

## SUBGROUP: NR 700

Remediation and Redevelopment External Advisory Group



### AGENDA

#### Remediation and Redevelopment External Advisory Group – NR 700

Tues. Dec. 5, 2023 | Noon-1:30 p.m.  
Milwaukee Water Commons | Adams Garden Park  
1836 W. Fond Du Lac Ave.  
Milwaukee, WI 53205

#### **Register to attend via Zoom**

<https://us02web.zoom.us/join/zoom-remediation-redevelopment-external-advisory-group-nr-700>  
<https://us02web.zoom.us/join/zoom-remediation-redevelopment-external-advisory-group-nr-700>

#### **In-person attendees should RSVP**

to Jody.Irland@wisconsin.gov by noon on Mon., Dec. 4, 2023.

#### *Introductions*

- Agenda repair
- Meeting logistics
- Future meeting dates

#### *Review Takeaways from Last Meeting*

- Vapor Intrusion Continuing Obligations Discussion (Jennifer Borski and Bill Nelson)
- DNR RR Program Process Brainstorming
- NR 700 EAG Subgroup open invitation for policy initiatives

#### *DNR Updates*

- Case study and small-group discussion
- Identify priorities

#### *Issue Paper Discussion*

- RR Program seeking input through issue paper development on upcoming Fiscal Year 2025 rulemaking topics:
  - Fees
  - Site investigation requirements and conceptual site models

#### *Next Steps and Assignments*

#### *Next meeting date*

- Remediation and Redevelopment External Advisory Group (EAG) – Jan. 25, 2024
- RR EAG Subgroup Series – Feb. 28, 2023

#### *Adjourn*

## Issue Paper Outline (12/5/2023 DRAFT)

### Conceptual Site Models and Site Investigations

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NR 700 EAG Subgroup

Molly Schmidt, Michele Norman, Jodie Thistle, Donna Volk, Josh Davenport

#### TYPE OF RECOMMENDATION

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[e.g., statutory, regulatory, administrative]

#### BACKGROUND

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NR 716 language can be ambiguous or confusing; seeking to identify issues and improve clarity and regulatory efficiency.

##### A. Conceptual Site Model (CSM)

- Not explicitly named in code as a requirement although components of a CSM are necessary to complete a site investigation
- Unclear when development of a CSM should begin and that it is an ongoing/living model that builds with each iteration of investigation as well as when remedial actions are taken
- Unclear how to present a CSM as part of the SI process (format, etc.) and RAOR, RAP, closure

##### B. Site Investigation Scoping

- SIWP requires scoping information per NR 716.09. The DNR doesn't receive SIWPs for most cases, although they are required.
- SIR requires scoping information per NR 716.15 and references NR 716.07
- Difficult for the DNR to review reports without adequate background information and presentation of general site conditions
- Work plans should be required for each iteration of site investigation.

##### C. DNR technical review requests

- Very few fee review requests received for SIWP, SIR, RAOR, which can result in compounding issues, less efficiency in cleanup.
- When fee review is requested for SIWP, the responsible party (RP) may need to wait 60 days before beginning field work. But if no technical review is requested, the timeframe is 30 days, resulting in a disincentive for time-sensitive projects to seek fee review.

##### D. Groundwater

- Often when Monitored Natural Attenuation (MNA) parameters are potentially a remedy or part of a remedy, the justification of MNA is limited to decreasing contaminant concentrations. Under NR 716.13(13), MNA parameters should be collected during site investigation (SI) work and should include analysis and interpretation of geochemical indicators and parameters.
- The correct use of temp wells (wells that do not comply with NR 141 construction requirements) and grab samples as being for field screening purposes is unclear. Results are generally not considered to be representative of groundwater conditions and not to be used for regulatory compliance. Also, a temp well variance request (for wells not complying with NR 141) must be submitted prior to use for DNR review.

*These draft issue papers and recommendations were developed by the Remediation and Redevelopment External Advisory Group and members of the public, and do not necessarily represent the opinions or the position of the Wisconsin Department of Natural Resources or other state agencies.*

## E. Data Interpretation

- Most site investigation reports (SIRs) do not include the interpretation of data required under NR 716.15 (3)(h). Often, the results are presented, but there is no discussion of how the degree and extent has been defined in all environmental media and impacts to receptors.

## F. J-flagged Lab Data

- If lab results are estimated or "J-flagged", those results require interpretation, however, there is typically no discussion of how the RP/consultant consider the J-flagged data to be representative of site conditions.

## G. Method Detection Limits

- Increased method detection limits due to dilution (e.g., interference) that result in "no detect" of a COC but the method detection limit is well above the RCL.

## H. Exceptions noted by the lab during analysis of environmental samples

- The SIR should discuss any samples noted by the lab as not being received in an appropriate condition.
- Typically, if the lab identifies that the environmental samples have been received in a condition that may affect the data results, these situations are not discussed in the SIR. For example, if the samples were not received on ice or there is air in a sample vial, the data results may be affected.

## I. Visual Aids

- Variability in Flow Direction. Variations in flow direction must be illustrated on water table and potentiometric surface maps under NR 716.15(4)(b)1, however, typically, only one flow direction map is provided with no discussion of variability in flow direction, which can affect receptors and remedial options.
- Isoconcentration Maps. Maps should include data to support illustration/depiction of extent of contamination displayed as isoconcentration lines. See NR 716.15(4)(c). Maps should include both isoconcentration lines and data.
- Cross Sections. Include data to support illustration/depiction of extent of contamination displayed as isoconcentration lines. See NR 716.15(4)(d). Cross sections should pass through the source area(s) and along potential/known migration pathways to potential receptors.
- Photographs. Photographs are required, but rarely submitted, to document site work. See NR 716.15(4)(f).

