

# SENATE BILL NO. 606

October 24, 2023, Introduced by Senators MOSS, IRWIN, SHINK, MCMORROW, GEISS, POLEHANKI, SANTANA, CHANG and BAYER and referred to the Committee on Energy and Environment.

A bill to amend 1994 PA 451, entitled "Natural resources and environmental protection act," by amending sections 20118, 20120a, 20120b, 20120e, and 20121 (MCL 324.20118, 324.20120a, 324.20120b, 324.20120e, and 324.20121), section 20118 as amended and section 20121 as added by 2014 PA 542, sections 20120a and 20120b as amended by 2018 PA 581, 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~~ **must**  
 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 all of**  
 26 **the following requirements:**

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

1 standards.

2 (ii) To the extent technically feasible, ends or reverses any  
3 vertical or horizontal expansion of the contaminated area or a  
4 ground contamination plume.

5 (iii) Otherwise complies with all applicable or relevant and  
6 appropriate requirements, rules, criteria, limitations, and  
7 standards of state and federal environmental law.

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

12 (4) The department may select or approve of a remedial action  
13 ~~meeting that meets~~ the criteria provided for in section 20120a that  
14 does not attain a degree of control or cleanup of hazardous  
15 substances that complies with R 299.3(5) or R 299.3(6) of the  
16 Michigan ~~administrative code~~, **Administrative Code**, or both, if the  
17 department makes a finding that the **degree of control or cleanup**  
18 **that will be achieved is the greatest technically feasible and that**  
19 **the selected or approved** remedial action is protective of the  
20 public health, safety, and welfare, and the environment.

21 Notwithstanding any other provision of this subsection, the  
22 department shall not approve of a remedial action that does not  
23 attain a degree of control or cleanup of hazardous substances that  
24 complies with R 299.3(5) or R 299.3(6) of the Michigan  
25 ~~administrative code~~ **Administrative Code** if the remedial action is  
26 being implemented by a person ~~who~~ **that** is liable under section  
27 20126 and the release was grossly negligent or intentional, unless  
28 attaining that degree of control is technically infeasible, or the  
29 adverse environmental impact of implementing a remedial action to

1 satisfy the rule would exceed the environmental benefit of that  
2 remedial action.

3 (5) A remedial action may be selected or approved ~~pursuant to~~  
4 **under** subsection (4) with regard to R 299.3(5) or R 299.3(6), or  
5 both, of the Michigan ~~administrative code,~~ **Administrative Code**, if  
6 the department determines, based on the administrative record, that  
7 1 or more of the following conditions are satisfied:

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

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

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

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

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

28 ~~(ii) The remedial action includes enforceable land use~~  
29 ~~restrictions or other institutional controls necessary to prevent~~

1 ~~unacceptable risk from exposure to the hazardous substances, as~~  
 2 ~~defined by the cleanup criteria approved as part of the remedial~~  
 3 ~~action.~~

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

- 13       (a) Residential.
- 14       (b) Nonresidential.
- 15       (c) Limited residential.
- 16       (d) Limited nonresidential.

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

27       (3) The department shall develop cleanup criteria ~~pursuant to~~  
 28 **under** subsection (1) based on generic human health risk assessment  
 29 assumptions that are determined by the department to appropriately

1 characterize patterns of human exposure associated with certain  
2 land uses. The department shall consider only reasonable and  
3 relevant exposure pathways and factors in determining these  
4 assumptions. The department may prescribe more than 1 generic set  
5 of exposure assumptions within each category described in  
6 subsection (1). If the department prescribes more than 1 generic  
7 set of exposure assumptions within a category, each set of exposure  
8 assumptions creates a subcategory within a category described in  
9 subsection (1). The department shall specify facility  
10 characteristics that determine the applicability of criteria  
11 derived for these categories or subcategories. ~~When developing and  
12 promulgating cleanup criteria under subsection (1), the department  
13 shall do all of the following:~~

14 ~~(a) Except as set forth in subdivision (c), for each hazardous  
15 substance, use final toxicity values from the United States  
16 Environmental Protection Agency integrated risk information system,  
17 or more recent United States Environmental Protection Agency Office  
18 of Pesticide Programs toxicity values for pesticides that are  
19 incorporated by the integrated risk information system in place of  
20 values that have been archived by the integrated risk information  
21 system, if available. If the United States Environmental Protection  
22 Agency has determined that there is insufficient scientific data to  
23 derive a value for inclusion in the integrated risk information  
24 system, the department shall not derive or adopt such a value for  
25 that hazardous substance. If a value is not available in the  
26 integrated risk information system, the department shall apply the  
27 following order of precedence when selecting toxicity values:~~

28 ~~(i) The best value from the agency for toxic substances and  
29 disease registry final minimal risk levels for hazardous substances~~

1 ~~or the United States Environmental Protection Agency provisional~~  
2 ~~peer-reviewed toxicity values.~~

3 ~~(ii) If a value is not available under subparagraph (i), the~~  
4 ~~best final value from the United States Environmental Protection~~  
5 ~~Agency health effects assessment summary table, or final values~~  
6 ~~adopted by other states, the World Health Organization, Canada, or~~  
7 ~~the European Union.~~

8 ~~(iii) If a value is not available under subparagraph (i) or (ii),~~  
9 ~~a value developed by the department if there is sufficient~~  
10 ~~supporting toxicity data and information available in the peer-~~  
11 ~~reviewed published scientific literature.~~

12 ~~(b) Apply the following order of precedence when selecting~~  
13 ~~chemical or physical data for the development of cleanup criteria:~~

14 ~~(i) The best relevant experimentally measured data.~~

15 ~~(ii) If data is not available under subparagraph (i), the best~~  
16 ~~relevant modeled or estimated data.~~

