From: Rolfes, Sarah <Rolfes.Sarah@epa.gov>
Sent: Wednesday, December 2, 2020 4:07 PM
To: Paulson, Robert; Fitzpatrick, William - DNR; Krueger, Sarah E - DNR
Cc: Korpela, Adrienne/MKE (Adrienne.Korpela@jacobs.com); Staci Goetz (Staci.Goetz@ramboll.com); Prasad, Narendra M
Subject: RE: 2020-09-28 Former Green Bay MGP- Sediment Remedial Investigation Report
Attachments: EPA Comments on Green Bay OU2 RI Rev 0_12.02.20.pdf

Hi Bob,
Attached please find EPA's comments on the RI Report for OU2 of the Former Green Bay MGP Site. Please reach out to me if you have any questions.

Thanks,

Sarah Rolfes
Remedial Project Manager
Superfund Division
USEPA Region 5
Email: rolfes.sarah@epa.gov
Phone: 312-886-6551

From: Paulson, Robert <robert.paulson@wecenergygroup.com>
Sent: Monday, September 28, 2020 7:40 PM
To: Rolfes, Sarah <Rolfes.Sarah@epa.gov>; 'Fitzpatrick, William - DNR' <William.Fitzpatrick@wisconsin.gov>; Sarah E Krueger - DNR <sarah.krueger@wisconsin.gov>
Cc: Korpela, Adrienne/MKE (Adrienne.Korpela@jacobs.com) <Adrienne.Korpela@jacobs.com>; Staci Goetz (Staci.Goetz@ramboll.com) <Staci.Goetz@ramboll.com>; Prasad, Narendra M <narendra.prasad@wecenergygroup.com>
Subject: 2020-09-28 Former Green Bay MGP- Sediment Remedial Investigation Report

Hello Sarah, Bill and Adrienne,

Please find at the link below the Remedial Investigation Report (Revision 0) for the Former WPSC Green Bay MGP Operable Unit 2 (sediment) for your review.

https://ramboll-my.sharepoint.com/:f:/p/jenni_plamann/EhAVZFgBpsdFluYEpeJiMo4B70D9hrnb3GcrTuFcNHD7Dw?e=kXel4g

If anyone has trouble accessing or downloading the files (other than taking forever to download), please let me or Staci know.

Regards,

Bob

Robert Paulson
Principal Environmental Consultant
WEC Energy Group – Business Services
333 Everett Street – A231
Milwaukee, WI 53203 USA

office: 414-221-3948
robert.paulson@wecenergygroup.com

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

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

VIA ELECTRONIC MAIL

REPLY TO THE ATTENTION OF:
SR-6J

December 2, 2020

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

Re: Review of the Remedial Investigation Report – Revision 0, Sediments Operable Unit 2, Former Green Bay Manufactured Gas Plant Site, Green Bay, Wisconsin

Dear Mr. Paulson,

The U.S. Environmental Protection Agency (U.S. EPA) has reviewed the document entitled: *Remedial Investigation Report – Revision 0 (RI Report)* for the *Sediments Operable Unit 2*, Former Green Bay Manufactured Gas Plant Site, dated September 25, 2020. Comments on the RI 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,

