From:	Rolfes, Sarah <rolfes.sarah@epa.gov></rolfes.sarah@epa.gov>
Sent:	Monday, December 7, 2020 1:30 PM
То:	Dombrowski, Frank J
Cc:	Krueger, Sarah E - DNR; Bougie, Cheryl - DNR; Fitzpatrick, William - DNR;
	Schmenk, Colin R -DNR; 'adrienne.korpela@jacobs.com';
	'staci.goetz@ramboll.com'; Brian Hennings (Brian.Hennings@ramboll.com);
	Prasad, Narendra M; Bartoszek, Brian F
Subject:	RE: Former WPS Green Bay MGP - Upland RI Data Summary
Attachments:	EPA Comments on Green Bay OU1 RI Data Summary_12.07.20.pdf

#### Good afternoon Frank,

Attached please find EPA's comments on the Former WPSC Green Bay MGP – Upland OU1 Remedial Investigation Data Summary Report – Revision 0. Please reach out to me if you have any questions that you would like to discuss.

Thanks, Sarah

From: Dombrowski, Frank J <<u>frank.dombrowski@wecenergygroup.com</u>> Sent: Friday, September 18, 2020 3:15 PM To: Rolfes, Sarah <<u>Rolfes.Sarah@epa.gov</u>> Cc: 'sarah.krueger@wisconsin.gov' <<u>sarah.krueger@wisconsin.gov</u>>; Cheryl.Bougie@wisconsin.gov; Fitzpatrick, William - DNR <<u>william.fitzpatrick@wisconsin.gov</u>>; colinr.schmenk@wisconsin.gov; 'adrienne.korpela@jacobs.com' <<u>adrienne.korpela@jacobs.com</u>>; 'staci.goetz@ramboll.com' <<u>staci.goetz@ramboll.com</u>>; Brian Hennings (<u>Brian.Hennings@ramboll.com</u>) <<u>Brian.Hennings@ramboll.com</u>>; Prasad, Narendra M <<u>narendra.prasad@wecenergygroup.com</u>>; Bartoszek, Brian F <<u>brian.bartoszek@wecenergygroup.com</u>> Subject: Former WPS Green Bay MGP - Upland RI Data Summary

Hi Sarah,

Below is a Ramboll sharefile link to the WPS Former Green Bay (Upland) RI Data Summary Rev 0.

<u>https://ramboll-</u> <u>my.sharepoint.com/:f:/p/jenni\_plamann/EsBg7VKMysBNqIZNDGaa9wEBrpmM1eTdAJ\_3EvqBvZNw\_w?</u> <u>e=Yo7opy</u>

Please feel free to contact me if there are any questions or if additional information may be needed.

Have a good weekend and stay safe.

## Frank Dombrowski Principal Environmental Consultant

WEC Energy Group - Business Services Environmental Dept. - Land Quality Group 333 W. Everett St., A231 Milwaukee, WI 53203 Office: (414) 221-2156 Cell: (414) 587-4467 Fax: (414) 221-2022

Serving WEC Energy Group, We Energies, Wisconsin Public Service, Michigan Gas Utilities, Minnesota Energy Resources, Peoples Gas and North Shore Gas



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

# VIA ELECTRONIC MAIL

December 7, 2020

REPLY TO THE ATTENTION OF: SR-6J

Mr. Frank Dombrowski Principal Environmental Consultant WEC Business Services – Environmental Dept. 700 North Adams Street P.O. Box 19001 Green Bay, WI 54307

Re: Review of the Upland Remedial Investigation Data Summary Report – Revision 0, Operable Unit 1, Former Green Bay Manufactured Gas Plant Site, Green Bay, Wisconsin

Dear Mr. Dombrowski,

The U.S. Environmental Protection Agency (U.S. EPA) has reviewed the document entitled: *Upland Remedial Investigation Data Summary Report – Revision 0 (Report)* for *Operable Unit 1*, Former Green Bay Manufactured Gas Plant Site, dated September 18, 2020. Comments on the Report are provided in Attachment 1.

If you have any questions or wish to discuss any of the comments, please do not hesitate to contact me at 312-886-6551.

Sincerely,

12/7/2020

Sarah Rolfes

Sarah Rolfes Remedial Project Manager Signed by: SARAH ROLFES

cc: Mr. William Fitzpatrick (WDNR) Ms. Sarah Krueger (WDNR)

## Attachment 1 – Comments on the Green Bay Former MGP OU1 Remedial Investigation Data Summary Report – Rev 0

### **General Comments**

- 1. In general, this pre-remedial investigation (RI) Report and pre-baseline risk assessment (BLRA) report contains many assertations and statements that conclude, for example, that source material is not present, or that there is no risk, except in the (undefined) areas subject to a preliminary design investigation (PDI) and removal action. The report also emphasizes past documents that have been reviewed and approved by the Agencies as evidence the remaining contamination is acceptable. The review by the Agencies of this pre-RI Report and pre-BLRA does not connotate acceptance of statements contained herein on remaining risk, and assertations of whether source material remains.
- 2. The Pre-Design Investigation sampling results should be integrated into the Upland RI Report.

