From: Sager, John E - DNR

To: Klatt, David/CHC; Patarcity, Jane M (Pittsburgh) USA; cieniawski.scott; Klinkhamer, Christopher; Isom, Kristen;

Stuart Messur; Bessingpas, David; Seaman, Jennifer/CHC; Selcoe, Barrie/HOU; Pfeiffer, Danielle; Anderson, Paul; Graham, Joseph R - DNR; Saari, Christopher A - DNR; Endsley, Erin A - DNR; Fassbender, Judy L - DNR

Subject: RE: Crawford Creek Discussion - Cleanup goals

Date: Wednesday, June 9, 2021 10:46:00 AM

All,

Following our meeting on May 26, 2021 the Department of Natural Resources (DNR) was able to schedule a meeting with the Wisconsin Department of Health Services (DHS) to discuss the residual contaminant levels (RCLs) proposed conceptually during the meeting. The DNR is scheduled to meet with DHS on June 17, 2021. Therefore we propose the meeting scheduled with you for June 16, 2021 be postponed to a later date. Also, thank you for the summary of the questions and responses from property owners during your discussions with them. The DNR will share this information with DHS for their evaluation.

The DNR has some initial comments and requests for further information regarding the information presented during our call on May 26, 2021:

Comments:

Slide 9 references NR720.07(2)(b). Although NR720.07(2)(b) allows the use of an alternative approach for determining standards exceedances with DNR's approval, the notes associated with NR720.07.(2)(b) state averaging soil concentrations is not appropriate as the sole method for addressing sites with significant soil contamination. The DNR requests a description of the method of averaging being proposed and specific examples for various areas of the site including an explanation of how exposure units will be defined considering the conceptual site model. The DNR does not typically approve depth averaging. Also, the proposed use of average concentrations was not plainly identified as an objective for previous site investigation efforts so it is not clear there will be sufficient data in all exposure areas to justify an appropriate alternative approach such as averaging.

Identify how the averaging concept will account for the presence of nonaqueous phase liquid (NAPL), that is, principal threat waste that requires active remediation.

The land use assumptions based on interviews with the current owners of the properties do not account for future potential use of these residential properties. Property ownership can change and new owners may not use the property the way the current property owners do. Also, as stated to you previously, the DNR does not believe we have the legal authority to impose the types of land use restrictions on property owners that are contemplated in the presentation. Therefore, it is necessary to make conservative use assumptions to account for potential property use. The cleanup levels (CULs) DNR provided take this into account. DHS was consulted on the parameters the DNR used to develop those numbers. The DNR will consult with DHS on the appropriate property use assumptions for the Koppers site.

The DNR does not believe it is appropriate to compare the exposure frequency assumptions applied for disposal of dredged material from the Howards Bay GLLA project to the Koppers site. The

Howards Bay evaluation was done to develop appropriate reuse criteria for placement of amended dredged material, which largely did not exceed industrial direct contact (DC) RCLs, and was also being covered by 6 inches of clean cover. The land use is also different, as the placement location is a former landfill with limited recreational use, is not a residential property, nor is it proximal to any residential properties.

Slide number 27 references the USEPA residential non-cancer RSL for TCDD as 51 ppt. However, the carcinogenic RSL for TCDD is 4.8 ppt. The DNR applies the lower of the two values as the appropriate RCL. As such, it is more appropriate to compare any site-specific value for TCDD to 4.8 ppt, which would be considered the default RCL and RSL for the site.

Slide 27 represents the proposed cleanup levels as a factor of the DNR site-specific CULs (4x and 9x increase for the two scenarios presented). The DNR site-specific CULs already represent a 44x increase over the default non-industrial DC RCL for BaP, and a 2.5x increase for TCDD. The DNR site-specific values already represent a significant amount of flexibility, and perhaps the maximum flexibility that is possible for a site-specific RCL. When comparing the proposed values for the two scenarios presented to the default non-industrial DC RCLs, the proposed values represent a 177x increase for BaP and a 11x increase for TCDD for the first scenario, and a 413x increase for BaP and a 26x increase for TCDD for the second scenario. It will be difficult to justify site-specific cleanup levels for the site that represent an increase of several orders of magnitude over default RCLs, and far exceed any site-specific RCLs that have been applied in Wisconsin. Please note that the proposed rule revisions allowing a 1x10-5 estimated lifetime cancer risk (ELCR) for PAHs were not approved by the Natural Resources Board. Per current Wis. Admin. Code, risk from direct contact with soil must currently use a target risk of 1x10-6 for individual compounds, and evaluate cumulative risk using a 1x10-5 target risk for all compounds.