17 ~~(c) If the department desires to use a toxicity value or input~~  
18 ~~that is different than a value that is available on the United~~  
19 ~~States Environmental Protection Agency integrated risk information~~  
20 ~~system, or more recent United States Environmental Protection~~  
21 ~~Agency Office of Pesticide Programs toxicity values for pesticides~~  
22 ~~that are incorporated by the integrated risk information system in~~  
23 ~~place of values that have been archived by the integrated risk~~  
24 ~~information system, or desires to establish a value when the~~  
25 ~~Environmental Protection Agency determined that there was~~  
26 ~~insufficient scientific data to do so when last evaluated by the~~  
27 ~~Environmental Protection Agency, the department shall provide~~  
28 ~~public notice and a written explanation of its intent to do so and~~  
29 ~~conduct a stakeholder process to obtain input. After obtaining~~

1 ~~stakeholder input, the department may promulgate a rule to use an~~  
2 ~~alternative value in accordance with the order of precedence set~~  
3 ~~forth in subdivision (a) (i) through (iii), if the department~~  
4 ~~demonstrates all of the following:~~

5 ~~(i) The integrated risk information system value is based on a~~  
6 ~~determination that is at least 10 years old.~~

7 ~~(ii) There is more current data in the peer-reviewed scientific~~  
8 ~~literature that is used on a general basis by the United States~~  
9 ~~Environmental Protection Agency or multiple other regulatory~~  
10 ~~agencies nationally for the purpose of calculating cleanup criteria~~  
11 ~~or standards.~~

12 ~~(iii) After assessing the body of evidence for the hazardous~~  
13 ~~substance using a rigorous systematic review methodology, such as~~  
14 ~~that used by the National Toxicology Program's Office of Health~~  
15 ~~Assessment and Translation and the European Food Safety Authority,~~  
16 ~~the weight of scientific evidence clearly supports the use of the~~  
17 ~~proposed value as best available science for the purpose of~~  
18 ~~calculating generic cleanup criteria.~~

19 ~~(d) Use a daily exposure time for inhalation in the exposure~~  
20 ~~intake for a nonresidential worker in an algorithm or equation used~~  
21 ~~to calculate generic cleanup criteria under this part that is equal~~  
22 ~~to the average number of hours, not to exceed 10 hours, that a~~  
23 ~~nonresidential worker spends working in a 5-day work week according~~  
24 ~~to the most appropriate governmental data or information.~~

25 ~~(e) When the department considers the pregnant woman as a~~  
26 ~~potential sensitive receptor to address prenatal developmental~~  
27 ~~effects, the department may apply a single event exposure scenario~~  
28 ~~for a hazardous substance, pursuant to the process set forth in~~  
29 ~~subdivision (f), only when either of the following occurs:~~



1 ~~(i) The United States Environmental Protection Agency applies a~~  
2 ~~single-event exposure scenario to establish regional screening~~  
3 ~~levels for that hazardous substance.~~

4 ~~(ii) The department demonstrates, after conducting a~~  
5 ~~comprehensive assessment of the specific hazardous substance, that,~~  
6 ~~for that specific hazardous substance, a single exposure may result~~  
7 ~~in an adverse effect and the weight of scientific evidence supports~~  
8 ~~the application of a single-event exposure scenario. The~~  
9 ~~department's comprehensive assessment must evaluate the body of~~  
10 ~~scientific evidence using a systematic review methodology, such as~~  
11 ~~that used by the National Toxicology Program's Office of Health~~  
12 ~~Assessment and Translation and the European Food Safety Authority.~~  
13 ~~The comprehensive assessment must, if appropriate, take into~~  
14 ~~account all of the following:~~

15 ~~(A) Whether there is data available involving single-day~~  
16 ~~exposures to the hazardous substance during pregnancy.~~

17 ~~(B) The differences in sensitivity, periods of development,~~  
18 ~~and progression of different types of developmental effects in~~  
19 ~~humans and animals.~~

20 ~~(C) Differences in toxicokinetics between species.~~

21 ~~(f) Before conducting the comprehensive assessment in~~  
22 ~~subdivision (c) (ii), the department shall provide public notice and~~  
23 ~~a written explanation of its intent to do so. Upon completion of~~  
24 ~~the assessment, the department shall conduct a stakeholder process~~  
25 ~~to obtain input. If, upon obtaining stakeholder input, the~~  
26 ~~department elects to apply a single-event exposure scenario for a~~  
27 ~~particular hazardous substance, the department shall do so in a~~  
28 ~~rule.~~

29 (4) If a hazardous substance poses a carcinogenic risk to

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

20 (5) If a cleanup criterion derived under subsection (4) for  
21 groundwater in an aquifer differs from either: (a) the state  
22 drinking water standards, ~~established pursuant to section 5 of the~~  
23 ~~safe drinking water act, 1976 PA 399, MCL 325.1005,~~ or (b) the  
24 national secondary drinking water regulations established ~~pursuant~~  
25 ~~to~~**under** 42 USC 300g-1, or (c), if there is not national secondary  
26 drinking water regulation for a contaminant, the concentration  
27 determined by the department according to methods approved by the  
28 United States Environmental Protection Agency below which taste,  
29 odor, appearance, or other aesthetic characteristics are not

1 adversely affected, the cleanup criterion is the more stringent of  
2 (a), (b), or (c) unless the department determines that compliance  
3 with this subsection is ~~not necessary because the use of the~~  
4 ~~aquifer is reliably restricted or controlled under provisions of a~~  
5 ~~postclosure plan or a postclosure agreement or by site-specific~~  
6 ~~criteria approved by the department under section~~  
7 ~~20120b.~~ **technically infeasible, in which case the cleanup criterion**  
8 **must be the most stringent criterion that is technically feasible.**

9 (6) The department shall not approve a remedial action plan or  
10 no further action report in **the** categories ~~set forth in~~ **under**  
11 subsection (1)(b) to (d), unless the person documents that the  
12 current zoning of the property is consistent with the categorical  
13 criteria being proposed, or that the governing zoning authority  
14 intends to change the zoning designation so that the proposed  
15 criteria are consistent with the new zoning designation, or the  
16 current property use is a legal nonconforming use. The department  
17 shall not grant final approval for a remedial action plan or no  
18 further action report that relies on a change in zoning designation  
19 until a final determination of that zoning change has been made by  
20 the local unit of government. The department may approve of a  
21 remedial action plan or no further action report that achieves  
22 categorical criteria that are based on greater exposure potential  
23 than the criteria applicable to current zoning. In addition, the  
24 remedial action plan or no further action report must include  
25 documentation that the current property use is consistent with the  
26 current zoning or is a legal nonconforming use. Abandoned or  
27 inactive property must be considered on the basis of zoning  
28 classifications as described above.

