

# HOUSE BILL NO. 4824

June 15, 2023, Introduced by Reps. McKinney, Wilson, Conlin, Arbit, Hood, Glanville, Steckloff, Price, Brenda Carter, Tsernoglou, Paiz, Rheingans, Morgan, Miller, Byrnes and MacDonell and referred to the Committee on Natural Resources, Environment, Tourism and Outdoor Recreation.

A bill to amend 1994 PA 451, entitled  
"Natural resources and environmental protection act,"  
by amending section 20120a (MCL 324.20120a), as amended by 2018 PA  
581.

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

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~~**must** be the option  
4 of the person proposing the remedial action, subject to department

1 approval if required, considering the appropriateness of the  
2 categorical criteria to the facility. The categories are as  
3 follows:

4 (a) Residential.

5 (b) Nonresidential.

6 (c) Limited residential.

7 (d) Limited nonresidential.

8 (2) As an alternative to the categorical criteria under  
9 subsection (1), the department may approve a response activity plan  
10 or a no further action report containing site-specific criteria  
11 that satisfy the requirements of section 20120b and other  
12 applicable requirements of this part. The department shall utilize  
13 only reasonable and relevant exposure pathways in determining the  
14 adequacy of a site-specific criterion. Additionally, the department  
15 may approve a remedial action plan for a designated area-wide zone  
16 encompassing more than 1 facility, and may consolidate remedial  
17 actions for more than 1 facility.

18 (3) The department shall develop cleanup criteria ~~pursuant to~~  
19 **under** subsection (1) based on generic human health risk assessment  
20 assumptions that are determined by the department to appropriately  
21 characterize patterns of human exposure associated with certain  
22 land uses. The department shall consider only reasonable and  
23 relevant exposure pathways and factors in determining these  
24 assumptions. The department may prescribe more than 1 generic set  
25 of exposure assumptions within each category described in  
26 subsection (1). If the department prescribes more than 1 generic  
27 set of exposure assumptions within a category, each set of exposure  
28 assumptions creates a subcategory within a category described in  
29 subsection (1). The department shall specify facility

1 characteristics that determine the applicability of criteria  
2 derived for these categories or subcategories. When developing and  
3 promulgating cleanup criteria under subsection (1), the department  
4 shall do all of the following:

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

19 (i) The best value from the agency for toxic substances and  
20 disease registry final minimal risk levels for hazardous substances  
21 or the United States Environmental Protection Agency provisional  
22 peer-reviewed toxicity values.

23 (ii) If a value is not available under subparagraph (i), the  
24 best final value from the United States Environmental Protection  
25 Agency health effects assessment summary table, or final values  
26 adopted by other states, the World Health Organization, Canada, or  
27 the European Union.

28 (iii) If a value is not available under subparagraph (i) or (ii),  
29 a value developed by the department if there is sufficient

1 supporting toxicity data and information available in the peer-  
2 reviewed published scientific literature.

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

5 (i) The best relevant experimentally measured data.

6 (ii) If data is not available under subparagraph (i), the best  
7 relevant modeled or estimated data.

8 (c) If the department desires to use a toxicity value or input  
9 that is different than a value that is available on the United  
10 States Environmental Protection Agency integrated risk information  
11 system, or more recent United States Environmental Protection  
12 Agency Office of Pesticide Programs toxicity values for pesticides  
13 that are incorporated by the integrated risk information system in  
14 place of values that have been archived by the integrated risk  
15 information system, or desires to establish a value when the **United**  
16 **States** Environmental Protection Agency determined that there was  
17 insufficient scientific data to do so when last evaluated by the  
18 **United States** Environmental Protection Agency, the department shall  
19 provide public notice and a written explanation of its intent to do  
20 so and conduct a stakeholder process to obtain input. After  
21 obtaining stakeholder input, the department may promulgate a rule  
22 to use an alternative value in accordance with the order of  
23 precedence set forth in subdivision (a) (i) ~~through~~ **to (iii)**, if the  
24 department demonstrates all of the following:

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

27 (ii) There is more current data in the peer-reviewed scientific  
28 literature that is used on a general basis by the United States  
29 Environmental Protection Agency or multiple other regulatory

1 agencies nationally for the purpose of calculating cleanup criteria  
2 or standards.

