to propose a
24 site-specific criterion or a mixing zone criterion under sections
25 20120a and 20120b. The notice shall include a schedule for
26 submission of the proposal.

27 (c) The department may approve a schedule as submitted under

1 subdivision (b) or ~~direct~~**REQUIRE** reasonable modifications in the
2 schedule. The department may grant extensions of time for actions
3 required under subdivision (b) and for activities in an approved or
4 department-modified schedule if the person is acting in good faith
5 and site conditions inhibit progress or completion of the activity.
6 The department's decision to grant an extension or impose a
7 schedule modification shall consider the practical problems
8 associated with carrying out the response activity and the nature
9 and extent of the exceedances of applicable GSI criteria.

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

22 (15) If a person has controlled the source of groundwater
23 contamination and has demonstrated that compliance with GSI
24 criteria developed under this part is unachievable, that person may
25 file a technical impracticability waiver request with the
26 department. The technical impracticability waiver shall document
27 the reasons why compliance is unachievable. The department shall

1 respond to the waiver within 180 days with an approval, request for
2 additional information, or denial that provides a detailed
3 description of the reasons for denial.

4 (16) Natural attenuation of hazardous substances in venting
5 groundwater upgradient of the GSI is an acceptable form of
6 remediation and may be relied upon in lieu of any active
7 remediation of the groundwater. Natural attenuation may be
8 occurring by way of ~~dispersion, diffusion, sorption,~~ degradation,
9 transformative reactions, and other methods. **NATURAL ATTENUATION**
10 **MAY OCCUR BY DISPERSION OR DIFFUSION IF IT IS TECHNICALLY**
11 **INFEASIBLE TO PREVENT THE DISPERSION OR DIFFUSION.**

12 (17) A permit ~~shall~~**IS** not ~~be~~ required under part 31 for any
13 venting groundwater contamination plume that is addressed under
14 this section.

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

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

23 (a) If the groundwater enters a storm sewer that is owned or
24 operated by an entity that is subject to federal municipal separate
25 storm sewer system regulations and a part 31 permit for the
26 discharges from the system, the contaminated groundwater entering
27 the sewer is subject to regulation by the entity's ordinance

1 regarding illicit discharges, but the regulation of the
2 contaminated groundwater ~~shall~~**DOES** not prevent the use of
3 subdivision (b) or other provisions of this section to determine
4 the need for response activity under this part.

5 (b) All of the following apply:

6 (i) The compliance monitoring point may be a groundwater
7 monitoring well, if proposed by the person performing the response
8 action, or that person may choose another point for measuring
9 compliance under this subparagraph.

10 (ii) A mixing zone may be applied that accounts for the mixing
11 ~~which~~**THAT** occurs in the receiving surface water into which the
12 sewer system discharges.

13 (iii) Attenuation that occurs in the sewer system ~~prior to~~
14 **BEFORE** the sewer system outfall to surface water shall be
15 considered.

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

19 (v) Monitoring to determine compliance may be performed at a
20 location where the contaminated groundwater enters the sewer or
21 downstream from that location but upstream of the sewer outfall at
22 the surface water, if practicable and representative. Appropriate
23 back calculation from the compliance point to the monitoring point
24 may be applied to account for mixing and other attenuation that
25 occurs in the sewer system before the compliance point. As
26 appropriate, such a monitoring point may require another monitoring
27 point in the sewer system upstream from the area where the

1 contaminated groundwater enters the sewer. Upstream sampling in the
2 sewer may be performed to determine source contribution.

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

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

11 (20) If the department denies a response activity plan
12 containing a proposal for alternative monitoring points, an
13 ecological demonstration, or a modeling demonstration, or a
14 combination of these, the department shall state the reasons for
15 denial, including the scientific and technical basis for the
16 denial. A person may appeal a decision of the department in a
17 response activity plan or no further action report regarding
18 venting groundwater as a scientific or technical dispute under
19 section 20114e.

20 (21) This section is intended to allow a person to demonstrate
21 compliance with requirements under this part for a response
22 activity involving venting groundwater, and, for this purpose, this
23 section ~~shall be given retroactive application and shall be~~ **APPLIES**
24 **RETROACTIVELY AND IS** available for use by such person. A person
25 performing response activity involving venting groundwater under
26 any judgment, consent judgment, order, consent order, or agreement
27 that was entered ~~prior to the effective date of the 2012 amendatory~~

1 ~~act that amended this section~~ **BEFORE JUNE 20, 2012** may pursue,
2 alter, or terminate such response activity based on any provision
3 of this section subject to any necessary entry or approval by the
4 court in a case of a judgment, consent judgment, or court order or
5 any necessary amendment procedure to amend an agreement. The
6 department shall not oppose use of any provision of this section as
7 grounds to amend an agreement or for a court to modify or terminate
8 response activity obligations involving venting groundwater under a
9 judgment, consent judgment, or court order. A person performing
10 response activity involving venting groundwater under any remedial
11 action plan, interim response plan designed to meet criteria,
12 interim response action plan, or response activity plan that was
13 approved by the department ~~prior to the effective date of the 2012~~
14 ~~amendatory act that amended this section~~ **BEFORE JUNE 20, 2012** may
15 submit an amended plan to the department for approval that pursues,
16 alters, or terminates response activity based on any provision of
17 this section. The department shall not oppose use of any provision
18 of this section in approving an amended plan.