29 (7) Cleanup criteria from 1 or more categories in subsection

1 (1) may be applied at a facility, if all relevant requirements are  
2 satisfied for application of a pertinent criterion.

3 (8) The need for soil remediation to protect an aquifer from  
4 hazardous substances in soil ~~shall~~**must** consider the vulnerability  
5 of the aquifer or aquifers potentially affected if the soil remains  
6 at the facility. Migration of hazardous substances in soil to an  
7 aquifer is a pertinent pathway if ~~appropriate~~**appropriately** based  
8 on consideration of site specific factors.

9 (9) The department may establish cleanup criteria for a  
10 hazardous substance using a biologically based model developed or  
11 identified as appropriate by the United States Environmental  
12 Protection Agency if the department determines all of the  
13 following:

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

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

19 (c) The United States Environmental Protection Agency has  
20 determined that application of the model is appropriate for the  
21 hazardous substance in question.

22 (10) If the target detection limit or the background  
23 concentration for a hazardous substance is greater than a cleanup  
24 criterion developed for a category ~~pursuant to~~**under** subsection  
25 (1), the criterion is the target detection limit or background  
26 concentration, whichever is larger, for that hazardous substance in  
27 that category.

28 (11) The department may also approve cleanup criteria if  
29 necessary to address conditions that prevent a hazardous substance

1 from being reliably measured at levels that are consistently  
2 achievable in samples from the facility in order to allow for  
3 comparison with generic cleanup criteria. A person seeking approval  
4 of a criterion under this subsection shall document the basis for  
5 determining that the relevant published target detection limit  
6 cannot be achieved in samples from the facility.

7 (12) In determining the adequacy of a land-use based response  
8 activity to address sites contaminated by polychlorinated  
9 biphenyls, the department shall not require response activity in  
10 addition to that which is subject to and complies with applicable  
11 federal regulations and policies that implement the toxic  
12 substances control act, 15 USC 2601 to ~~2692-2697~~.  
13

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

18 (14) Approval by the department of remedial action based on  
19 the categorical standard in subsection (1) (a) or (b) ~~shall~~**must** be  
20 granted only if the pertinent criteria are satisfied in the  
21 affected media. The department shall approve the use of  
22 probabilistic or statistical methods or other scientific methods of  
23 evaluating environmental data when determining compliance with a  
24 pertinent cleanup criterion if the methods are determined by the  
25 department to be reliable, scientifically valid, and best represent  
26 actual site conditions and exposure potential.

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

29 (16) Remedial actions that rely on categorical cleanup  
criteria developed ~~pursuant to~~**under** subsection (1) ~~shall~~**must** also

1 consider other factors necessary to protect the public health,  
2 safety, and welfare, and the environment as specified by the  
3 department, if the department determines based on data and existing  
4 information that such considerations are relevant to a specific  
5 facility. These factors include, but are not limited to, the  
6 protection of surface water quality and consideration of ecological  
7 risks if pertinent to the facility based on the requirements of  
8 this part.

9 ~~(17) The department shall promulgate all generic cleanup~~  
10 ~~criteria and target detection limits as rules. Except for generic~~  
11 ~~cleanup criteria and target detection limits developed before~~  
12 ~~January 11, 2018, and those generic cleanup criteria determined as~~  
13 ~~set forth in subsections (5) and (23) and section 20120e(1)(a),~~  
14 ~~generic cleanup criteria and target detection limits, and any~~  
15 ~~modifications or revisions to generic cleanup criteria and target~~  
16 ~~detection limits, are not legally enforceable until promulgated as~~  
17 ~~rules. The generic cleanup criteria and target detection limits are~~  
18 ~~subject to all of the following:~~

19 ~~(a) The department may periodically repromulgate rules for any~~  
20 ~~portion of the generic cleanup criteria to adopt and use new~~  
21 ~~toxicity values or chemical or physical data selected pursuant to~~  
22 ~~subsection (3)(a) and (b) or to otherwise update the generic~~  
23 ~~cleanup criteria in accordance with this part to incorporate, as~~  
24 ~~appropriate,~~ **Not later than December 31, 2013, the department shall**  
25 **evaluate and revise cleanup criteria developed under this section.**  
26 **The evaluation and revisions must incorporate** knowledge gained  
27 through research and studies in the areas of fate and transport and  
28 risk assessment taking into account best practices from other  
29 states, reasonable and realistic conditions, and sound science. ~~The~~

1 ~~department may also repromulgate rules that establish target~~  
2 ~~detection limits to update those limits in accordance with this~~  
3 ~~part.~~ **After the evaluation and revisions, the department shall**  
4 **periodically evaluate whether new information is available**  
5 **regarding the cleanup criteria and shall make revisions as**  
6 **appropriate. The department shall prepare and submit to the**  
7 **legislature a report detailing any revisions made to the cleanup**  
8 **criteria developed under this section within 90 days after the**  
9 **revisions are made.**

