

## ***Proposed Part 201 Rules Soon To Be Released For Public Comment***

In a June 25, 2001, letter, the Michigan Department of Environmental Quality (MDEQ) requested publication of proposed amendments to the rules under Part 201 (Environmental Response) of the Michigan Natural Resources and Environmental Protection Act (NREPA). The Proposed Part 201 Rules and the notice of public hearing for them will be published in the July 16, 2001, Michigan Register. The public hearing on the Proposed Part 201 Rules will be held on August 28, 2001, at the Michigan Library and Historical Center, 717 West Allegan, Lansing, Michigan, from 1:00 PM to 5:00 PM and from 6:30 PM to 8:00 PM. Written comments must be submitted to the MDEQ, Environmental Response Division, P.O. Box 30426, Lansing, Michigan 48909-7926, by 5:00 PM Eastern Daylight Time on September 11, 2001. Copies of the Proposed Part 201 Rules may be downloaded from MDEQ's web site at <http://www.deq.state.mi.us/erd> or from the Office of Regulatory Reform's web site at <http://www.state.mi.us/orr>.

Some of these proposals have been discussed in previous articles. *Michigan Environmental Compliance Update*, Vol. 11, No. 12 and Vol. 12, Nos. 2 and 3.

### **Remedial Investigations**

This article addresses the Proposed Part 201 Rules regarding remedial investigations (RIs). A "remedial investigation" is defined in Part 1 of the Proposed Part 201 Rules as "an evaluation to determine the nature, extent, and impact of a release or threat of release [of a hazardous substance] and the collection of data necessary to conduct a feasibility study of alternative response activities or to conduct a remedial action at a facility." Briefly, under Part 201, a "facility" is any place where a released hazardous substance comes to be located in excess of the generic residential cleanup

criteria. Part 201 provides that MDEQ may establish land use- based cleanup criteria for various categories of land use, including residential, commercial, and industrial.

Similar to other portions of the proposed Part 201 Rules discussed in previous installments, MDEQ has separated the RI rules into three categories based upon whether the person performing an RI is or is not liable under Part 201 and whether that person is or is not seeking MDEQ's approval of a proposed or completed RI.

### **Remedial Investigations Conducted By A Liable Person Seeking MDEQ Approval – Proposed Rule 511a**

Proposed Rule 511a applies to an RI conducted by a person who is liable under Part 201 and who is seeking MDEQ's approval of the RI. Proposed Rule 511a sets out the requirements that a RI submitted to MDEQ for approval must meet, in addition to other potentially applicable requirements under Part 201 and its rules. MDEQ may require or request that a liable person conduct an RI and may require the person to prepare a RI workplan prior to beginning the RI. A liable person who has not been required or requested by MDEQ to perform an RI may also seek MDEQ's approval of an RI before or after it has been completed. If the RI has already been completed, the person must submit an RI report that describes the completed work. MDEQ may approve an RI that is proposed to be done in phases, provided sufficient detail is provided on the subsequent phases in order that MDEQ is able to determine that the phase being proposed or reported on is appropriately defined.

If the person proposing an RI has already determined that one of the categories of land- use based remedial actions (i.e., residential, commercial, or industrial) will be implemented at a facility, then the scope of the RI may be directed with that objective in mind; however, a later change in the remedial action objective may require performance

of additional investigations. Proposed Rule 511a lists the following factors to be addressed by an RI:

- the nature and extent of the contamination at a facility;
- risks posed to the public health, safety, and welfare and to the environment and natural resources;
- relevant exposure pathways;
- with respect to the hazardous substances present at a facility, each of the following items: (i) amount; (ii) concentration; (iii) hazardous properties; (iv) environmental fate; (v) bioaccumulative properties; (vi) persistence; and (vii) mobility;
- with respect to the physical setting of the facility, all of the following: (i) geology; (ii) hydrology; (iii) hydrogeology; (iv) the depth to the saturated zone; (v) hydrologic gradients; (vi) the proximity to aquifers; (vii) the proximity to surface water; (viii) the proximity to flood plains; and (ix) the proximity to wetlands;
- current and potential groundwater uses;
- identification and characterization of the source;
- whether hazardous substances at the facility may be reused or recycled;
- the likelihood of future releases if the hazardous substances will remain at the facility;
- the extent to which the hazardous substances are currently contained by natural or manmade barriers and the adequacy of those barriers;
- the impact of any planned demolition activities;
- the extent to which hazardous substances have migrated, or are expected to migrate, from the release area, including the potential to migrate along or enter sewers;
- an evaluation of the injury to, destruction of, or loss of natural resources;
- the contribution of hazardous substances at the facility to air, water, or land contamination;
- legally applicable or relevant and appropriate state and federal requirements;
- sampling design and the rationale for the parameters selected;
- a description of monitoring well construction;
- a description of, and reasons for, any geophysical techniques to be used in the RI (Proposed Rule 511a additionally notes that geophysical data must be made available to MDEQ upon request);
- procedures for sample collection and preparation;

- laboratories that are to be used for sample analysis;
- laboratory methods to be followed for analyses (Proposed Rule 511a additionally notes that quality assurance/quality control data for the data reported must be made available to MDEQ upon request);
- a description of any statistical methods used to evaluate laboratory data relative to the cleanup criteria and an explanation of why the statistical analysis is appropriate;
- any other matters appropriate for the facility.

