From:	Sager, John E - DNR
Sent:	Wednesday, December 1, 2021 1:34 PM
То:	Bessingpas, David
Cc:	Klinkhamer, Christopher; cieniawski.scott; Klatt, David/CHC;
	Endsley, Erin A - DNR; Saari, Christopher A - DNR; Graham, Joseph R - DNR; Fassbender, Judy L - DNR; Patarcity, Jane (Pittsburgh) USA (Jane.Patarcity@TRMI.Biz); Stuart Messur; Seaman, Jennifer/CHC; Selcoe, Barrie/HOU; Pfeiffer, Danielle; Anderson, Paul; Preto, Lauren; Koch, Amanda A - DHS; Kilburg-Basnyat, Brita J - DHS; Justin Drehs
Subject:	RE: Presentation and Spreadsheet from Today's Call
Attachments:	20211116_99_DNR_11-10-21_Call_Follow-Up.pdf

Dave,

Thank you for the information from the November 10<sup>th</sup> call. In the DNR's email to you dated November 16, 2021 (attached) the DNR stated the following:

- To be consistent with how DNR has applied direct contact RCLs at all other sites in Wisconsin, apply the DNR site-specific cleanup levels over the 0-4' depth interval to address potential risk from direct contact with contaminated soil.
- DNR and DHS do not support application of the project team's site-specific cleanup level
  assumptions for depths greater than 0.5' below the surface. Consistent with previous feedback
  on these proposed cleanup levels, DNR and DHS do not support the modified exposure
  assumptions or the use of fractional intake, and find that the site-specific cleanup levels derived
  with those inputs are not protective for site users.

If the feasibility study incorporates the Beazer/EPA project team's cleanup levels, modified exposure assumptions or disregards contamination greater than the DNR's recommended site-specific recreational cleanup levels from 0-4 feet below the surface, the DNR will exercise its authority under Wis. Adm. Code ch. NR 722.15 (2) to disapprove of the report.

### We are committed to service excellence.

Visit our survey at <u>http://dnr.wi.gov/customersurvey</u> to evaluate how I did.

John Sager

Hydrogeologist – Remediation and Redevelopment Program Wisconsin Department of Natural Resources 1701 N. 4<sup>th</sup> St. Superior, WI 54880 Phone: (715) 919-7239 john.sager@wisconsin.gov



From: Bessingpas, David <<u>David.Bessingpas@arcadis.com</u>>

Sent: Tuesday, November 23, 2021 2:20 PM

To: Sager, John E - DNR <<u>John.Sager@wisconsin.gov</u>>

Cc: Klinkhamer, Christopher <<u>Klinkhamer.Christopher@epa.gov</u>>; cieniawski.scott <<u>cieniawski.scott@epa.gov</u>>; Klatt, David/CHC <<u>David.Klatt@jacobs.com</u>>; Endsley, Erin A - DNR <<u>erin.endsley@wisconsin.gov</u>>; Saari, Christopher A - DNR <<u>Christopher.Saari@wisconsin.gov</u>>; Graham, Joseph R - DNR <<u>Joseph.Graham@wisconsin.gov</u>>; Fassbender, Judy L - DNR <<u>Judy.Fassbender@wisconsin.gov</u>>; Patarcity, Jane (Pittsburgh) USA (Jane.Patarcity@TRMI.Biz) <<u>Jane.Patarcity@TRMI.Biz</u>>; Stuart Messur <<u>smessur@anchorqea.com</u>>; Seaman, Jennifer/CHC <<u>Jennifer.Seaman@jacobs.com</u>>; Selcoe, Barrie/HOU <<u>Barrie.Selcoe@jacobs.com</u>>; Pfeiffer, Danielle <<u>Danielle.Pfeiffer@arcadis.com</u>>; Anderson, Paul <<u>Paul.Anderson@arcadis.com</u>>; Preto, Lauren <<u>Lauren.Preto@jacobs.com</u>>; Koch, Amanda A - DHS <<u>Amanda.Koch@dhs.wisconsin.gov</u>>; Kilburg-Basnyat, Brita J - DHS <<u>brita.kilburgbasnyat@dhs.wisconsin.gov</u>>; Justin Drehs <<u>JDrehs@anchorqea.com</u>>

Subject: RE: Presentation and Spreadsheet from Today's Call

### CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

As a follow-up to our 11/10/21 call, the following are attached:

- Copy of PowerPoint slides from the Nov. 10 call
- Meeting notes/minutes from the Nov. 10 call
- Excel file with the CUL/risk evaluation approach table that we walked through during the Nov.
   10 call

A couple of notes regarding the attached table:

- The "Portion of Polygon with Visual Impacts?" column has only been filled out for samples in the two "focus areas" that we discussed during the Nov. 10 call.
- The two "Only 1 individual compound > 1E-6 and results are ≤2E-6?" columns have been changed to "More than 1 individual compound with risk > 1E-6, or 1 individual compound with risk > 2E-6?" In making that change, "Yes" results are now shaded orange instead of the "No" results. These changes were made to consistently use "Yes" answers (and shaded cells) to represent samples that are "in" for further consideration based on a given criteria.

