Legislative Analysis

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ENVIRONMENTAL REMEDIATION CRITERIA

Senate Bill 1244 (H-3) as reported from House committee
Sponsor: Sen. Jim Stamas
House Committee: Michigan Competitiveness
Senate Committee: Natural Resources
Complete to 12-18-18

(Enacted as Public Act 581 of 2018)

SUMMARY:

Senate Bill 1244 would amend Part 201 (Environmental Remediation) of the Natural Resources and Environmental Protection Act (NREPA) to modify the circumstances and requirements according to which the Department of Environmental Quality (DEQ) may carry out environmental remedial actions.

NFA Reports

Environmental remedial actions are actions conducted for the sake of mitigating, minimizing, or preventing a hazardous substance from harming public health or the environment. Currently, if a person is found liable for environmental contamination that requires remedial action to address, NREPA requires the person to complete the remedial actions that fulfill the requirements set in Part 201 before filing a No Further Action Report (NFA), signifying that the person has carried out all necessary action required for environmental remediation. The bill would allow a person to file a NFA report before completing the remedial actions as long as the person has documented the basis for concluding that these remedial actions are sufficient to address the threat to public health and the environment posed by the environmental contamination.

Disputes

Under NREPA, certain persons may appeal a decision made by the DEQ by submitting a petition to the director. If the dispute cannot be resolved through negotiation, the director may involve the Response Activity Review Panel created under Section 20114e to hear, and help resolve, the dispute. These provisions currently apply to technical or scientific disputes. The bill would add disagreements over an administrative issue. The bill would also add a person who has filed a remedial action plan or a person who has filed a postclosure plan to the list of those who are allowed to appeal a departmental decision, and would add disagreements over remedial action plans or postclosure plans to the definition of "dispute" for purposes of the above-described provisions.

Development of Cleanup Criteria

In developing and promulgating cleanup criteria under NREPA, the bill would require the DEQ to do all of the following:

- For each hazardous substance, use final toxicity values from the Integrated Risk Information System (IRIS) of the U.S. Environmental Protection Agency (EPA), or more recent U.S. EPA Office of Pesticide Programs toxicity values for pesticides that are incorporated by IRIS in place of values that have been archived by IRIS, if available. If the EPA had determined that there are not enough scientific data to decide on a toxicity value for a specific substance, the DEQ could not define a value for that

substance. If the EPA IRIS otherwise did not make a toxicity value available, the DEQ could use a value from the following sources, listed in order of precedence:

- The best value from the U.S. Agency for Toxic Substances and Disease Registry (ATSDR), the EPA's provisional peer-reviewed toxicity values.
- The best final value from the EPA's health effects assessment summary table or final values adopted by other states, the World Health Organization (WHO), Canada, or the European Union (EU).
- A value developed by the department itself, using sufficient supporting data and peer-reviewed published scientific literature.

- Select chemical or physical data for the development of cleanup criteria from the best relevant experimentally measured data or, if those data are not available, the best relevant modeled or estimated data.
- If the DEQ desired to use a toxicity value or input that is different than a value available to the EPA IRIS, or more recent EPA Office of Pesticide Programs toxicity values for pesticides that are incorporated by IRIS in place of values that have been archived by IRIS, or desired to establish a value when the EPA determined that there were insufficient scientific data to do so when last evaluated by the EPA, then the DEQ would have to provide public notice and a written explanation of its intent to do so as well as conduct a stakeholder process to obtain input. After obtaining stakeholder input, the DEQ could promulgate a rule to use an alternative value in accordance with the order of precedence set forth above, but only if the DEQ demonstrated all of the following:
  - The IRIS value is based on a determination that is at least 10 years old.
  - There are more current data in the peer-reviewed scientific literature that are used on a general basis by the EPA or multiple other regulatory agencies nationally for the purpose of calculating cleanup criteria or standards.
  - After assessing the body of evidence for the hazardous substance using a rigorous systematic review methodology (such as that used by the National Toxicology Program's Office of Health Assessment and Translation and the European Food Safety Authority), the weight of scientific evidence clearly supports the use of the proposed value as best available science for the purpose of calculating generic cleanup criteria.
- In regard to the exposure of nonresidential workers to environmental contaminants, use a daily exposure time for inhalation that is equal to the average number of hours that such workers would work during a five-day week (not exceeding 10 hours) according to government data.
- In the treatment of pregnant women as "potential sensitive receptors" to address prenatal developmental effects, the DEQ could apply a single-event exposure scenario for a hazardous substance, pursuant to the notice process described below, but only when either of the following occurred:
  - The U.S. EPA applied a single-event exposure scenario to establish regional screening levels for that hazardous substance.
  - The DEQ demonstrated, after conducting a comprehensive assessment of the specific hazardous substance, that, for that specific substance, a single-exposure could result in an adverse effect and the weight of scientific evidence supports the application of a single-event exposure scenario. The DEQ's assessment would have to evaluate the body of evidence using a systematic review methodology and, if appropriate, take into account all of the following:

  - Whether there are data available involving single-day exposures to the hazardous substance during pregnancy.
  - The differences in sensitivity, periods of development, and progression of different types of developmental effects in humans and animals.
  - The differences in toxicokinetics between species.
- Before conducting a comprehensive assessment of the specific hazardous substance for pregnant women, the DEQ would first have to provide public notice and a written explanation of its intent to do so. Upon completion of the assessment, the DEQ would then have to conduct a stakeholder process to obtain input. If, upon obtaining input, the DEQ elects to apply a single-event exposure scenario for a particular hazardous substance, then the DEQ would have to do so in a rule.