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

23 (23) As used in this section:

24 (a) "Alternative monitoring points" means alternative
25 monitoring points authorized under subsection (8).

26 (b) "Ecological demonstration" means an ecological
27 demonstration authorized under subsection (1)(e).

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

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

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

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

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

(i) Groundwater.

(ii) Hyporheic zone water.

(iii) Water in enclosed sewers.

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

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

Sec. 20121. (1) ~~A~~ **IF MEETING THE CLEANUP CRITERIA FOR UNRESTRICTED RESIDENTIAL USE AND RESTORING ANY AFFECTED AQUIFER TO STATE DRINKING WATER STANDARDS AS THAT TERM IS DEFINED IN SECTION 2 OF THE SAFE DRINKING WATER ACT, 1976 PA 399, MCL 325.1002, IS TECHNICALLY INFEASIBLE, A person may impose land or resource use restrictions ~~to~~ FOR ANY OF THE FOLLOWING PURPOSES:**

(A) TO reduce or restrict exposure to hazardous substances. ~~to~~

(B) TO eliminate a potential exposure pathway. ~~to assure~~

1 (C) **TO ENSURE** the effectiveness and integrity of containment
2 or exposure barriers. ~~to~~

3 (D) **TO** provide for access. ~~or to~~

4 (E) **TO** otherwise ~~assure~~ **ENSURE** the effectiveness and integrity
5 of response activities undertaken at a property.

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

9 (a) A legal description of the property that is subject to the
10 restrictions that is sufficient to identify the property and is
11 sufficient to record the document with the register of deeds for
12 the county where the property is located. If the property being
13 restricted constitutes a portion of a parcel, the restrictive
14 covenant shall also include 1 of the following:

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

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

18 (iii) Another type of description or drawing approved by the
19 department.

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

24 (c) A description of the activity and use limitations imposed
25 on the property. The description should be drafted, to the extent
26 practicable, using plain, everyday language in an effort to make
27 the activity and use limitations understandable to the reader

1 without having to reference statutory or regulatory text or
2 department guidance.

3 (d) A grant to the department of the ability to enforce the
4 restrictive covenant by legal action in a court of appropriate
5 jurisdiction.

6 (e) A signature of the property owner or someone with the
7 express written consent of the property owner unless the
8 restrictive covenant has been ordered by a court of competent
9 jurisdiction. For condominium common elements and similar commonly
10 owned property, the restrictive covenant may be signed by an
11 authorized person.

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

16 (a) A provision requiring notice to the department or other
17 persons upon transfer or before construction or changes in use that
18 could affect environmental contamination or increase exposure at
19 the property.

20 (b) A provision granting rights of access to the department or
21 other persons. These rights may include, but are not limited to,
22 the right to enter the property for the purpose of monitoring
23 compliance with the restrictive covenant, the right to take
24 samples, and the right to implement response activities.

25 (c) A provision subordinating a property interest that has
26 priority, if agreed to by the person that owns the superior
27 interest.

1 (d) A provision granting the right to enforce the restrictive
2 covenant to persons in addition to the department, including, but
3 not limited to, the local unit of government in which the property
4 is located or the United States ~~environmental protection~~
5 ~~agency.~~ **ENVIRONMENTAL PROTECTION AGENCY.**

6 (e) A provision obligating the owner of the land subject to
7 the restrictive covenant to inspect or maintain exposure barriers,
8 permanent markers, fences, or other aspects of the response action
9 or remedy.

10 (f) A provision limiting the restrictive covenant to a
11 specific duration, or terminating the restrictive covenant upon the
12 occurrence of a specific event or condition, such as the completion
13 of additional response activities that are approved by the
14 department.

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

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

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

22 (a) Runs with the land.

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

26 (6) Upon recording, a copy of the restrictive covenant shall
27 be provided to the department together with a notice that includes

1 the street address or parcel number for the property or properties
2 subject to the covenant. A restrictive covenant that meets the
3 requirements of this section need not be approved by the department
4 except as expressly required elsewhere in this part.

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

8 (a) A conservation easement.

9 (b) A court order or judicially approved settlement involving
10 the property.

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

25 (9) Alternative instruments and means may be used, with
26 department approval, to impose the land or resource use
27 restrictions described in subsection (1), including, but not

1 limited to, licenses and license agreements, contracts with local,
2 state, or federal units of government, health codes or regulations,
3 or government permitting requirements.

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

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

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

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

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

16 (d) It imposes a negative burden.

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

19 (f) The benefit or burden does not touch or concern real
20 property.

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

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

24 (12) Restrictive covenants or other instruments that impose
25 land or resource use restrictions that were recorded before ~~the~~
26 ~~effective date of the amendatory act that added this section~~
27 **JANUARY 15, 2015** are not invalidated or made unenforceable by this

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