3 (iii) After assessing the body of evidence for the hazardous  
4 substance using a rigorous systematic review methodology, such as  
5 that used by the National Toxicology Program's Office of Health  
6 Assessment and Translation and the European Food Safety Authority,  
7 the weight of scientific evidence clearly supports the use of the  
8 proposed value as best available science for the purpose of  
9 calculating generic cleanup criteria.

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

16 (e) When the department considers the pregnant woman as a  
17 potential sensitive receptor to address prenatal developmental  
18 effects, the department may apply a single-event exposure scenario  
19 for a hazardous substance, ~~pursuant to~~ **under** the process set forth  
20 in subdivision (f), only when either of the following occurs:

21 (i) The United States Environmental Protection Agency applies a  
22 single-event exposure scenario to establish regional screening  
23 levels for that hazardous substance.

24 (ii) The department demonstrates, after conducting a  
25 comprehensive assessment of the specific hazardous substance, that,  
26 for that specific hazardous substance, a single exposure may result  
27 in an adverse effect and the weight of scientific evidence supports  
28 the application of a single-event exposure scenario. The  
29 department's comprehensive assessment must evaluate the body of

1 scientific evidence using a systematic review methodology, such as  
2 that used by the National Toxicology Program's Office of Health  
3 Assessment and Translation and the European Food Safety Authority.  
4 The comprehensive assessment must, if appropriate, take into  
5 account all of the following:

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

8 (B) The differences in sensitivity, periods of development,  
9 and progression of different types of developmental effects in  
10 humans and animals.

11 (C) Differences in toxicokinetics between species.

12 (f) Before conducting the comprehensive assessment in  
13 subdivision (e) (ii), the department shall provide public notice and  
14 a written explanation of its intent to do so. ~~Upon~~ **On** completion of  
15 the assessment, the department shall conduct a stakeholder process  
16 to obtain input. If, ~~upon~~ **after** obtaining stakeholder input, the  
17 department elects to apply a single-event exposure scenario for a  
18 particular hazardous substance, the department shall do so in a  
19 rule.

20 (4) If a hazardous substance poses a carcinogenic risk to  
21 humans, the cleanup criteria derived for cancer risk under this  
22 section ~~shall~~ **must** be the 95% upper bound on the calculated risk of  
23 1 additional cancer above the background cancer rate per 100,000  
24 individuals using the generic set of exposure assumptions  
25 established under subsection (3) for the appropriate category or  
26 subcategory. If the hazardous substance poses a risk of an adverse  
27 health effect other than cancer, cleanup criteria ~~shall~~ **must** be  
28 derived using appropriate human health risk assessment methods for  
29 that adverse health effect and the generic set of exposure

1 assumptions established under subsection (3) for the appropriate  
2 category or subcategory. A hazard quotient of 1.0 ~~shall~~**must** be  
3 used to derive noncancer cleanup criteria. For the noncarcinogenic  
4 effects of a hazardous substance present in soils, the intake ~~shall~~  
5 **must** be assumed to be 100% of the protective level, unless compound  
6 and site-specific data are available to demonstrate that a  
7 different source contribution is appropriate. If a hazardous  
8 substance poses a risk of both cancer and 1 or more adverse health  
9 effects other than cancer, cleanup criteria ~~shall~~**must** be derived  
10 under this section for the most sensitive effect.

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

27 (6) The department shall not approve a remedial action plan or  
28 no further action report in categories set forth in subsection  
29 (1)(b) to (d), unless the person documents that the current zoning

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

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

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

27 (9) The department may establish cleanup criteria for a  
28 hazardous substance using a biologically based model developed or  
29 identified as appropriate by the United States Environmental



1 Protection Agency if the department determines all of the  
2 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 has  
9 determined that application of the model is appropriate for the  
10 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~~ **under** subsection  
14 (1), the criterion is 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  
28 addition to that which is subject to and complies with applicable  
29 federal regulations and policies that implement the toxic

1 substances control act, 15 USC 2601 to ~~2692~~-**2697**.

