Senate Fiscal Agency
P. O. Box 30036
Lansing, Michigan 48909-7536

BILL ANALYSIS

Telephone: (517) 373-5383
Fax: (517) 373-1986

Senate Bill 1244 (as introduced 11-29-18)
Sponsor: Senator Jim Stamas
Committee: Natural Resources

Date Completed: 12-4-18

CONTENT

The bill would amend Part 201 (Environmental Remediation) of the Natural Resources and Environmental Protection Act to do the following:

-- Allow a person to submit a no further action (NFA) report before the completion of remedial actions that satisfied the requirements of Part 201.
-- Modify a requirement for the Director of the Department of Environmental Quality (DEQ) to establish a response activity review panel to advise him or her on disputes, and define the term "dispute".
-- Require the Department, when developing and promulgating cleanup criteria for each hazardous substance, to use final toxicity values from the United States Environmental Protection Agency (EPA) integrated risk information system, if available.
-- Require the DEQ, when developing and promulgating cleanup criteria for each hazardous substance, if final toxicity values from the EPA integrated risk information system were not available, to follow a specified order of precedence for selecting final toxicity values.
-- Require the DEQ to promulgate all generic cleanup criteria and target detection limits as rules.
-- Provide methods by which a person could evaluate, address, and manage the vapor intrusion to the indoor air inhalation exposure pathway for a hazardous substance.

The bill would take effect 90 days after its enactment.

NFA Reports before Remedial Actions Complete

Part 201 prescribes remediation requirements for an owner or operator of property who has knowledge that the property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, or disposed of. Upon completion of remedial actions that satisfy the requirements of Part 201, a person may submit an NFA report to the Department. The bill would delete that provision.

A person may submit an NFA report for remedial actions addressing contamination for which the person is or is not liable. A report submitted for this purpose must document the basis for concluding that the remedial actions have been completed. Under the bill, an NFA report submitted for this purpose would have to document the basis for concluding that the remedial actions included in the NFA report were protective of the public health, safety, and welfare,

and the environment with respect to the environmental contamination addressed by the remedial actions.

Response Activity Review Panel

Part 201 requires the Director to establish a response activity review panel to advise him or her on technical or scientific disputes, including disputes regarding assessment of risk, response activity plans, no further action reports, certificates of completion, and documentations of due care compliance under Part 201, and initial assessment reports, final assessment reports, closure reports, and documentations of due care compliance under Part 213 (Leaking Underground Storage Tanks).

The bill would require the Director to establish a response activity review panel to advise him or her on disputes. "Dispute" would mean any disagreement over a technical, scientific, or administrative issue, including disagreements over assessment of risk, response activity plans, remedial action plans, no further action reports, certificates of completion, documentation of due care compliance under Part 201, determinations of whether a person has submitted sufficient information for the Department to make a decision regarding a submittal under Part 201 or Part 213, and initial assessment reports, final assessment reports, closure reports, postclosure plans, and documentations of due care compliance under Part 213.

Part 201 allows a person who submitted a response activity plan; an NFA report; a request for certificate of completion or documentation of due care compliance under this part; or an initial assessment report, final assessment report, closure report, or documentation of due care compliance under Part 213 to appeal a decision made by the Department regarding a technical or scientific dispute, including a dispute regarding assessment of risk, concerning the response activity plan, no further action report, request for certificate of completion, initial assessment report, final assessment report, closure report, or documentation of due care compliance by submitting a petition to the Director.

Under the bill, a person who submitted a response activity plan; a remedial action plan; a postclosure plan; an NFA report; a request for certificate of completion or documentation of due care compliance under this part; or an initial assessment report, final assessment report, closure report, or documentation of due care compliance under Part 213 could appeal a decision made by the Department regarding a dispute by submitting a petition to the Director.

Department Established Cleanup Criteria

Part 201 authorizes the Department to establish cleanup criteria and to approve of remedial actions.

The bill would require the Department, when developing and promulgating cleanup criteria under Part 201, for each hazardous substance, to use final toxicity values from the EPA integrated risk information system, if available. If the EPA had determined that there was insufficient scientific data to derive a value for inclusion in the integrated risk information system, the DEQ could not derive or adopt such a value for that hazardous substance.

