

GUIDANCE CRITERIA RELATED TO SEDIMENT QUALITY GUIDELINES

Contaminated Sediments External Advisory Group

Work Group Meeting

April 27, 2016

Agenda

- 9:00 – 9:05 Welcome and agenda repair
- 9:05 – 9:30 Work group purpose and goals
- 9:30 – 10:45 Identify general and site-specific evaluation criteria for the assessment of contaminated material in sediment and the transition zone for consideration by DNR
- 10:45 – 11:00 Identify next steps for work group meeting(s)

Sediment vs. Soil w/ respect to the Ordinary High Water Mark (OHWM)

WATER'S EDGE

(Annual/Seasonal High)

Use CBSQG

or

Pursue site-specific number(s)

TRANSITION AREA

(Between Water's Edge and OHWM)

Use the more protective of CBSQG or NR720

or

Pursue site-specific number(s)

Ordinary High Water Mark

UPLAND - SOIL

(Above OHWM)

Use NR 720 unless NR 716.07(8)(a), (b) and/or (c) apply

Site-specific number(s) may be necessary for sites that meet NR 716.07(8) criteria.



Wisconsin Law, Statutes, and Administrative Codes

- **Wisconsin Law**

- Wisconsin Constitution for provision on public trust
- Act 204

- **Wisconsin Statutes**

- Chapter 30
- Chapter 160
- Chapter 281
- Chapter 289
- Chapter 292

- **Administrative Codes**

- NR 700 Series
 - NR 700, NR 716, NR 718, NR720, and NR 722
- NR 102 – NR 106
- NR 345
- NR 347
- NR 500

Guidance

- **Wisconsin Guidance**

- Consensus Based Sediment Quality Guidelines, Recommendations for Use and Application, Interim Guidance (WT-732)
- Exempting Low-Hazard Waste from Solid Waste Regulations (WA-1645)
- Management of Contaminated Soils and Other Waste Materials Under s. NR 718, Wis. Admin. Code (RR-999)

- **EPA**

- Guidance
 - Risk assessment
 - Sediment remediation
 - Regional screening level web calculator
 - Water quality standards
 - Toxicology database
- Clean Water Act

Other Resources

- **Other Resources/Considerations**

- MacDonald et. al. – sediment quality guidelines
- Multiple lines of evidence, weight of evidence, Triad approach, etc...
- Equilibrium partitioning sediment benchmarks
- ITRC documents
- State of Washington sediment management standards
- Ontario sediment quality guidelines

In-situ Risk Evaluation Criteria

- Contaminant evaluation
 - Known and/or unknown contaminant source(s)
 - Historical and/or on-going release(s) to the environment
 - Media of concern
 - Contaminant characteristics
 - Potential for recontamination
 - Background concentrations
- Physical environment
 - Deposition/scour/resuspension
 - Drainage patterns
 - Surface water/groundwater connectivity
 - Seasonal variations

In-situ Risk Evaluation Criteria (cont.)

- Exposure routes
 - Ecological, human or both
- Multiple lines of evidence
- Sensitive environments (defined in NR 700.03)
- Fish and/or wildlife public health advisories
- Long-term vs. short-term risk reduction
- Timeframe to achieve the remedial action objective (RAO)

In-situ Risk Evaluation Criteria

(cont.)

- Conceptual site model
- Historical, current, and anticipated future use and zoning of the property

Restoration and Redevelopment Considerations

- Habitat and/or resource restoration
- Available funding sources
- Enrolled in the voluntary party liability exemption (VPLE) program
- Acceptable continuing obligations

Guidance Criteria: Initial External Comments

- Contains default (i.e. off-ramp) sediment numbers
- Retains the ability to pursue site-specific sediment numbers
- Allows for performance based criteria
- Has milestones/check-ins for acceptance of results
- Looks at the designated water use
- Establishes a “safe in water” number rather than a “clean-up goal”
- Establishes baseline criteria for risk assessments

Guidance Criteria:

Initial External Comments (cont.)

- Difficult to remove all contamination
 - Identify ways to improve the environment vs. removing all the contamination
- Determine the classification (sediment or soil) of deep, pre-deposited, contaminated material

THANK YOU!
