Contaminated Sediments External Advisory Group (CSEAG) Work Group Meeting Minutes May 25, 2016

External Participants

Karen Dettmer, Frank Dombrowski, Kristin Kurzka, Ted O'Connell, Laurie Parsons, John Rice, Jeanne Tarvin, Mark Thimke, Shar TeBeest, and Tony Vogel

Department of Natural Resources (DNR) Participants

Margaret Brunette, Marsha Burzynski, Kristin DuFresne, Darsi Foss, Judy Fassbender, Lis Olson, and John Robinson

Work Group Purpose and Goals

The DNR is seeking input from the work group to identify general and sitespecific evaluation criteria for the assessment of contaminated material in sediment and the transition zone. The information obtained from the work group will be considered by the DNR.

The DNR intends to create a guidance document that outlines a seamless, comprehensive, consistent, and coordinated approach for managing contaminated sediment sites. DNR staff, from various programs, and externals are the intended users of the guidance document.

The DNR does not have the authority to initiate a rule making process to develop sediment standards.

Contaminant Values Comparison Table

The DNR prepared contaminant values comparison table was presented to the work group. The table was created as a means to compare the various types of sediment/soil values. The following resources were used to create the table:

- Consensus Based Sediment Quality Guideline, Recommendations for Use and Application, Interim Guidance, December 2003, WT-732-2003
- Soil Residual Contaminant Level Determinations Using the U.S. EPA Regional Screening Level Web Calculator, January 23, 2014, PUB-RR-890
- <u>Risk Assessment Information System (RAIS)</u> housed by the University of Tennessee.

The CBSQG document was used as the basis for placing the constituents in the table. If the constituent is listed in the CBSQG document it has a TEC and a PEC value and was added to the table. Note: Sediment values are based on ecological end points and soil values are based on human health.

The following observations and comments were provided:

- The CBSQG values mimic the EPA Region 5 ecological screening levels (ESLs).
- It may be beneficial to rely on the EPA Region 5 ESLs for the default/Tier 1¹ values. Reliance on the EPA Region 5 ESLs would accommodate changes in science and would be consistent with the approach being used for soil. Learned from NR 720 that table values don't work.
- The CBSQG document has values for 18 PAHs. A literature search should be conducted to determine if sediment/soil values are available for additional PAHs.
- Typically look at individual PAH values when evaluating soil. Look at total PAHs when evaluating sediment. Should individual values be used for sediment? If not, what is the rationale for using totals?
- Are there locations in Wisconsin where the CBSQGs and/or the ESLs can be met? Need to develop a process where values can actually be met.
- Evaluate if it is feasible to establish industrial/non-industrial or rural/non-rural values.
- Need to determine the intent of the numbers screening levels or remedial action levels? Note: Screening levels can become cleanup levels.
- Two perspectives need to be taken into consideration when establishing guidance values:
 - o 1) Clean-up: Non-default numbers
 - 2) Development: Independent evaluation and no site-specific DNR review needed.
- In addition to having values, externals want to know and understand the sediment evaluation process. For example under Tier 2¹, what lines of evidence are used, priorities/preferences for evaluation, etc....
- Values can change over time. At the time of closure sites need to meet the values available at that point in time.

_

¹ The tiered approach was discussed at the April 27, 2016 meeting. Refer to the CSEAG Work Group meeting minutes for additional details.

Tier 1 – Default Numbers

Tier 2 – Default Numbers + Site-specific Evaluation Criteria

Tier 3 – Risk Assessment Process

- Refer to NR 722. Risk assessment for sediment will require a code change.
- Add values from additional resources (e.g. Washington State, Florida, and Ontario) to the table.
- Consider bringing in representative(s) from Washington State, Florida, or EPA in an effort to understand the process that was used to establish sediment values.
- Add NR 720 background concentrations to the table.
- For future discussion, the DNR will send out an internal table titled WDNR
 Tiered Steps for Assessing Sediment Quality, Establishing Sediment
 Quality Objectives to Protect Receptors, and Making Sediment
 Management Decisions. This table originated from a 2004 DNR CBSQG
 staff training manual.

Background Concentrations Literature

WEC Energy Group and Natural Resource Technology presented their background sampling approach for the North Branch of the Chicago River.

Frank Dombrowski and Laurie Parsons will provide the CSEAG with a future update regarding the site progress.

Approach to Establishing Background Concentrations

Due to a limited amount of time slides 1 - 4 were discussed.

Next Meeting

To be determined.

Action Items

- Jeanne Tarvin and the DNR will check into whether or not EPA Region 5 is in the process or has intentions of updating the ESLs.
- Frank Dombrowski will prepare a bibliography of urban background and toxicology data.
- The DNR will revise the contaminant values comparison table so it includes information from additional resources (e.g. Washington State, Florida, and Ontario) and background concentrations.
- The DNR will consider bringing in representative(s) from Washington State, Florida, or EPA in an effort to understand the process that was used to establish sediment values.

- For future discussion, the DNR will send out an internal table titled WDNR Tiered Steps for Assessing Sediment Quality, Establishing Sediment Quality Objectives to Protect Receptors, and Making Sediment Management Decisions.
- The DNR will solicit dates, via Doodle Poll, for the next meeting. Participants should look for an email from Kristin DuFresne.