10 ~~(b) If generic cleanup criteria are included in or relied upon~~  
11 ~~as a basis for decision in a work plan, response activity plan,~~  
12 ~~remedial action plan, postclosure plan, request for certificate of~~  
13 ~~completion, or similar document, that is submitted to the~~  
14 ~~department or approved by the department prior to the effective~~  
15 ~~date of a rule revising those cleanup criteria, then the generic~~  
16 ~~cleanup criteria effective at the time of submittal or prior~~  
17 ~~approval continue to apply to the review, revision, or~~  
18 ~~implementation of the plan, request, or document, as well as to any~~  
19 ~~future review, approval, or disapproval of a no further action~~  
20 ~~report or any part thereof that is based on the plan, request, or~~  
21 ~~document, unless either of the following occur:~~

22 ~~(i) The person making the submittal voluntarily elects to apply~~  
23 ~~the revised cleanup criteria.~~

24 ~~(ii) The department director makes a site-specific~~  
25 ~~demonstration, based on clear and convincing evidence, that the~~  
26 ~~prior cleanup criteria are no longer protective of the public~~  
27 ~~health, safety, or welfare, or the environment, given the totality~~  
28 ~~of circumstances at the site, including any site-specific factors~~  
29 ~~that reduce exposure or risk, such as the existence of land or~~

~~1 resource use restrictions that reduce or restrict exposure. This  
2 subparagraph does not apply if, no later than 6 months after the  
3 promulgation of the rule revision changing the cleanup criteria,  
4 both of the following conditions are met:~~

~~5 (A) The person has substantially completed all active  
6 remediation as set forth in the approved plan, request, or similar  
7 document, and only monitoring, maintenance, or postclosure  
8 activities remain.~~

~~9 (B) The person submits a request for a no further action  
10 approval to the department.~~

~~11 (c) No further action reports that have been approved by the  
12 department and that rely on cleanup criteria that have been  
13 subsequently revised remain valid, subject to the liability  
14 provisions of section 20126(4)(c).~~

~~15 (d) If generic cleanup criteria are included in or relied upon  
16 as a basis for decision in a no further action report, other than a  
17 no further action report described in subdivision (b) (ii), that is  
18 submitted to the department but not yet approved by the department  
19 prior to the effective date of a rule revising those cleanup  
20 criteria, then the generic cleanup criteria effective at the time  
21 of submittal continue to apply to the review, revision, and  
22 approval of the report unless either of the following occur:~~

~~23 (i) The person making the submittal voluntarily elects to apply  
24 the revised cleanup criteria.~~

~~25 (ii) The department director makes a site-specific  
26 demonstration, based on clear and convincing evidence, that the  
27 prior generic cleanup criteria are no longer protective of the  
28 public health, safety, or welfare, or the environment, given the  
29 totality of circumstances at the site, including any site-specific~~



1 ~~factors that reduce exposure or risk, such as the existence of land~~  
2 ~~or resource use restrictions that reduce or restrict exposure.~~

3 ~~(e) A demonstration by the department director under~~  
4 ~~subdivision (b) or (d) that prior cleanup criteria are no longer~~  
5 ~~protective of the public health, safety, or welfare, or the~~  
6 ~~environment, is appealable in accordance with section 20114e.~~

7 ~~(f) Notwithstanding subdivisions (b) through (d), an owner's~~  
8 ~~or operator's obligations under section 20107a shall be based upon~~  
9 ~~the current numeric cleanup criteria under section 20120a(1) or~~  
10 ~~site-specific criteria approved under section 20120b.~~

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

14 (a) The facility is an establishment covered by the  
15 classifications provided by sector 31-33 - manufacturing, of the  
16 North American Industry Classification System, United States, ~~2012,~~  
17 **2017**, published by the Office of Management and Budget.

18 (b) The person complies with the Michigan occupational safety  
19 and health act, 1974 PA 154, MCL 408.1001 to 408.1094, and the  
20 rules promulgated under that act applicable to the exposure to the  
21 hazardous substance, including, but not limited to, the  
22 occupational health standards for air contaminants, R 325.51101 to  
23 R 325.51108 of the Michigan Administrative Code.

24 (c) The hazardous substance is included in the facility's  
25 hazard communication program under section 14a of the Michigan  
26 occupational safety and health act, 1974 PA 154, MCL 408.1014a, and  
27 the hazard communication rules, R 325.77001 to R 325.77004 of the  
28 Michigan Administrative Code, except that, unless the hazardous  
29 substance is in use in the facility, the requirement to have a

1 material safety data sheet in the workplace requires only a generic  
2 material safety data sheet for the hazardous substance and the  
3 labeling requirements do not apply.

4 (19) The department shall ~~promulgate as rules~~ **make available**  
5 the algorithms used to calculate ~~, modify, or revise~~ all  
6 residential and nonresidential generic cleanup criteria, as well as  
7 the tables listing, by hazardous substance, all toxicity, exposure,  
8 and other algorithm factors or variables used in the department's  
9 calculations. ~~, modifications, or revisions.~~

10 ~~(20) Calculation and application of toxic equivalency~~  
11 ~~quotients are subject to the following:~~

12 ~~(a) The toxic equivalency factors used must only be those~~  
13 ~~adopted by the World Health Organization.~~

14 ~~(b) When compounds contributed by 2 or more persons acting~~  
15 ~~independently are combined in a toxic equivalency quotient to~~  
16 ~~assess human health risks, harm is divisible and subject to~~  
17 ~~apportionment of liability under subsections 20129(1) and (2).~~

18 ~~(c) To assess human health risks, the toxic equivalency~~  
19 ~~quotient must be compared to generic or site-specific criteria for~~  
20 ~~the reference hazardous substance.~~

21 ~~(21) Polychlorinated dibenzodioxin and dibenzofuran congeners~~  
22 ~~are not likely to leach from soil to groundwater. The groundwater~~  
23 ~~surface water interface protection and the residential drinking~~  
24 ~~water protection exposure pathways are not applicable or relevant~~  
25 ~~when assessing polychlorinated dibenzodioxin and dibenzofuran~~  
26 ~~congeners unless the department demonstrates that those congeners~~  
27 ~~are leaching at material concentrations through co-solvation.~~