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

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

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

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

27 (17) The department shall promulgate all generic cleanup  
28 criteria and target detection limits as rules. Except for generic  
29 cleanup criteria and target detection limits developed before

1 January 11, 2018, and those generic cleanup criteria determined as  
2 set forth in subsections (5) and (23) and section 20120e(1)(a),  
3 generic cleanup criteria and target detection limits, and any  
4 modifications or revisions to generic cleanup criteria and target  
5 detection limits, are not legally enforceable until promulgated as  
6 rules. The generic cleanup criteria and target detection limits are  
7 subject to all of the following:

8 (a) The department may periodically repromulgate rules for any  
9 portion of the generic cleanup criteria to adopt and use new  
10 toxicity values or chemical or physical data selected ~~pursuant to~~  
11 **under** subsection (3)(a) and (b) or to otherwise update the generic  
12 cleanup criteria in accordance with this part to incorporate, as  
13 appropriate, knowledge gained through research and studies in the  
14 areas of fate and transport and risk assessment taking into account  
15 best practices from other states, reasonable and realistic  
16 conditions, and sound science. The department may also repromulgate  
17 rules that establish target detection limits to update those limits  
18 in accordance with this part.

19 (b) If generic cleanup criteria are included in or relied ~~upon~~  
20 **on** as a basis for decision in a work plan, response activity plan,  
21 remedial action plan, postclosure plan, request for certificate of  
22 completion, or similar document, that is submitted to the  
23 department or approved by the department ~~prior to~~**before** the  
24 effective date of a rule revising those cleanup criteria, then the  
25 generic cleanup criteria effective at the time of submittal or  
26 prior approval continue to apply to the review, revision, or  
27 implementation of the plan, request, or document, as well as to any  
28 future review, approval, or disapproval of a no further action  
29 report or any part ~~thereof~~**of the no further action report** that is

1 based on the plan, request, or document, unless either of the  
 2 following ~~occur~~**occurs**:

3 (i) The person making the submittal voluntarily elects to apply  
 4 the revised cleanup criteria.

5 (ii) The department director makes a site-specific  
 6 demonstration, based on clear and convincing evidence, that the  
 7 prior cleanup criteria are no longer protective of the public  
 8 health, safety, or welfare, or the environment, given the totality  
 9 of circumstances at the site, including any site-specific factors  
 10 that reduce exposure or risk, such as the existence of land or  
 11 resource use restrictions that reduce or restrict exposure. This  
 12 subparagraph does not apply if, no later than 6 months after the  
 13 promulgation of the rule revision changing the cleanup criteria,  
 14 both of the following conditions are met:

15 (A) The person has substantially completed all active  
 16 remediation as set forth in the approved plan, request, or similar  
 17 document, and only monitoring, maintenance, or postclosure  
 18 activities remain.

19 (B) The person submits a request for a no further action  
 20 approval to the department.

21 (c) No further action reports that have been approved by the  
 22 department and that rely on cleanup criteria that have been  
 23 subsequently revised remain valid, subject to the liability  
 24 provisions of section 20126(4)(e).

25 (d) If generic cleanup criteria are included in or relied ~~upon~~  
 26 **on** as a basis for decision in a no further action report, other  
 27 than a no further action report described in subdivision (b)(ii),  
 28 that is submitted to the department but not yet approved by the  
 29 department ~~prior to~~**before** the effective date of a rule revising

1 those cleanup criteria, then the generic cleanup criteria effective  
 2 at the time of submittal continue to apply to the review, revision,  
 3 and approval of the report unless either of the following

4 ~~occur~~:**occurs**:

5 (i) The person making the submittal voluntarily elects to apply  
 6 the revised cleanup criteria.

7 (ii) The department director makes a site-specific  
 8 demonstration, based on clear and convincing evidence, that the  
 9 prior generic cleanup criteria are no longer protective of the  
 10 public health, safety, or welfare, or the environment, given the  
 11 totality of circumstances at the site, including any site-specific  
 12 factors that reduce exposure or risk, such as the existence of land  
 13 or resource use restrictions that reduce or restrict exposure.

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

18 (f) Notwithstanding subdivisions (b) ~~through to~~ (d), an  
 19 owner's or operator's obligations under section 20107a ~~shall be~~**are**  
 20 based ~~upon~~**on** the current numeric cleanup criteria under ~~section~~  
 21 ~~20120a(1)~~**subsection (1)** or site-specific criteria approved under  
 22 section 20120b.