In the approach presented during the November 10<sup>th</sup> call, DNR's recreator CULs and associated riskbased exposure assumptions were used for surficial floodplain materials (0-0.5 feet), as these materials represent the depth interval most likely to be contacted by recreators who may visit the floodplain. Based on the responses of residents and general location and characteristics of the floodplain, the application of the DNR recreator CULs/assumptions to the 0-0.5' depth interval is conservative and protective of human health.

For subsurface floodplain materials (below 0.5 feet), the approach presented during the November 10<sup>th</sup> call used Site-specific recreator CULs and associated risk-based exposure assumptions. For the record, supporting rationale for the use of Site-specific CULs/assumptions for evaluation of subsurface floodplain materials is as follows:

- Given observations over the past 20+ years, responses of the residents, and activities prohibited in the floodplain by Wisconsin laws/regulations, contact with subsurface floodplain materials (>0.5 feet) is expected to be lower than contact with surficial floodplain materials (0-0.5 feet).
- To account for the lower expected exposure to subsurface floodplain materials, the approach presented during the November 10 call included the use of site-specific CULs and risk-based exposure assumptions for floodplain materials below 0.5 feet. These site-specific CULs/assumptions were first presented to DNR during a May 26, 2021 call and were determined using the same assumptions as the DNR recreator CULs (including Exposure Frequency = 175 days and Exposure Time = 4 hours), except for including a Fraction Intake (FI) term of 0.25. The FI term accounts for the fact that although people may be outside for 175 days/year and 4 hours each time, people do not spend their entire outside time in the floodplain , and that not all of a person's daily outdoor dermal and ingestion soil exposure comes from the floodplain. As noted during the May 26<sup>th</sup> call, the use of an FI term of 0.25 is supported by two lines of evidence:
  - The floodplain comprises about 25% (or less) of adjoining resident's properties, so even if residents spent an equal amount of time on all sections of their property, about 25% of their time would be spent in the floodplain (refer to Slide 18 from 5/26/21 presentation); and
  - Responses of the residents indicate that when they visit the floodplain, they typically spend 1 hour or less in the floodplain per visit (1 hour in the floodplain out of 4 hours total spent outside = 0.25; refer to Slide 19 from 5/26/21 presentation).
- We believe that the application of site-specific CULs and risk-based exposure assumptions to floodplain materials below 0.5 feet is conservative and protective of human health. This approach assumes a receptor is exposed to a single sample location and depth interval for 1 hour per day, 175 days per year, for 24 years (ages 2-26), which is a highly unlikely scenario.
- It also bears mentioning that the site-specific CUL for TCDD-TEQ (52.4 ng/kg) used in the proposed screening approach is very similar to the non-cancer Regional Screening Level for TCDD (51 ng/kg) that USEPA considers acceptable and protective of surface soils in residential yards at CERCLA and RCRA sites.

Thanks, Dave

### **David Bessingpas**

Certified Project Manager Arcadis U.S., Inc. 123 North 3rd Street, Suite 705 | Minneapolis, MN | 55401 | USA T +1 218 208 3427 M +1 320 260 8621 www.arcadis.com

## in 🖌 🗗 🎯

From: Sager, John E - DNR <<u>John.Sager@wisconsin.gov</u>>
Sent: Wednesday, November 10, 2021 3:54 PM
To: Bessingpas, David <<u>David.Bessingpas@arcadis.com</u>>
Cc: Klinkhamer, Christopher <<u>Klinkhamer.Christopher@epa.gov</u>>; cieniawski.scott
<<u>cieniawski.scott@epa.gov</u>>; Klatt, David/CHC <<u>David.Klatt@jacobs.com</u>>; Endsley, Erin A - DNR
<<u>erin.endsley@wisconsin.gov</u>>; Saari, Christopher A - DNR <<u>Christopher.Saari@wisconsin.gov</u>>; Graham,
Joseph R - DNR <<u>Joseph.Graham@wisconsin.gov</u>>; Fassbender, Judy L - DNR

# ARCADIS

<Judy.Fassbender@wisconsin.gov>

Subject: Presentation and Spreadsheet from Today's Call

Dave,

Please send us a copy of the presentation and the spreadsheet from today's meeting as soon as possible. Erin has a call scheduled with DHS to discuss the application of the proposed criteria below .5 feet. We hope to give you feedback as soon as possible so you can continue with your evaluation.