Requests:

The DNR requests full citation for the references shown in the various slides presented during the May 26, 2021 meeting:

- Slide 10 "EPA guidance supports depth-weighted averaging (USEPA 1996)"
- Slide 11 "EPA guidance supports averaging across an exposure area (USEPA 1992)"
- Slide 13, table note 2 "USEPA's Exposure Factor Handbook (2011)"
- Slide 17 "Definition: A term to account for the fraction of soil contacted that is presumed to be contaminated (USEPA 2003, USEPA 1989)."

In addition, please provide the DNR with the equations used to develop the cleanup levels presented by Beazer and EPA on May 26.

We would appreciate receiving the materials requested above, along with any additional material to be presented by Beazer or EPA, well in advance of our next meeting.

Regards,

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John Sager

Hydrogeologist – Remediation and Redevelopment Program Wisconsin Department of Natural Resources

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Superior, WI 54880 Phone: (715) 919-7239 john.sager@wisconsin.gov



From: Klatt, David/CHC < David.Klatt@jacobs.com>

Sent: Wednesday, May 26, 2021 3:55 PM

To: Patarcity, Jane M (Pittsburgh) USA <Jane.Patarcity@TRMI.Biz>; cieniawski.scott <cieniawski.scott@epa.gov>; Klinkhamer, Christopher <klinkhamer.christopher@epa.gov>; Isom, Kristen <isom.kristen@epa.gov>; Stuart Messur <smessur@anchorqea.com>; Bessingpas, David <david.bessingpas@arcadis.com>; Seaman, Jennifer/CHC <Jennifer.Seaman@jacobs.com>; Selcoe, Barrie/HOU <Barrie.Selcoe@jacobs.com>; Pfeiffer, Danielle <Danielle.Pfeiffer@arcadis.com>; Anderson, Paul <Paul.Anderson@arcadis.com>; Graham, Joseph R - DNR < John.Sager@wisconsin.gov>; Saari, Christopher A - DNR <Christopher.Saari@wisconsin.gov>; Endsley, Erin A - DNR <erin.endsley@wisconsin.gov>; Fassbender, Judy L - DNR <Judy.Fassbender@wisconsin.gov> **Subject:** RE: Crawford Creek Discussion - Cleanup goals

Hi Everyone,

Attached to this email is the presentation from today's call.

I will work with Chris Klinkhamer and Dave Bessingpas to have a summary of the property owner discussions provided to WDNR.

Erin- Please note that Dave B and Danny Pfeiffer are not available on June 9, so if health services staff want to schedule a call, we will probably have to pick another date.

Thanks again for the participation on the call today.

Please feel free to request additional information or provide comments over the next several weeks leading up to our next call on June 16.

Regards,

Dave

David Klatt Jacobs -----Original Appointment-----

From: Klatt, David/CHC

Sent: Tuesday, May 4, 2021 8:46 AM

To: Klatt, David/CHC; Patarcity, Jane M (Pittsburgh) USA; cieniawski.scott; Klinkhamer, Christopher; Isom, Kristen; Stuart Messur; Bessingpas, David; Seaman, Jennifer/CHC; Selcoe, Barrie/HOU; Pfeiffer, Danielle; Anderson, Paul; Graham, Joseph R - DNR; Sager, John E - DNR; Saari, Christopher A - DNR;

Endsley, Erin A - DNR; Judy.Fassbender

Subject: Crawford Creek Discussion - Cleanup goals

When: Wednesday, May 26, 2021 2:00 PM-4:00 PM (UTC-06:00) Central Time (US & Canada).

Where: Microsoft Teams Meeting

Hi Crawford Creek Team,

We wanted to get together again with WDNR to continue progress on the key elements affecting the focused feasibility study (FFS).

Tentative Agenda:

- Discuss any WDNR comments on the Data Gap Technical Memo
- Discuss Cleanup Levels (CULs) to be used in the FFS
- Further discuss disposal options

Our goal is to get group concurrence on key FFS elements in Late May or early June, so the FFS document preparation can resume.

Let me know if anyone has questions.

Dave

David Klatt Jacobs Senior Project Manager M 1 312 480 9875 David.Klatt@Jacobs.com

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