Regarding the last item, Proposed Rule 511a states that any request by MDEQ for information regarding such other matters must be accompanied by an explanation of why the information is needed and, further, that MDEQ may only request information on factors that are not adequately addressed by the information provided in relation to the other factors to be addressed under the rule.

#### **Remedial Investigations Conducted By A Liable Person Not Seeking MDEQ Approval – Proposed Rule 511b**

Proposed Rule 511b addresses RIs performed by a person that is liable under Part 201, but which is not seeking MDEQ's approval of the RI, as is allowed under Part 201, unless the person is performing the RI subject to an administrative order or agreement or a judicial consent decree which requires MDEQ's prior approval. The factors to be addressed by an RI performed under Proposed Rule 511b are for the most part identical to those summarized above under Proposed Rule 511a, except, of course, the requirements which relate to MDEQ's approval or request for additional information on other matters appropriate for a facility.

#### **Remedial Investigation Conducted by A Non-Liable Person Seeking MDEQ Approval – Proposed Rule 511c**

Proposed Rule 511c addresses RIs performed by a person that is not liable under Part 201 that is seeking MDEQ's approval of the RI. Proposed Rule 511c is nearly

identical to Proposed Rule 511a discussed above, except differences reflecting that the person performing the RI is not liable under Part 201.

### **Remedial Investigations To Evaluate Certain Groundwater Conditions – Proposed Rule 512**

Proposed Rule 512 addresses components of a RI that are required when reasonable inferences from data and observations at a facility support a conclusion that hazardous substances have reached groundwater. A person that is liable must comply with the requirements of the proposed rule. A non-liable person is not required to make the notifications required under the rule; however, a non-liable person must comply with the substantive requirements of the rule if the person is performing an RI of groundwater that may be entering a sewer. The proposed rule notes that such a non-liable person may be subject to other laws, ordinances, or rules relating to contaminated groundwater entering a sewer.

### **Groundwater Venting To Surface Water**

If reasonable inferences from available data and observations support the conclusion that hazardous substances have reached groundwater, then the RI must characterize the nature and extent of groundwater contamination to determine if those substances in venting groundwater exceed the generic groundwater surface water interface (GSI) cleanup criteria. As used in Part 201, “venting groundwater” is defined as groundwater that is entering surface water of the State. Proposed Rule 512 provides that the requirement to determine whether venting groundwater requires response activity, MDEQ authorization, or compliance with other regulatory requirements, is an ongoing obligation that must take into account the factors that influence the possibility that venting groundwater will exceed the generic GSI cleanup criteria, including factors such

as concentration gradients, seasonal variations in groundwater elevations, and changes in water quality standards.

The proposed rule provides that groundwater monitoring wells must be installed to track the flow of contaminated groundwater towards surface water. The monitoring wells must be “vertical” wells designed to obtain a vertical profile of the contamination within the groundwater in order to identify the intervals within the aquifer that have the highest concentration of a hazardous substance, taking into account the physical properties of the hazardous substance and the characteristics of the aquifer. The intervals with the highest concentration of a hazardous substance are to be used to make the determinations required under the proposed rule. The monitoring wells must be located such that they are sampling only groundwater and not groundwater mixed with surface water.

The investigation must determine if the concentration of a hazardous substance in a “surface water impact monitoring well” exceeds its generic GSI cleanup criterion. A “surface water impact monitoring well” is defined under the proposed rule as “a well that is downgradient from a release or from the areas of highest hazardous substance concentration at the facility, or both, and, if there is more than 1 well between the release and the surface water, the well that is the closest to the surface water.” Proposed Rule 512 notes that there may be more than one surface water impact monitoring wells at a given facility. If the concentration of a hazardous substance in a surface water impact monitoring well exceeds its generic GSI cleanup criterion, then a person liable under Part 201 must comply with both of the following requirements:

- Notify MDEQ within 90 days, unless response action is taken within that 90-day period to halt the flow of groundwater exceeding the generic GSI cleanup criterion before the 90-day period expires.
- Obtain authorization from MDEQ for the venting groundwater in compliance with Part 201, which requires compliance with the requirements of Part 31 (Water Resources Protection) of NREPA, before the groundwater exceeding the generic GSI cleanup criteria reaches the surface water, or prevent the discharge of the venting groundwater exceeding the generic GSI criteria.