## J. Iterative Nature of SI & Comprehensive SIR

- Often, multiple SI reports are submitted to the DNR. The DNR recognizes that the SI is an iterative process; however, if multiple SIRs and technical reports with SI data have been submitted, a comprehensive report is needed to integrate and interpret all the data that has been collected to respond to the hazardous substance discharge.
- Frequently, DNR staff are trying to review multiple reports to determine if the degree and extent of contamination has been defined in all environmental media. This is an inefficient and time-consuming process.

## PROPOSAL

### A. CSM

- The ITRC definition of a CSM is “a three-dimensional visualization of site conditions that allows for evaluation of contaminant sources and affected media, migration pathways and potential receptors”
- Require development of a CSM to be maintained as a communication and decision-making tool throughout the NR 700 process (potentially through rule revisions and guidance).
- Potential CSM steps:
  - Begins when a hazardous substance discharge is reported
  - Evolves as scoping information is gathered
  - The initial CSM should be included in the submittal of an SIWP and updated CSMs included with subsequent submittals throughout process, including closure submittal
  - As site investigation data are collected, the CSM should be updated
  - Should be included in the submittal of an SIR and show the degree and extent of contamination in all affected media
  - CSM directly supports the RAOR/RAP in evaluating remedial options
  - Closure application should include the CSM to demonstrate that the site investigation is complete and how the response/remedial actions address any residual contamination and are protective
- CSM examples as part of a guidance document should be created for simple and complex sites

### B. SIWP

- Clarify when additional work plans and fees would be required for additional SI field work. Add authority to require subsequent workplans and a fee per plan when additional investigation steps are proposed.
- Clarify whether additional SIWPs require all previous background data that was submitted as part of previous SIWP.
- The pace of the investigation should be considered when requiring developing a work plans. For investigations where the RP needs to move forward more quickly but multiple field iterations may be anticipated, consider stepped/dynamic work plan approaches that outline how an RP will move forward with additional investigation based on the initial fieldwork (e.g., stepping out monitoring wells based on specific pre-defined criteria). How would this be reviewed/approved/fees collected?
- RP's understand that they are proceeding at their own risk if they proceed with fieldwork without SIWP approval; regardless of approval of SIWP, the DNR may request additional work.

### C. DNR technical review requests

- Consider having a consistent timeframe (60 days) for both fee and non-fee SIWP (through rule revisions)
- Consider incentivizing the submittal of a fee, for example, changing review time to 90/180 days without fee and 30/60 days with fee (through rule revision).
- Consider requiring a fee review for SIWP, SIR, RAOR, RAP (through rule revisions)
- Consider a graduated scale for expediting reviews. Larger the fee, the faster the review.

- D. Groundwater
  - Clarify when field monitoring of DO, ORP, pH, temp, alkalinity is required and then submit as part of SI report.
  - Certain MNA parameters should be included in the SIWP based on contaminant identified during discharge notice.
  - Consider adding clarity to administrative code or/and guidance regarding temporary groundwater monitoring wells and grab samples; consider clarifying terminology to be consistent with industry terms
  - Further clarify types of temporary wells used by industry and when pre-approval is required
- E. Data Interpretation
  - Further discuss issue, causes, and potential resolution for lack of interpretation of data required under NR 716.15 (3)(h). Consider whether administrative review for completeness applies.
- F. J-flagged Lab Data
  - Further discuss issues ("J-flagged" interpretation and discussion of how data is representative of site conditions), causes and potential resolution.
  - Consider requiring data validation section in SI Report
- G. Method Detection Limits
  - Further discuss issue (increased method detection limits due to dilution that result in "no detect" of a COC but the method detection limit is well above the RCL), causes and potential resolution.
  - Include discussion in report of elevated detection limits
  - Clarify whether this will be interpreted as above the RCL standard (see NR 720.07(2))
  - Consider requiring data validation section in SI Report
- H. Exceptions noted by the lab during analysis of environmental samples
  - Consider requiring QA/QC report discussion in SIR
  - Consider requiring data validation section in SIR
- I. Visual Aids
  - Further discuss issues (missing data relating to variability in flow direction, isoconcentration maps, cross sections, and photographs), causes and potential resolution(s).
  - Consider whether administrative review for completeness applies
  - Clarify in code to specify exactly what DNR wants for visual aids
  - Clarify when photographs are appropriate and what types of photos DNR is looking for
- J. Iterative Nature of SI & Comprehensive SIR
  - Further discuss issues (submission of multiple SIRs and technical reports with SI data with no comprehensive report and resulting inefficiencies for DNR staff), causes, and potential resolution.
  - A comprehensive SI should consist of all relevant data and visual aids, taking into account the time gap between sampling events, if applicable.

# Remediation and Redevelopment External Advisory Group



Paper/Agenda #

## RESOURCES NEEDED

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[DNR staff participation estimated hours, external participation estimated hours]

## ENVIRONMENTAL JUSTICE EVALUATION

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[Explain how this proposal furthers Wisconsin DNR goals regarding environmental justice]

## COMMENTS

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[Notable comments from issue paper draft writing process from subgroup members, including alternative approaches considered]

DRAFT

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