If a value were not available in the system, the DEQ would have to apply the following order of precedence when selecting toxicity values: 1) the best value from the Agency for Toxic Substances and Disease Registry final minimal risk levels for hazardous substances, the EPA provisional peer-reviewed toxicity values, or the EPA Office of Pesticide Programs toxicity values for pesticides; 2) if a value were not available from the above sources, the best final value from the EPA Health Effects Assessment Summary Table, or final values adopted by other states, the World Health Organization, Canada, or the European Union; or 3) if a value

were not available from any of the above sources, a value developed by the Department, if there were sufficient supporting toxicity data and information available in the peer-reviewed published scientific literature.

The Department also would be required, when developing and promulgating cleanup criteria under Part 201, to apply the following order of precedence when selecting chemical or physical data for the development of cleanup criteria: 1) the best relevant experimentally measured data; or 2) if data were not available, the best relevant modeled or estimated data.

The Department would be required, when developing and promulgating cleanup criteria under Part 201, to use a daily exposure time in the exposure intake for a nonresidential worker in an algorithm or equation used to calculate generic cleanup criteria under Part 201 that was equal to the average number of hours, not to exceed 10 hours, that a nonresidential worker spent working in a five-day work week, according to the most appropriate governmental data or information.

The bill also would require the exposure intake, when developing and promulgating cleanup criteria under Part 201, to consider a pregnant woman as a potential sensitive receptor to address prenatal developmental effects when the EPA determined that that was warranted and established regional screening levels for the pregnant woman receptor to address prenatal developmental effects. The Department would have to promulgate a cleanup criterion for a particular hazardous substance based on a pregnant woman receptor to address prenatal developmental effects only if the EPA established regional screening levels for that hazardous substance based on that receptor to address prenatal developmental effects. When promulgating those criteria, the Department would have to use the approach, exposure frequency, and exposure duration that the EPA used to establish the regional screening level for this specific receptor for that hazardous substance.

Target Detection Limits

The DEQ would have to promulgate all generic cleanup criteria and target detection limits as rules. Except for those generic cleanup criteria determined as set forth in specified provisions, generic cleanup criteria and target detection limits, and any modifications or revisions to criteria and detection limits, would not be legally enforceable until promulgated as rules. The generic cleanup criteria and target detection limits would be subject to all of the following provisions.

The Department could periodically repromulgate rules for any portion of the generic cleanup criteria to adopt and use new toxicity values or chemical or physical data to select final toxicity values and develop cleanup criteria or to otherwise update the generic cleanup criteria in accordance with Part 201 to incorporate, as appropriate, knowledge gained through research and studies in the areas of fate and transport and risk assessment and would have into account best practices from other states, reasonable and realistic conditions, and sound science. The Department could also repromulgate rules that establish target detection limits to update those limits in accordance with Part 201.

If generic cleanup criteria were included in or relied upon as a basis for decision in a work plan, response activity plan, remedial action plan, postclosure plan, request for certificate of completion, or similar document, that was submitted to, or approved by, the DEQ before the effective date of a rule revising those cleanup criteria, then the criteria effective at the time of submittal or prior approval would continue to apply to the review, revision, or implementation of the plan, request, or document, as well as to any future review, approval, or disapproval of an NFA report that was based on the plan, request, or document, unless either of the following occurred:

-- The person making the submittal voluntarily elected to apply the revised cleanup criteria.
-- The Director made a site-specific demonstration, based on clear and convincing evidence, that the prior cleanup criteria were no longer protective of the public health, safety, or welfare, or the environment, given the totality of circumstances at the site, including any site-specific factors that reduced exposure or risk, such as the existence of land or resource use restrictions that reduced or restricted exposure.

The latter provision would not apply if, before six months had passed after the promulgation of the rule revision changing the cleanup criteria, both of the following conditions were met:

-- The person had substantially completed all active remediation as set forth in the approved plan, request, or similar document, and only monitoring, maintenance, or postclosure activities remain.
-- The person submitted a request for a no further action approval to the DEQ.

No further action reports that had been approved by the DEQ and that relied on cleanup criteria that had been subsequently revised would remain valid, subject to the liability provisions of Part 201.