## **Specific Comments**

- 3. Section 4.1.1, page 24: Any monitoring well locations where non-aqueous phase liquid (NAPL) is or has been observed as a measurable thickness should be highlighted on Figure 8. Whether wells were constructed with sumps and the thickness of NAPL observed should be discussed in Section 4.1.1. An assessment of the physical characteristics and mobility of all remaining occurrences of NAPL should be performed as part of the RI/feasibility study process. This should also include an assessment of the recoverability of NAPL in areas where there are remaining measurable thicknesses of NAPL in monitoring wells.
- 4. Section 4.1.2, page 26: The text here states, "no exceedances of industrial surface soils (0-4 feet) for inorganic compounds (Figure 12C)." However, soil data figures 12a through 12c suggest that the area that was excavated as Area 4 in 2003 (that appears to be impacted with gas purifier wastes) does not appear sufficiently characterized in the 0 to 4-foot interval with respect to inorganic constituents. Given that arsenic and cyanide appear to drive risk at the site, might additional characterization of this area be warranted?
- 5. Section 4.2.2.4, page 29: Please check that the order of anaerobic respiration processes listed here is correct.
- 6. Section 4.2.2.4, page 29: Note that in sulfate-reducing environments iron sulfide minerals will form where sufficient sulfur is present. This may result in a reduction in dissolved iron concentrations. As such, the relative concentrations of iron should be taken in context of other redox indicators when assessing them as an indicator for biodegradation.
- Section 4.2.2.5, page 30: Considering the generally poor resulting R<sup>2</sup> values that suggest the best linear fit to log-normalized concentration data may not accurately represent temporal trends, consideration should be given to using statistical approaches that are better suited for assessing trends in environmental data (e.g. Mann-Kendall test).
- 8. Section 4.3, page 31: In the last sentence of the second paragraph, the count should be 15 of 28 samples.
- 9. Section 4.3, page 31: The naphthalene exceedance at IA1 occurred in data reported as September 2016, not August.
- 10. Section 5.2.1, page 36: The reference to exceedances above mid risk criteria should be to Figure 23 (not Figure 22).

## Attachment 1 – Comments on the Green Bay Former MGP OU1 Remedial Investigation Data Summary Report – Rev 0

- 11. Section 5.2.2, page 36: Add a reference to Table 7 for groundwater SL exceedances.
- Section 5.2.2, page 36: In the 2nd sentence of the fourth paragraph, acknowledge the additional chemicals (not solely benzene) that exceeded groundwater vapor intrusion screening levels (VISLs).
- 13. Section 5.2.3, page 37: In the 1st sentence, add that subslab vapor samples were also collected.
- 14. Section 5.2.3, page 37: Based on Figure 19, there is a soil gas sample (ethylbenzene in SS405A) exceedance at the Butler Building. The last sentence of the first paragraph should be reworded accordingly. Consider the need for collecting indoor air samples at the Butler Building.
- 15. Section 5.2.3, page 37: Please note in paragraph 2 that naphthalene also exceeded its soil vapor VISL at SG401.
- 16. Section 5.3, page 37: There is a soil gas exceedance at the Butler Building. Please revise this section accordingly. In addition, conclusions regarding risk should be put in terms of contaminants of concern (COCs) based on various target risk levels (10-6, 10-5, 10-4) and target hazard index of 1.
- 17. Section 6.1.1, page 38: The last sentence of this paragraph seems to present contradictory statements. Specifically, if there are measurable thicknesses of NAPL in monitoring wells, then NAPL should be assumed to be greater than residual at that location (as it is able to enter a monitoring well), unless other lines of evidence indicate otherwise. The statement, "there are no longer any indications of source material" is inaccurate, given that all NAPL (residual or otherwise) represents a source.
- 18. Section 6.1.1, page 38: Please provide an explanation of the source of NAPL in MW-405A. The presence of NAPL in a well that was not historically impacted by NAPL may indicate that there may be an area of source material remaining that is migrating.
- 19. Section 6.1.2, page 38: Consideration should be given to adding a summary discussion to this section of soil conditions as they relate to all constituents of potential concern, not just select organic constituents.
- 20. Section 6.1.3, page 38: See Comment 7 on Section 4.2.2.5. The conclusions regarding concentration trends over time are not well supported by the statistical approach used and described in Section 4.2.2.5. At a minimum future trend analyses should include additional discussion on the approach used that includes why it is appropriate, and its statistical strength.
- 21. Section 6.1.4, page 39: There is a soil gas exceedance at the Butler Building, therefore the vapor intrusion pathway cannot be concluded to be incomplete. Please revise this section accordingly.
- Section 6.1.5, page 39, paragraphs 2-4: As noted in the previous comment, there is a soil gas exceedance at the Butler Building. Please revise this section accordingly. In addition, conclusions regarding risk should be put in terms of COCs based on various target risk levels (10-6, 10-5, 10-4) and target hazard index of 1.
- 23. Figures 8, 9a and 9d: Figure 8 indicates "oil wetted-coated material above native clay", however cross-section A-A' in Figure 9a shows a deeper interval of "oil coated/oil wetted" material that extends into the native clay at SB-418D. Please clarify this discrepancy. This appears to potentially be the same case with boring SB-418F on cross-section G-G' in Figure 9d.

## Attachment 1 – Comments on the Green Bay Former MGP OU1 Remedial Investigation Data Summary Report – Rev 0

24. Figure 21: The graphical Conceptual Site Model shown on Figure 21 should include a note that explains that the depicted sheet pile wall near the river only covers about 15% of the project shoreline. At least 200 linear feet of shoreline does not have a sheet pile wall between known NAPL and the river.