Thanks.

We are committed to service excellence. Visit our survey at <u>http://dnr.wi.gov/customersurvey</u> to evaluate how I did.

John Sager Hydrogeologist – Remediation and Redevelopment Program Wisconsin Department of Natural Resources 1701 N. 4<sup>th</sup> St. Superior, WI 54880 Phone: (715) 919-7239 john.sager@wisconsin.gov



This email and any files transmitted with it are the property of Arcadis and its affiliates. All rights, including without limitation copyright, are reserved. This email contains information that may be confidential and may also be privileged. It is for the exclusive use of the intended recipient(s). If you are not an intended recipient, please note that any form of distribution, copying or use of this communication or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please return it to the sender and then delete the email and destroy any copies of it. While reasonable precautions have been taken to ensure that no software or viruses are present in our emails, we cannot guarantee that this email or any attachment is virus free or has not been intercepted or changed. Any opinions or other information in this email that do not relate to the official business of Arcadis are neither given nor endorsed by it.

From:	Sager, John E - DNR
Sent:	Tuesday, November 16, 2021 10:30 AM
То:	Bessingpas, David; Klinkhamer, Christopher; cieniawski.scott; Klatt,
	David/CHC; Jane Patarcity (Jane.Patarcity@TRMI.biz)
Cc:	Saari, Christopher A - DNR; Fassbender, Judy L - DNR
	(Judy.Fassbender@wisconsin.gov); Endsley, Erin A - DNR
	(erin.endsley@wisconsin.gov); Graham, Joseph R - DNR
	(Joseph.Graham@wisconsin.gov); Kilburg-Basnyat, Brita J - DHS;
	Koch, Amanda A - DHS
Subject:	Follow-up to November 10th Conference Call

Hello All,

Thank you for sharing the additional information you presented during the November 10th conference call. DNR requested information as a follow-up to that meeting, including the presentation materials and spreadsheet. We have not yet received that information. DNR and DHS had a chance to discuss the information presented at the November 10<sup>th</sup> meeting and are providing the following feedback in the interest of keeping the FS process moving forward:

- DNR agrees that the project team should evaluate the data on a point-by-point basis to determine if an area is within the remedial footprint and remedial action is warranted.
- Conduct the point-by-point evaluation using the site-specific cleanup levels DNR proposed on July 30, 2020 and developed in consultation with DHS. This includes utilizing a 1x10<sup>-5</sup> target risk for individual cPAHs and the exposure assumption modifications as described in the memo attached to the letter. DNR and DHS consider the site-specific cleanup levels presented in the July 30, 2020 letter to be protective for recreational use, and they offer the maximum flexibility possible for site-specific cleanup levels.
- Any point with results exceeding the cleanup levels on an individual basis, or exceeding the cumulative cancer risk of 1x10<sup>-5</sup> or hazard index of 1.0 for noncancer compounds be considered within the remedial footprint.
- To be consistent with how DNR has applied direct contact RCLs at all other sites in Wisconsin, apply the DNR site-specific cleanup levels over the 0-4' depth interval to address potential risk from direct contact with contaminated soil.
- Although DNR recommends using individual exceedances and cumulative exceedances to define the remedial footprint, the proposal to use two or more compounds with risk > 1x10<sup>-6</sup> or a single compound with risk > 2x10<sup>-6</sup> could be useful criteria to apply during the development of remedial alternatives, in order to identify areas that may warrant a more or less aggressive remedial action.
- DNR and DHS do not support application of the project team's site-specific cleanup level
  assumptions for depths greater than 0.5' below the surface. Consistent with previous feedback
  on these proposed cleanup levels, DNR and DHS do not support the modified exposure
  assumptions or the use of fractional intake, and find that the site-specific cleanup levels derived
  with those inputs are not protective for site users.

### We are committed to service excellence.

Visit our survey at <u>http://dnr.wi.gov/customersurvey</u> to evaluate how I did.

John Sager Hydrogeologist – Remediation and Redevelopment Program Wisconsin Department of Natural Resources 1701 N. 4<sup>th</sup> St. Superior, WI 54880 Phone: (715) 919-7239 john.sager@wisconsin.gov