If generic cleanup criteria were included in or relied upon as a basis for decision in an NFA report, other than a report based on a site-specific demonstration made by the Director, that was submitted to, but not yet approved by, the DEQ before the effective date of a rule revising those cleanup criteria, then the criteria effective at the time of submittal would continue to apply to the review, revision, and approval of the report unless either of the following occurred:

-- The person making the submittal voluntarily elected to apply the revised cleanup criteria.
-- The Director made a site-specific demonstration, based on clear and convincing evidence, that the prior cleanup criteria were no longer protective of the public health, safety, or welfare, or the environment, given the totality of circumstances at the site, including any site-specific factors that reduced exposure or risk, such as the existence of land or resource use restrictions that reduced or restricted exposure.

A demonstration by the Director that prior cleanup criteria were no longer protective of the public health, safety, or welfare, or the environment, would be appealable under a response activity review panel.

An owner's or operator's obligations under Section 20107a (which prescribes the duties of an owner or operator of property having certain knowledge) would have to be based upon the current numeric cleanup criteria established by the DEQ or site-specific criteria approved by the DEQ.

Part 201 requires the DEQ to make available the algorithms used to calculate all residential and nonresidential generic cleanup criteria, and tables listing, by hazardous substance, all toxicity, exposure, and other algorithm factors or variables used in the DEQ's calculations. Under the bill, the DEQ would have to promulgate as rules the algorithms used to calculate, modify, or revise all residential and nonresidential generic cleanup criteria, as well as the tables listing, by hazardous substance, all toxicity, exposure, and other algorithm factors or variables used in the DEQ's calculations, modifications, or revisions.

Calculation and application of toxic equivalency quotients would be subject to the following:

-- The toxic equivalency factors used could only be those adopted by the World Health Organization.

-- When compounds contributed by two or more people acting independently were combined in a toxic equivalency quotient to assess human health risks, harm would be divisible and subject to apportionment of liability.
-- To assess human health risks, the toxic equivalency quotient would have to be compared to generic or site-specific criteria for the reference hazardous substance.

The bill states that polychlorinated dibenzodioxin and dibenzofuran congeners are not likely to leach from soil to groundwater. The groundwater surface water interface protection and the residential drinking water protection exposure pathways would not be applicable or relevant when assessing polychlorinated dibenzodioxin and dibenzofuran congeners unless the DEQ demonstrated that those congeners were leaching at material concentrations through cosolvation.

The bill also states that polychlorinated dibenzodioxin and dibenzofuran congeners are not likely to volatilize from soil or groundwater into the air. Vapor inhalation exposure pathways would not be applicable or relevant when assessing polychlorinated dibenzodioxin and dibenzofuran congeners.

Within six months after the bill's effective date, the DEQ would have to recalculate its generic cleanup criteria to use all toxicity values from the EPA integrated risk information system that were final on that date, and would have to publish the updated criteria on its website. The updated and revised generic cleanup criteria would take effect and would be legally enforceable when published by the DEQ. The Department could not make any other revisions or updates to the generic cleanup criteria. All revisions and updates to the criteria, other than those needed to recalculate them using all toxicity values from the EPA integrated risk information system that were final on the bill's effective date would be promulgated as rules.

For a substance that did not have generic cleanup criteria, if, based on the best available information, the Department determined that the substance was a hazardous substance, it could calculate criteria for that hazardous substance using the toxicity values and chemical and physical data it selected and publish them on the DEQ's website. Within 30 days after publishing the new generic cleanup criteria, the Department would have to initiate rulemaking for the new criteria by filing a rulemaking request under the Administrative Procedures Act. The request could include only the revisions necessary to promulgate the new generic cleanup criteria.

The new criteria would take effect and would be legally enforceable when published by the DEQ if it also initiated rulemaking to promulgate rules for the new criteria within 30 days. The new generic cleanup criteria would remain effective and legally enforceable until replaced by a final rule, until the Director directed the DEQ to withdraw the rule request, or the time limitations prescribed under the Administrative Procedures Act were not met.

Persistence of Site-Specific Criteria

The Department must approve numeric or nonnumeric site-specific criteria in a response activity under Section 20120a if those criteria, in comparison to generic criteria, better reflect best available information concerning the toxicity or exposure risk posed by the hazardous substance or other factors. Under the bill, site-specific criteria approved by the Department would not be invalidated by subsequent changes to the generic criteria for that hazardous substance, including changes to toxicity, exposure, or other values or variables used by the DEQ to calculate the generic criteria.