28 ~~(22) Polychlorinated dibenzodioxin and dibenzofuran congeners~~  
29 ~~are not likely to volatilize from soil or groundwater into the air.~~

1 ~~Vapor inhalation exposure pathways are not applicable or relevant~~  
2 ~~when assessing polychlorinated dibenzodioxin and dibenzofuran~~  
3 ~~congeners.~~

4 ~~(23) For a substance that does not have generic cleanup~~  
5 ~~criteria, if, based on the best available information, the~~  
6 ~~department determines that the substance is a hazardous substance,~~  
7 ~~the department may calculate generic cleanup criteria for that~~  
8 ~~hazardous substance using toxicity values and chemical and physical~~  
9 ~~data selected pursuant to subsection (3) (a) and (b) and in~~  
10 ~~accordance with all other requirements of this part and publish the~~  
11 ~~generic cleanup criteria on the department's website. Within 30~~  
12 ~~days after publishing the new generic cleanup criteria, the~~  
13 ~~department shall initiate rule-making to promulgate rules for the~~  
14 ~~new criteria by filing a rule-making request under section 39 of~~  
15 ~~the administrative procedures act, 1969 PA 306, MCL 24.239. The~~  
16 ~~rule-making request shall only include the revisions necessary to~~  
17 ~~promulgate the new generic cleanup criteria. The new generic~~  
18 ~~cleanup criteria published pursuant to this subsection take effect~~  
19 ~~and are legally enforceable when published by the department if the~~  
20 ~~department also initiates rule-making to promulgate rules for the~~  
21 ~~new criteria within 30 days. The new generic cleanup criteria~~  
22 ~~published pursuant to this subsection remain effective and legally~~  
23 ~~enforceable until replaced by a final rule or, until the director~~  
24 ~~directs the department to withdraw the rule request under section~~  
25 ~~66(11) of the administrative procedures act, 1969 PA 306, MCL~~  
26 ~~24.266, or the time limitation in either section 45(1) or section~~  
27 ~~66(12) of the administrative procedures act, 1969 PA 306, MCL~~  
28 ~~24.245 and 24.266, is not met.~~

29 Sec. 20120b. (1) Subject to subsection (4), the department

1 shall approve numeric or nonnumeric site-specific criteria in a  
2 response activity under section 20120a if ~~such~~**the** criteria, in  
3 comparison to generic criteria, better reflect best available  
4 information concerning the toxicity or exposure risk posed by the  
5 hazardous substance or other factors.

6 (2) Site-specific criteria approved under subsection (1) may,  
7 as appropriate, **do any of the following:**

8 (a) Use the algorithms for calculating generic criteria  
9 established ~~by rule under section 20120a(19)~~ or propose and use  
10 different algorithms **to set site-specific criteria that are at**  
11 **least as protective as the generic criteria for unrestricted**  
12 **residential use, or if site-specific criteria as protective as the**  
13 **generic criteria for unrestricted residential use are not**  
14 **technically feasible, the most protective site-specific criteria**  
15 **that are technically feasible.**

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

19 (c) Take into consideration the ~~depth below the ground surface~~  
20 ~~of contamination, which may reduce the potential for exposure and~~  
21 ~~serve as an exposure barrier.~~**characteristics of the site that**  
22 **increase or decrease the potential for exposure, including, but not**  
23 **limited to, the depth of the contamination below the ground**  
24 **surface, geomorphological and hydrological dynamics, proximity to**  
25 **residential areas, and proximity to drinking water wells and**  
26 **surface drinking water sources.**

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

1 (e) Use probabilistic methods of calculation.

2 (f) Use nonlinear-threshold-based calculations where  
3 scientifically justified.

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

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

9 (a) Eliminate exposure to the hazardous substance through  
10 removal, **if technically feasible. If removal is not technically**  
11 **feasible**, containment, exposure barriers, or land use or resource  
12 use restrictions **may be used**.

13 (b) If another hazardous substance is expected to have similar  
14 fate, mobility, bioaccumulation, and toxicity characteristics,  
15 apply the cleanup criteria for that hazardous substance as a  
16 surrogate. Before using a surrogate, the person shall notify the  
17 department, provide a written explanation why the surrogate is  
18 suitable, and request approval. If the department does not notify  
19 the person that it disapproves the use of the chosen surrogate  
20 within ~~90~~**120** days after receipt of the notice, the surrogate is  
21 considered approved. A hazardous substance may be used as a  
22 surrogate for a single hazardous substance or for a class or  
23 category of hazardous substances.

24 (c) For venting groundwater, use **an ecological demonstration**,  
25 a modeling demonstration, ~~an ecological demonstration~~, or a  
26 combination of both, consistent with section ~~20120e(9) and (10)~~,  
27 **20120e(6) and (7)**, to demonstrate that the hazardous substance is  
28 not likely to migrate **do either of the following**:

29 (i) **Migrate** to a surface water body or ~~has not or will not~~

1 ~~impair the existing or designated uses for a surface~~ **a drinking**  
 2 ~~water body.~~ **well.**

3 **(ii) Cause vapor intrusion in occupied structures.**

4 (d) If toxicity information is available for the hazardous  
 5 substance, develop site-specific cleanup criteria for the hazardous  
 6 substance ~~pursuant to~~ **under** subsections (1) and (2), or develop  
 7 simplified site-specific screening criteria based ~~upon~~ **on** toxicity  
 8 and concentrations found on site, and request department approval.  
 9 If the department does not notify the person that it disapproves  
 10 the site-specific criteria or screening criteria within ~~90~~ **120** days  
 11 after receipt of the request, the criteria are considered approved.