Promulgation of Generic Cleanup Criteria

The bill would require the DEQ to promulgate all generic cleanup criteria and target detection limits, and any revisions or modifications to those criteria and limits, as rules. With some exceptions, these criteria and limits would not be considered legally enforceable until they had been promulgated as rules. The generic cleanup criteria and target detection limits would be subject to all of the following:

- The DEQ could periodically update and re-promulgate the generic cleanup criteria or target detection limits with new toxicity values and chemical or physical data as new knowledge and research became available.
- If the generic cleanup criteria were included in or relied upon as the basis for decisions made in a remedial action plan, or similar document, that was submitted prior to the effective date of a revised set of criteria, then the old criteria would continue to be used for those specific plans unless:
  - The person submitting the plan voluntarily elected to apply the revised cleanup criteria.
  - The DEQ made a site-specific demonstration that the prior cleanup criteria were no longer adequate in relation to the specific circumstances of the site. (This exception would not apply under circumstances specified in the bill.)

If the DEQ determined a substance to be hazardous that did not already have generic cleanup criteria, the DEQ could calculate them using toxicity values and chemical and physical data as outlined in **Development of Cleanup Criteria**, above, and publish the criteria on its website. Within the next 30 days, the DEQ would have to initiate rulemaking to promulgate the rules for the new criteria by filing a rule-making request under the Administrative Procedures Act. If the DEQ did so, the criteria would have legal effect when published.

Changes to the generic criteria for a hazardous substance would not invalidate site-specific criteria for that substance that the DEQ had previously approved.

Calculation of Toxic Equivalency Quotients

When the DEQ calculates toxic equivalency quotients—which are used to define toxicity levels—the bill would establish the following requirements:

- The toxic equivalency factors must only be those adopted by the WHO.
- When two or more people acting independently contributed to the hazardous substances measured by the quotients, the harm is considered divisible and liability is subject to apportionment as laid out in the NREPA.

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

Polychlorinated Dibenzodioxin and Dibenzofuran Congeners

The bill would further state that polychlorinated dibenzodioxin and dibenzofuran congeners—pollutants created as a byproduct of some industrial processes, forest fires, and volcanic activity—are not likely to leach from soil to groundwater or volatize from soil or groundwater into the air. Therefore, assessments of groundwater or drinking water exposure pathways would not be considered applicable or relevant when assessing polychlorinated dibenzodioxin and dibenzofuran congeners unless the DEQ demonstrated that those congeners were leaching through co-solvation, and vapor inhalation exposure pathways would not be considered applicable or relevant at all.

Indoor Air Inhalation Exposure

The bill would allow a person to handle a potential contamination of the quality of indoor air by a hazardous substance using any of the following methods:

- The cleanup methods outlined in Section 20120a(18) of NREPA.
- In cases dealing with air pollution from petroleum, the process outlined in the Interstate Technology Regulatory Council Petroleum Vapor Intrusion Guidance Document.[1]
- An approach, using multiple lines of evidence, demonstrating that the potential contamination does not pose an unacceptable risk to the public health, safety, or welfare, or the environment as consistent with standards outlined further in the bill.
- Indoor air sampling that accounts for actual conditions and demonstrates acceptable indoor air concentrations resulting from vapor intrusion compared to criteria outlined further in the bill.
- A method or model allowed in a promulgated rule.
- An alternative method or model that utilizes only site-specific variables or a combination of site-specific or building-specific variables, as long as the method or model is scientifically sound and supported by adequate site information. Alternative methods or models would have to be approved by the DEQ for contamination that has migrated beyond the boundaries of the property.

Under the bill, an indoor air inhalation pathway—meaning a pathway through which air can enter an indoor space and thus be inhaled by an individual—would not be considered a reasonable and relevant pathway in need of remedial action if there were no occupied building or planned occupied building within 30 feet of petroleum contamination or within 100 feet of any other volatile hazardous substance contamination. If there were an occupied building or planned occupied building within these distances of volatile hazards, further evaluation would be conducted by the DEQ to establish if the claim of an environmental hazard was reasonable and relevant.

FISCAL IMPACT:

Senate Bill 1244 would require the DEQ to promulgate administrative rules in accordance with certain procedures, including the use of certain EPA standards, which may increase rulemaking-related costs for the department. The DEQ already has processes in place for rule

[1] https://www.itrcweb.org/Guidance/ListDocuments?topicID=13&subTopicID=48

promulgation, and it is difficult to determine whether these additional rulemaking requirements would significantly increase the administrative costs already inherent in this process. The bill is unlikely to affect departmental revenues or local government costs or revenues.

POSITIONS:

Representatives of the Michigan Chamber of Commerce testified in support of the bill. (12-18-18)

The following entities indicated support for the bill (12-18-18):

- Michigan Manufacturers Association
- Michigan Petroleum Association
- Grand Rapids Chamber of Commerce
- DOW Chemical
- Michigan Chemistry Council

Representatives of the following entities testified in opposition to the bill (12-18-18):

- Michigan League of Conservation Voters
- Clean Water Action

The following entities indicated opposition to the bill (12-18-18):

- Michigan Environmental Council
- Washtenaw County Water Resources Commissioner
- Michigan Sierra Club
- Michigan Chapter of American Academy of Pediatrics
- Natural Resources Defense Council
- Michigan Demands Action

Legislative Analysts: Nick Kelly
Emily S. Smith
Fiscal Analyst: Austin Scott