Indoor Air Inhalation and Hazardous Substances

Under Part 201, a person demonstrates compliance with indoor air inhalation criteria for a

hazardous substance at a facility if all of the following conditions are met:

-- The facility is an establishment covered by the classifications provided by Sector 31-33 – Manufacturing, of the North American industry classification system, United States, 2012, published by the Office of Management and Budget.
-- The person complies with the Michigan Occupational Safety and Health Act and the rules promulgated under that Act applicable to the exposure to the hazardous substance.
-- The hazardous substance is included in the facility's hazard communication program under the Michigan Occupational Safety and Health Act, and the Hazard Communication Rules of the Michigan Administrative Code, except as otherwise provided.

The bill would allow a person to evaluate, address, and manage the vapor intrusion to the indoor air inhalation exposure pathway for a hazardous substance using any of the following methods:

-- Meeting all of the conditions described above for indoor air inhalation criteria.
-- For purposes of evaluating and addressing the vapor intrusion to the indoor air inhalation pathway in connection with any release of petroleum as described as a regulated substance defined in Part 213, the process outlined in the guidance document Petroleum Vapor Intrusion created by the Interstate Technology Regulatory Council Petroleum Vapor Intrusion (PVI-1, OCT-14).
-- Indoor air sampling demonstrating compliance with applicable indoor air inhalation generic cleanup criteria if the indoor air sampling accounted for actual site conditions.
-- An alternative method or model for assessing vapor intrusion risk that used only site-specific variables or a combination of site-specific or building-specific variables if the method or model were scientifically sound and supported by adequate site information.
-- A method or model allowed in a promulgated rule.

A person also could evaluate, address, and manage the vapor intrusion to the indoor air inhalation exposure pathway for a hazardous substance using an approach, using multiple lines of evidence, demonstrating that the vapor intrusion to the indoor air inhalation exposure pathway did not pose an unacceptable human health risk consistent with all or a combination of one or more of the following:

-- The USEPA "Oswer Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air" (Oswer publication 9200.2-154, June 2015).
-- The guidance document Petroleum Vapor Intrusion created by the Interstate Technology Regulatory Council Petroleum Vapor Intrusion (PVI-1, Oct-14).
-- The EPA's "Documentation for EPA's Implementation of the Johnson and Ettinger Model to Evaluate Site Specific Vapor Intrusion into Buildings version 6.0" (USEPA, September 2017).

The indoor air inhalation pathway would not be a reasonable and relevant pathway for purposes of response activities undertaken under Part 201 if there were no occupied building or planned occupied building that was within the following distances from subsurface volatile hazardous substance contamination:

-- For petroleum contamination, within both a 30-foot lateral separation distance and the permissible vertical separation distance under guidance document Petroleum Vapor Intrusion created by the Interstate Technology Regulatory Council Petroleum Vapor Intrusion (PVI-1, Oct-14).
-- For any volatile hazardous substance contamination other than petroleum, within both a 100-foot lateral separation distance and a 100-foot vertical separation distance.

If there were an occupied building or planned occupied building within the distances from subsurface volatile hazardous substance contamination above, the indoor air inhalation pathway would not necessarily be a reasonable and relevant pathway. Instead, further evaluation would be needed to determine whether the indoor air inhalation pathway was reasonable and relevant considering site-specific factors such as site-specific geology or hydrogeology, measured contaminant concentrations, the existence of institutional controls, including land use or resource use restrictions, or the existence of exposure controls, exposure barriers, or other mitigating factors, including building ventilation or use.

MCL 324.20101 et al. Legislative Analyst: Nathan Leaman

FISCAL IMPACT

The bill would have minor, but negative fiscal impact on the Department of Environmental Quality (DEQ) and no fiscal impact on local units of government. The bill would require the DEQ to promulgate a number of new and amended rules regarding environmental cleanup criteria under Part 201 of the Natural Resources and Environmental Protection Act. The promulgation of these new rules would introduce new administrative costs to the DEQ which would be borne by existing resources.

Fiscal Analyst: Josh Sefton

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