

Cleanup Criteria

Section XXXX. Cleanup criteria.

(1) The department may establish cleanup criteria and approve of response activities in the categories listed in this subsection. The cleanup category proposed shall be the option of the person implementing the response activity, subject to department approval, considering the appropriateness of the categorical criteria to the facility. The categories are as follows:

- (a) Residential.
- (b) Restricted residential.
- (c) Restricted nonresidential.

(2) The department may approve a response activity based on site specific criteria that satisfy the applicable requirements of this part and the rules promulgated under this part. The department shall utilize only reasonable and relevant exposure pathways in determining the adequacy of a site specific criterion. Additionally, the department may select or approve response activities that address more than 1 facility in a single plan or report.

(3) The department shall develop cleanup criteria pursuant to subsection (1) based on human health risk assessment assumptions determined by the department to appropriately characterize patterns of human exposure associated with certain land uses. The department shall utilize only reasonable and relevant exposure pathways in determining these assumptions. The department shall specify site characteristics that determine the applicability of criteria derived for these categories.

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

(5) In lieu of R 299.5709(1), if a cleanup criterion derived under subsection (4) for groundwater in an aquifer differs from either: (a) the state drinking water standard established pursuant to section 5 of the safe drinking water act, Act No. 399 of the

Cleanup Criteria

Public Acts of 1976, being section 325.1005 of the Michigan Compiled Laws, (b) the secondary maximum contaminant level established by the United States environmental protection agency, or (c) the criterion for an adverse aesthetic characteristic, the cleanup criterion shall be the lesser value unless the department determines that compliance with this rule is not necessary because the use of the aquifer is reliably restricted pursuant to section XXXX (controlled risk categories).

(6) The department shall not approve of a response activity in categories set forth in subsection (1)(b) to (c), unless the person proposing the response activity documents that the current zoning of the property is consistent with the categorical criteria being proposed, or that the governing zoning authority intends to change the zoning designation so that the proposed criteria are consistent with the new zoning designation, or the current property use is a legal nonconforming use. The department shall not grant final approval for a response activity that relies on a change in zoning designation until a final determination of that zoning change has been made by the local unit of government. The department may approve of a response activity that achieves categorical criteria that is based on greater exposure potential than the criteria applicable to current zoning. In addition, the response activity shall include documentation that the current property use is consistent with the current zoning or is a legal nonconforming use. Abandoned or inactive property shall be considered on the basis of zoning classifications as described above.

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

(8) Except as provided in subsections XXXX of this part, compliance with the residential category in subsection (1)(a) shall be based on R 299.5710 and R299.5716 of the Michigan administrative code and criteria described in the following sentence. In lieu of R 299.5709(1), R 299.5712, R 299.5714, R 299.5720, R 299.5724, and R 299.5726 of the Michigan administrative code, criteria will be developed as provided in subsections XXXX of this part. *Note: revision of this subsection may be required to ensure consistency with other aspects of the program redesign.*

(9) The need for soil remediation to protect an aquifer from hazardous substances in soil shall be determined by R 299.5722 of the Michigan administrative code, considering the vulnerability of the aquifer or aquifers potentially affected if the soil remains at the facility. Migration of hazardous substances in soil to an aquifer is a pertinent pathway if appropriately based on consideration of site specific factors.

(10) The department may approve the use of biological or mathematical modeling methods or other scientific methods developed or identified as appropriate by the United States environmental protection agency to evaluate or identify reasonable

Cleanup Criteria

and relevant exposure assumptions or toxicity endpoints of hazardous substances if the department determines all of the following:

- (a) The use of the model or method is reliable, scientifically valid and best represents the available information.
- (b) That application of the model or methods results in a criterion that more accurately reflects the risk posed by the hazardous substance in question.
- (c) That data of sufficient quantity and quality are available for a specified hazardous substance to allow the scientifically valid application of the model or method.

(11) If the cleanup criterion for a hazardous substance determined by R 299.5707 of the Michigan administrative code is greater than a cleanup criterion developed for a category pursuant to subsection (1), the criterion determined pursuant to R 299.5707 of the Michigan administrative code shall be the cleanup criterion for that hazardous substance in that category.

(12) In determining the adequacy of a land-use based response activity to address sites contaminated by polychlorinated biphenyls, the department shall not require response activity in addition to that which is subject to and complies with applicable federal regulations and policies that implement the toxic substances control act, Public Law 94-469, 15 U.S.C. 2601 to 2629, 2641 to 2656, 2661 to 2671, and 2681 to 2692.

(13) Response activity to address the release of uncontaminated mineral oil satisfies subsection (5) of this part for groundwater or R 299.5718 for soil under the Michigan administrative code if all visible traces of mineral oil are removed from groundwater and soil.

(14) The department shall approve the use of probabilistic or statistical methods or other scientific methods of evaluating environmental data when determining compliance with a pertinent cleanup criterion if the methods are determined by the department to be reliable, scientifically valid, and best represent actual site conditions and exposure potential.

(15) If a response activity allows for venting groundwater, the discharge shall comply with requirements of part 31, and the rules promulgated under that part or an alternative method established by rule. If the discharge of venting groundwater is provided for in a response activity that is approved by the department, a permit for the discharge is not required. As used in this subsection, "venting groundwater" means groundwater that is entering a surface water of the state from a facility.

(16) A response activity plan shall provide for response activity to meet the residential categorical criteria, or provide for activity and use limitations pursuant to section XXXX (*controlled risk categories*).

Cleanup Criteria

(17) A response activity that relies on cleanup criteria developed pursuant to subsection (1) shall also consider other factors necessary to protect the public health, safety, and welfare, and the environment as specified by the department, if the department determines based on data and existing information that such considerations are relevant to a specific facility. These factors include, but are not limited to, the protection of surface water quality and consideration of ecological risks if pertinent to the facility based on the requirements of R 299.5728 and R 299.5730 of the Michigan administrative code.

(18) The department shall evaluate and revise, if appropriate, the cleanup criteria derived under this section not less than every 5 years. The evaluation shall incorporate knowledge gained through research and studies in the areas of fate and transport, toxicology and risk assessment. The department shall prepare and submit to the legislature a report detailing revisions made to cleanup criteria under this section.

(XX) Note: placeholder to address language inconsistencies between current rules and that of the proposed program redesign, inclusive of remedial action plan and generic criteria

(XX) Note: placeholder for criteria development timetable, public comment period and procedure for criteria publication on website. It is proposed that the groundwater contact exposure pathway (R 299.5712) will be rescinded; the groundwater and soil volatilization to indoor air exposure pathways (R 299.5714 and R 299.5724, respectively) will be replaced by the Vapor Intrusion exposure pathway as addressed in subsection XXXX of this part; and the soil direct contact (R 299.5720) and ambient air exposure pathways (R 299.5726) will be combined into a single soil exposure pathway as addressed in subsection XXXX of this part. The department shall publish criteria for the exposure pathways addressed in subsections XXXX of this part no less than XX months following the date that this part become effective and until such time the criteria presented in R299.5744, R 299.5746 and R 299.5748 shall apply. The department shall make criteria developed under subsections XXXX available for public comment per R 299.5740.

(XX) Note: placeholder for establishing adverse aesthetic criterion for groundwater in an aquifer.

(XX) Note: placeholder for Soil criteria.

(XX) Note: placeholder for Immediate Response Activity Screening Levels.

(XX) Note: placeholder for Vapor Intrusion.