### **Groundwater Infiltrating Sewers – Storm Sewers**

If reasonable inferences support a conclusion that groundwater infiltrates a storm sewer at a facility, then the RI must characterize the nature and extent of the groundwater contamination to determine if groundwater containing a hazardous substance in excess of its generic GSI cleanup criterion is infiltrating the storm sewer. The investigation must determine if the concentration of a hazardous substance in a “sewer impact monitoring point” exceeds its generic GSI cleanup criterion. A “sewer impact monitoring point” is defined as either of: (i) “a well that is downgradient from a release or from the areas of highest hazardous substance concentration at the facility and, if there is more than 1 well between the release and the sewer, the well that is closest to the sewer”; or, in the alternative, (ii) “another monitoring point that allows for sampling of groundwater which is representative of the groundwater contamination that is infiltrating the sewer.” A person relying on an alternative monitoring point must document the technical basis for selecting the alternative point and such points must be practical to monitor with sufficient frequency to comply with Proposed Rule 512. As is the case with surface water impact monitoring wells, there may be multiple sewer monitoring impact points at a given facility. Monitoring wells for sewer impact monitoring points must also be “vertical” wells, as described above.

If the concentration of a hazardous substance exceeds its generic GSI cleanup criterion at a sewer impact monitoring point for a storm sewer and the invert elevation of the storm sewer is at or below the water table, then a liable person conducting an RI must comply with the same requirements listed above with respect to discharges of groundwater to surface water, except that the requirements are modified to reflect that the groundwater is discharging to a sewer.

### **Groundwater Infiltrating Sewers – Sanitary/Combined Sewers**

If reasonable inferences support a conclusion that groundwater infiltrates a sanitary sewer or combined sanitary and storm sewer at a facility, then the RI must characterize the nature and extent of the groundwater contamination to determine if groundwater containing a hazardous substance infiltrates a sewer in excess of any of the following criteria:

- The generic GSI cleanup criteria for (i) chlordane, (ii) 4, 4 – DDD, (iii) 4, 4 – DDE, (iv) 4, 4 – DDT, (v) dieldrin, (vi) hexachlorobenzene, (vii) hexachlorobutadiene, (viii) hexachlorocyclohexanes, (ix) alpha-hexachlorocyclohexane, (x) beta-hexachlorocyclohexane, (xi) delta-hexachlorocyclohexane, (xii) lindane, (xiii) mercury, (xiv) mirex, (xv) octachlorostyrene, (xvi) polychlorinated biphenyls, (xvii) pentachlorobenzene, (xviii) photomirex, (xix) 2, 3, 7, 8 – TCDD, (xx) 1, 2, 3, 4 - tetrachlorobenzene, (xxi) 1, 2, 4, 5 - tetrachlorobenzene, and (xxii) toxaphene.
- The generic GSI cleanup criterion of a hazardous substance for which the wastewater treatment plant has exceeded a water or land discharge permit limit in the past twelve months.
- The concentration of a hazardous substance which, if it enters a sewer, might result in a fire or explosion hazard or an acute toxic health hazard.

If the concentration of a hazardous substance at a sewer impact monitoring point exceeds any of the above criteria and the elevation of the invert of the sanitary/combined sewer is at or below the water table, then a liable person must do all of the following:

- Within 90 days, notify the operator of the wastewater treatment plant which receives the sanitary/combined sewer discharge, if the operator is a local unit

of government that has elected to receive notices under the proposed rule, or such other person as is designated in a local ordinance.

- Comply with any requirements imposed by an industrial pretreatment program imposed by the wastewater treatment plant.
- Comply with Part 31's industrial pretreatment rules with respect to groundwater that is potentially entering the sanitary/combined sewer.

Proposed Rule 512 also sets out procedures that a local government may follow to require reporting of potential discharges to a wastewater treatment plant it operates and establish different reporting requirements.

### **Responsibilities Of Non-Liable Persons**

Proposed Rule 512 also notes that, although a person who is not liable under Part 201 is not required under Part 201 to perform remedial action for contaminated groundwater entering a sewer, some form of action may nevertheless be required under other parts of NREPA or a local ordinance. It also states that fines shall not be collected under Part 201 for failure to comply with a local ordinance related to the rule.

The Michigan Chemistry Council and the Michigan Manufacturers Association are preparing comments on the proposed Part 201 rules. If you are interested in participating in these efforts, contact Andy Such of the Michigan Chemistry Council at (517) 372-8898 or Mike Johnston of the Michigan Manufacturers Association at (517) 372-5900.

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