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

26 (a) The facility is an establishment covered by the  
 27 classifications provided by sector 31-33 - manufacturing, of the  
 28 North American Industry Classification System, United States, 2012,  
 29 published by the Office of Management and Budget.

1 (b) The person complies with the Michigan occupational safety  
2 and health act, 1974 PA 154, MCL 408.1001 to 408.1094, and the  
3 rules promulgated under that act applicable to the exposure to the  
4 hazardous substance, including, but not limited to, the  
5 occupational health standards for air contaminants, R 325.51101 to  
6 R 325.51108 of the Michigan Administrative Code.

7 (c) The hazardous substance is included in the facility's  
8 hazard communication program under section 14a of the Michigan  
9 occupational safety and health act, 1974 PA 154, MCL 408.1014a, and  
10 the hazard communication rules, R 325.77001 to R 325.77004 of the  
11 Michigan Administrative Code, except that, unless the hazardous  
12 substance is in use in the facility, the requirement to have a  
13 material safety data sheet in the workplace requires only a generic  
14 material safety data sheet for the hazardous substance and the  
15 labeling requirements do not apply.

16 (19) The department shall promulgate as rules the algorithms  
17 used to calculate, modify, or revise all residential and  
18 nonresidential generic cleanup criteria, as well as the tables  
19 listing, by hazardous substance, all toxicity, exposure, and other  
20 algorithm factors or variables used in the department's  
21 calculations, modifications, or revisions.

22 (20) Calculation and application of toxic equivalency  
23 quotients are subject to the following:

24 (a) The toxic equivalency factors used must only be those  
25 adopted by the World Health Organization.

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

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

4 (21) Polychlorinated dibenzodioxin and dibenzofuran congeners  
5 are not likely to leach from soil to groundwater. The groundwater  
6 surface water interface protection and the residential drinking  
7 water protection exposure pathways are not applicable or relevant  
8 when assessing polychlorinated dibenzodioxin and dibenzofuran  
9 congeners unless the department demonstrates that those congeners  
10 are leaching at material concentrations through co-solvation.

11 (22) Polychlorinated dibenzodioxin and dibenzofuran congeners  
12 are not likely to volatilize from soil or groundwater into the air.  
13 Vapor inhalation exposure pathways are not applicable or relevant  
14 when assessing polychlorinated dibenzodioxin and dibenzofuran  
15 congeners.

16 (23) For a substance that does not have generic cleanup  
17 criteria, if, based on the best available information, the  
18 department determines that the substance is a hazardous substance,  
19 the department may calculate generic cleanup criteria for that  
20 hazardous substance using toxicity values and chemical and physical  
21 data selected ~~pursuant to~~ **under** subsection (3) (a) and (b) and in  
22 accordance with all other requirements of this part and publish the  
23 generic cleanup criteria on the department's website. Within 30  
24 days after publishing the new generic cleanup criteria, the  
25 department shall initiate rule-making to promulgate rules for the  
26 new criteria by filing a rule-making request under section 39 of  
27 the administrative procedures act **of 1969**, 1969 PA 306, MCL 24.239.  
28 The rule-making request ~~shall~~ **must** only include the revisions  
29 necessary to promulgate the new generic cleanup criteria. The new

1 generic cleanup criteria published ~~pursuant to~~ **under** this  
2 subsection take effect and are legally enforceable when published  
3 by the department if the department also initiates rule-making to  
4 promulgate rules for the new criteria within 30 days. The new  
5 generic cleanup criteria published ~~pursuant to~~ **under** this  
6 subsection remain effective and legally enforceable until replaced  
7 by a final rule, ~~or, until the director directs the department to~~  
8 ~~withdraw the rule request under section 66(11) of the~~  
9 ~~administrative procedures act, 1969 PA 306, MCL 24.266,~~ or the time  
10 limitation in ~~either section 45(1) or section 66(12) of the~~  
11 administrative procedures act **of 1969**, 1969 PA 306, MCL 24.245, and  
12 24.266, is not met.

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

15 Enacting section 2. This amendatory act does not take effect  
16 unless Senate Bill No. \_\_\_\_ or House Bill No. 4826 (request no.  
17 02687'23) of the 102nd Legislature is enacted into law.