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

13 (4) Site-specific criteria approved by the department are ~~not~~  
 14 invalidated by subsequent changes to the generic criteria for that  
 15 hazardous substance, including changes to toxicity, exposure, or  
 16 other values or variables used by the department to calculate the  
 17 generic criteria, **unless the site-specific criteria are lower than**  
 18 **the new generic criteria.**

19 Sec. 20120e. (1) **A person shall proceed under section 20114b**  
 20 **to undertake response activities involving venting groundwater.**

21 Subject to other requirements of this section, a person may  
 22 demonstrate compliance with requirements ~~under this part~~ for a  
 23 response activity ~~providing for~~ **activities involving** venting  
 24 groundwater by meeting any of the following, singly or in  
 25 combination:

26 (a) Generic GSI criteria, which are ~~the~~ **surface** water quality  
 27 standards ~~for surface waters~~ developed by the department ~~pursuant~~  
 28 ~~to~~ **under** part 31. The use of surface water quality standards or  
 29 variances ~~shall be~~ **is** allowable in any of the cleanup categories

1 provided for in section 20120a(1).

2 (b) A variance from the surface water quality standards as  
3 approved by the department under part 31. A variance ~~shall~~**must** be  
4 used only if the variance is **technically feasible and** requested by  
5 ~~a~~**the** person performing response activities with respect to venting  
6 groundwater.

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

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

23 (e) An ecological demonstration under subsection ~~(9)~~**(6)**.

24 (f) A modeling demonstration under subsection ~~(10)~~**(7)**.

25 (2) Whole effluent toxicity testing ~~shall~~**must** not be required  
26 or be a criterion or ~~be~~ the basis for any criteria under subsection  
27 (1) for venting groundwater except for samples taken at the GSI.

28 (3) The pathway addressed by GSI criteria under subsection (1)  
29 ~~shall~~**must** be considered a relevant pathway when a remedial

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

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

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

12 (c) Subject to subsection ~~(23)(g)~~, **(19)(g)**, whether the  
13 receiving surface water is a ~~surface~~-water of the state, as that  
14 term is defined in ~~part 31~~ **section 3101** and **the** rules promulgated  
15 under ~~that~~ **part 31**.

16 (d) The direction of groundwater movement.

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

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

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

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



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

6 **(i) The existing or designated uses of the receiving surface**  
 7 **water and whether the receiving surface water is a drinking water**  
 8 **source.**

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

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

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

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

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

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

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

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

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

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

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

26       ~~(c) The venting groundwater is entering a surface water body~~  
27 ~~protected for coldwater fisheries identified in the following~~  
28 ~~publications:~~

29       ~~(i) "Coldwater Lakes of Michigan," as published in 1976 by the~~

1 ~~department of natural resources.~~

2 ~~(ii) "Designated Trout Lakes and Regulations," issued September~~  
3 ~~10, 1998, by the director of the department of natural resources~~  
4 ~~under the authority of part 411.~~

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

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

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

19 ~~(5) (8)~~ Alternative monitoring points may be used to  
20 demonstrate compliance with subsection (1) if the alternative  
21 monitoring points meet the following standards:

22 (a) The locations where venting groundwater enters surface  
23 water have been reasonably identified to allow monitoring for the  
24 evaluation of compliance with criteria. This identification ~~shall~~  
25 **must** include all of the following:

26 (i) Identification of the location of alternative monitoring  
27 points within areas of venting groundwater.

28 (ii) Documentation of the approximate boundaries of the areas  
29 where the groundwater plume vents to surface water. This

1 documentation ~~shall~~**must** include information about the substrate  
2 character and geology in the areas where groundwater vents to  
3 surface water.

4 (iii) Documentation that the venting area identified and  
5 alternative monitoring points include points that are reasonably  
6 representative of the higher concentrations of hazardous substances  
7 present in the groundwater at the GSI.

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

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

20 (6) ~~(9)~~An ecological demonstration may be used to demonstrate  
21 compliance with subsection (1) if the ecological demonstration  
22 meets the following:

23 (a) The boundaries of the area where the groundwater plume  
24 vents to surface water are documented as provided in subsection  
25 ~~(8)(a)(ii)~~. **(5) (a) (ii)** .

26 (b) Sampling data for the area described in subdivision (a),  
27 when compared to other reasonably proximate areas of that surface  
28 water body, do not show an impairment of existing or designated  
29 uses for that surface water body caused by, or contributed to by,

1 the venting plume, or do not show that the venting plume will cause  
2 or contribute to impairment of existing or designated uses of that  
3 surface water body in a situation where the area of the surface  
4 water immediately outside the venting area of the venting plume  
5 shows an impairment of existing or designated uses.

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

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

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

21 (7) ~~(10)~~—A modeling demonstration may be used to demonstrate  
22 compliance with subsection (1) if the modeling demonstration meets  
23 all of the following:

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

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

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

3 (8) ~~(11)~~—If alternative monitoring points, ~~or~~ an ecological  
4 demonstration, or a modeling demonstration, or a combination of  
5 these, is used for the response activity and sentinel wells are  
6 installed, a contingency plan for potential additional response  
7 activity may be required.

8 (9) ~~(12)~~—If a person intends to utilize mixing zone-based GSI  
9 criteria under subsection (1)(c) or site-specific criteria under  
10 subsection (1)(d) in conjunction with alternative monitoring  
11 points, an ecological demonstration, or a modeling demonstration,  
12 or a combination of these, the person shall submit to the  
13 department a response activity plan that includes the following:

14 (a) A demonstration of compliance with the standards in  
15 subsection ~~(6), (7), or (8),~~ (5), as applicable.

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

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

23 (10) ~~(13)~~—If there is an exceedance of an applicable GSI  
24 criterion based on acute toxicity at a compliance monitoring point  
25 applicable at a particular facility, then action ~~shall~~ **must** be  
26 taken as follows:

27 (a) A person that is implementing the response activity at  
28 that facility and ~~that~~ determines that there is an exceedance shall  
29 notify the department of that condition within 7 days ~~of obtaining~~

1 ~~knowledge~~**after discovering** that the exceedance is occurring.

2 (b) If the person described in subdivision (a) is a person  
3 liable under section 20126, ~~then~~ that person shall, within 30 days  
4 ~~of~~**after** the date on which notice is required under subdivision  
5 (a), do 1 or more of the following:

6 (i) Commence response activity to address the exceedance at the  
7 applicable compliance monitoring point and submit a schedule to the  
8 department for the response activity.

9 (ii) Submit a notice of intent to the department to propose an  
10 alternative monitoring point or perform an ecological demonstration  
11 or perform a modeling demonstration or a combination of these. The  
12 notice ~~shall~~**must** include a schedule for ~~submission of~~**submitting**  
13 the proposal.

14 (iii) Submit a notice of intent to the department to propose a  
15 site-specific criterion or a mixing zone criterion under sections  
16 20120a and 20120b. The notice ~~shall~~**must** include a schedule for  
17 ~~submission of~~**submitting** the proposal.

18 (c) The department may approve a schedule as submitted under  
19 subdivision (b) or ~~direct~~**require** reasonable modifications in the  
20 schedule. The department may grant extensions of time for actions  
21 required under subdivision (b) and for activities in an approved or  
22 department-modified schedule if the person is acting in good faith  
23 and site conditions inhibit progress or completion of the activity.  
24 The department's decision to grant an extension or impose a  
25 schedule modification shall consider the practical problems  
26 associated with carrying out the response activity and the nature  
27 and extent of the exceedances of applicable GSI criteria.

28 ~~(14) Response activity beyond evaluations shall not be~~  
29 ~~required if venting groundwater has no effect or only a de minimis~~

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

11 (11) ~~(15)~~ If a person has controlled the source of groundwater  
12 contamination and ~~has~~ demonstrated that compliance with GSI  
13 criteria developed under this part is unachievable, that person may  
14 file a technical ~~impracticability~~ **infeasibility** waiver request with  
15 the department. The technical ~~impracticability~~ **infeasibility** waiver  
16 ~~shall~~ **must** document the reasons why compliance is unachievable. The  
17 department shall respond to the **technical infeasibility** waiver  
18 within 180 days with an approval, request for additional  
19 information, or denial that provides a detailed description of the  
20 reasons for denial.

21 (12) ~~(16)~~ Natural attenuation of hazardous substances in  
22 venting groundwater upgradient of the GSI is **not** an acceptable form  
23 of remediation and may **not** be relied ~~upon in lieu of~~ **instead** of any  
24 active remediation of the groundwater, **unless active remediation is**  
25 **technically infeasible**. Natural attenuation may ~~be occurring~~ **occur**  
26 by way of ~~dispersion, diffusion, sorption, degradation,~~  
27 transformative reactions, and other methods. **Natural attenuation**  
28 **may be allowed to occur by dispersion or diffusion only if it is**  
29 **technically infeasible to prevent the dispersion or diffusion.**



1           (13) ~~(17)~~ A permit ~~shall~~**is** not ~~be~~ required under part 31 for  
2 any venting groundwater contamination plume that is addressed under  
3 this section.

4           (14) ~~(18)~~ Wetlands ~~shall~~**must** be protected for the groundwater  
5 surface water pathway to the extent that particular designated  
6 uses, as **that term is** defined ~~by~~**in** part 31, ~~which~~**that** are  
7 specific to that wetland would otherwise be impaired by a  
8 groundwater contamination plume venting to surface water in the  
9 wetland.

10           (15) ~~(19)~~ If a groundwater contamination plume is entering a  
11 sewer that discharges to surface water, and the GSI pathway is  
12 relevant, all of the following apply:

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

22           (b) All of the following apply:

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

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

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

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

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

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

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

27           **(16)** ~~(20)~~—If the department denies a response activity plan  
28 containing a proposal for alternative monitoring points, an  
29 ecological demonstration, ~~or~~ a modeling demonstration, or a

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

7       **(17)** ~~(21)~~—This section is intended to allow a person to  
8 demonstrate compliance with requirements under this part for a  
9 response activity involving venting groundwater, and, for this  
10 purpose, this section ~~shall be given retroactive application and~~  
11 ~~shall be~~ **applies retroactively and is** available for use by ~~such the~~  
12 person. A person performing response activity involving venting  
13 groundwater under any judgment, consent judgment, order, consent  
14 order, or agreement that was entered ~~prior to the effective date of~~  
15 ~~the 2012 amendatory act that amended this section~~ **before June 20,**  
16 **2012** may pursue, alter, or terminate ~~such the~~ response activity  
17 based on any provision of this section subject to any necessary  
18 entry or approval by the court in a case of a judgment, consent  
19 judgment, or court order or any necessary amendment procedure to  
20 amend an agreement. The department shall not oppose use of any  
21 provision of this section as grounds to amend an agreement or for a  
22 court to modify or terminate response activity obligations  
23 involving venting groundwater under a judgment, consent judgment,  
24 or court order. A person performing response activity involving  
25 venting groundwater under any remedial action plan, interim  
26 response plan designed to meet criteria, interim response action  
27 plan, or response activity plan that was approved by the department  
28 ~~prior to the effective date of the 2012 amendatory act that amended~~  
29 ~~this section~~ **before June 20, 2012** may submit an amended plan to the

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

5 ~~(18) (22)~~ A person that ~~undertakes response activity under~~  
 6 ~~subsection (4) or that takes action under subsection (13)(b) shall~~  
 7 **(10)(b) is** not ~~be considered to be~~ making an admission of liability  
 8 by undertaking ~~such the~~ response activities or taking ~~such~~ action.

9 ~~(19) (23)~~ As used in this section:

10 (a) "Alternative monitoring points" means alternative  
 11 monitoring points authorized under subsection ~~(8)~~. **(5)**.

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

14 (c) "GSI" means groundwater-surface water interface, ~~which and~~  
 15 is 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 necessary to protect public health or**  
4 **safety during response activities or if meeting the cleanup**  
5 **criteria for unrestricted residential use and restoring an affected**  
6 **aquifer to state drinking water standards are technically**  
7 **infeasible, a person may impose land or resource use restrictions**  
8 ~~to~~ **for any of the following purposes:**

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

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

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

14 (d) **To** provide for access. ~~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,~~ **must,** at a minimum,  
19 include all 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 **(f) Except as otherwise provided in this subdivision, a**  
22 **provision that limits the duration of the restrictive covenant to**  
23 **the time reasonably necessary to complete response activities**  
24 **required under this part. If the department requires completion of**  
25 **additional response activities beyond the duration described under**  
26 **this subdivision, the duration may be extended until the time**  
27 **reasonably necessary to complete the additional response**  
28 **activities. If the department determines that restoring an affected**  
29 **aquifer to state drinking water standards is technically**

1 **infeasible, a provision that limits the duration of the restrictive**  
2 **covenant is not required, and the department must review this**  
3 **determination every 15 years.**

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

8 (a) A provision requiring notice to the department or other  
9 persons upon transfer or before construction or changes in use that  
10 could affect environmental contamination or increase exposure at  
11 the property.

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

17 (c) A provision subordinating a property interest that has  
18 priority, if agreed to by the person that owns the superior  
19 interest.

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

25 (e) A provision obligating the owner of the land subject to  
26 the restrictive covenant to inspect or maintain exposure barriers,  
27 permanent markers, fences, **monitoring wells**, or other aspects of  
28 the response action or remedy.

29 ~~(f) A provision limiting the restrictive covenant to a~~

1 ~~specific duration, or terminating the restrictive covenant upon the~~  
 2 ~~occurrence of a specific event or condition, such as the completion~~  
 3 ~~of additional response activities that are approved by the~~  
 4 ~~department.~~

5 (f) ~~(g)~~—A provision providing notice of hazardous substances  
 6 that exceed aesthetic-based cleanup criteria.

7 (4) **The department may require financial assurance in the form**  
 8 **of a bond, insurance policy, or irrevocable letter of credit to**  
 9 **enforce a restrictive covenant used to impose a land or resource**  
 10 **use restriction under this section if the person imposing the**  
 11 **restrictive covenant fails to enforce it.**

12 (5) ~~(4)~~—A restrictive covenant used to impose land or resource  
 13 use restrictions under this section ~~shall~~**must** be recorded with the  
 14 register of deeds for the county where the property is located.

15 (6) ~~(5)~~—A restrictive covenant under this section that is  
 16 recorded under subsection ~~(4)~~**(5)** does both of the following:

17 (a) Runs with the land.

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

21 (7) ~~(6)~~ ~~Upon~~**On** recording, a copy of the restrictive covenant  
 22 ~~shall~~**must** be provided to the department together with a notice  
 23 that includes the street address or parcel number for the property  
 24 or properties subject to the covenant. A restrictive covenant that  
 25 meets the requirements of this section need not be approved by the  
 26 department except as expressly required elsewhere in this part.

27 (8) ~~(7)~~—The following instruments may impose the land or  
 28 resource use restrictions described in subsection (1) if they meet  
 29 the requirements of a restrictive covenant under this section:



1 (a) A conservation easement.

2 (b) A court order or judicially approved settlement involving  
3 the property.

4 (9) ~~(8)~~—An institutional control may be used to impose the  
5 land or resource use restrictions described in subsection (1)  
6 instead of or in addition to a restrictive covenant. Institutional  
7 controls that may be considered include, but are not limited to,  
8 local ordinances or state laws and regulations that limit or  
9 prohibit the use of contaminated groundwater, prohibit the raising  
10 of livestock, prohibit development in certain locations, or  
11 restrict property to certain uses, such as a zoning ordinance. A  
12 local ordinance that serves as an institutional control under this  
13 section ~~shall~~**must** be published and maintained in the same manner  
14 as a zoning ordinance and ~~shall~~**must** include a requirement that the  
15 local unit of government notify the department at least 30 days  
16 ~~prior to~~**before** adopting a modification to the ordinance or ~~prior~~  
17 ~~to~~**before** the lapsing or revocation of the ordinance.

18 (10) ~~(9)~~—Alternative instruments and means may be used, with  
19 department approval, to impose the land or resource use  
20 restrictions described in subsection (1), including, but not  
21 limited to, licenses and license agreements, contracts with local,  
22 state, or federal units of government, health codes or regulations,  
23 or government permitting requirements.

24 (11) ~~(10)~~—The department, with the approval of the state  
25 administrative board, may place restrictive covenants described in  
26 this section on deeds of state-owned property.

27 (12) ~~(11)~~—A restrictive covenant recorded ~~pursuant to~~**under**  
28 this part, whether recorded **on**, before, or after ~~the effective date~~  
29 ~~of the amendatory act that added this section,~~ **January 15, 2015**, is

1 valid and enforceable even if 1 or more of the following situations  
2 exist:

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

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

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

7 (d) It imposes a negative burden.

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

10 (f) The benefit or burden does not touch or concern real  
11 property.

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

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

15 **(13) Imposing a land or resource use restriction under this**  
16 **section does not relieve a person from undertaking response**  
17 **activities required under this part.**

18 **(14)** ~~(12)~~ Restrictive covenants or other instruments that  
19 impose land or resource use restrictions that were recorded before  
20 ~~the effective date of the amendatory act that added this section~~  
21 **January 15, 2015** are not invalidated or made unenforceable by this  
22 section. Except as provided in subsection ~~(11)~~, **(12)**, this section  
23 only applies to a restrictive covenant or other instrument recorded  
24 ~~after the effective date of the amendatory act that added this~~  
25 ~~section.~~ **January 15, 2015**. This section does not invalidate or  
26 render unenforceable any instrument or interest that is otherwise  
27 enforceable under the law of this state.

28 Enacting section 1. This amendatory act does not take effect  
29 unless all of the following bills of the 102nd Legislature are

1 enacted into law:

2 (a) Senate Bill No. 605.

3

4 (b) Senate Bill No. 607.