12/2/2020

X Sarah Rolfes

Sarah Rolfes
Remedial Project Manager
Signed by: SARAH ROLFES

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

Specific Comments

1. Section 1.2, Page 9: The text states that WPSC will assume monitoring and maintenance responsibilities of the North Focus Area upon issuance of the Operable Unit 2 record of decision. Concerning the South Focus Area, will ongoing monitoring of remedy performance be required? Recall that post dredge sediment confirmation sampling found 3 locations that contained trace oil - wetted material.
2. Section 1.3.5.1, Page 13: Please include a definition of "within containment". A reader unfamiliar with the details of the sediment remedial action will not know that sheet pile walls were installed in the river to contain residuals suspended during dredging.
3. Section 1.3.5.2, Page 14: The RI Report offered a NFA RA cleanup level of 80 mg/kg tPAH13. The RI should note that this cleanup level was proposed and has not been accepted. Also note this comment should be incorporated in Section 4.1.1.1.
4. Section 3.4.3, Page 23 and Section 4.1.1.3, Page 31: Please modify the language in this section to indicate that the mobility testing was conducted without an approved Sampling and Analysis Plan and Quality Assurance Project Plan.
5. Section 3.4.4.3, Page 25: Please include a sentence stating where the sample results can be located.
6. Section 4.1.1.2, Page 30: Provide a discussion of DNAPL remaining in the full project area, rather than only referring to figures in Appendices D3 and D4. A review of the cross sections in Appendix D3 (Figures series C-300 - C-307) shows a fairly substantial wedge of soft sediment along the shoreline was not dredged to the Removal Action Design Surface as compared to the Removal Action As-Built Surface, due to "Stable slope from Shoreline to Sediment". This wedge of undredged inventory can be seen in Figures C-301 through C-305, and as evidenced in Figure c-305, contains known DNAPL. While the shoreline excavation removed a substantial of DNAPL source material, DNAPL in soft sediment near the shoreline remains, which needs to be acknowledged, and incorporated into future performance monitoring.
7. Section 4.1.1.3, Page 31: Acknowledge within the discussion the issues encountered with the testing procedure, and previous comments received on the results.
8. Section 4.1.2.1, Page 34: Reword the following sentence "These results also indicate that the shoreline soil removal performed adjacent to the SFA is no longer a source area." The soil removal was not the source area; the shoreline soils were a source area. Additionally, sediments immediately adjacent to the shoreline, some impacted with NAPL, were not removed, and remain in place. Please note that none of the 2018 post-removal sediment core samples were located in the areas with remaining NAPL. Further monitoring of the SFA is recommended and should be focused along the shoreline undredged wedge with known DNAPL.
9. Section 5.1, Page 39: The first paragraph of this section references two figures. The figure numbers are incorrect and should be corrected.
10. Section 5.3, Page 40: Please incorporate comments on Appendix K - Baseline Risk Assessment (BLRA) into the "Media of Concern" section of the RI report.
11. Section 6.0, Page 45: As previously noted, further monitoring of the SFA is also recommended, as construction limitations resulted in remaining NAPL near the south shoreline.

Appendix K – Baseline Risk Assessment General Comments

12. The ecological portion of the BLRA lacks sufficient documentation to allow for a through technical review and evaluation of the conclusions. Much of the underlying data are not presented, only summaries are provided. All data used in the BLRA should be provided.
13. The most recent version of the USEPA Regional Screening Levels (RSLs) available at the time the BLRA is submitted should be used. In this case, the May 2020 RSLs should be used and referenced in text and all tables.
14. The ecological evaluation of sediment is technically flawed. The approach of calculating a 95% upper confidence limit on the mean as an exposure point concentration (EPC) is applicable to mobile species that are exposed over a home range and is not representative of a sessile species such as benthic macroinvertebrates. Using a surface weighted average concentration (SWAC) as EPC is applicable to bioaccumulative compounds such as PCBs but not in cases where direct toxicity is expected as with PAHs and benthic macroinvertebrates. These analyses should be removed.

Appendix K – Baseline Risk Assessment Specific Comments

15. Section 2.3, Page 11: The approved RAF states that arsenic, mercury, and selenium will be evaluated for fish consumption on a site-specific basis, depending on concentrations detected in sediments in comparison to ambient levels. Therefore, discuss these chemical concentrations in sediment compared to ambient levels and add the fish consumption scenario to the CSM and risk estimates if necessary, based on results of the comparison.
16. Section 2.3, Page 11: Where are the dredged materials placed, and are they accessible for exposure on land? If they are accessible, add to the CSM and the risk estimates for potential receptors (e.g., industrial workers).
17. Section 3.3.1, Page 14: In each subsection of 3.3.1, indicate if some samples mentioned are not on Figure 3 (since Figure 3 is referenced and samples may not be on the figure).
18. Section 3.3.1.2, Page 14: Clarify if DNAPL under sand or armored amended cap are included in the BLRA.
19. Section 3.3.2, Page 16: Describe the location(s) and aerial extent where the water depth is only 3 to 4 ft so that accessibility to these locations and the significance of this exposure area can be determined. Include a figure showing these locations and aerial extent. If the area is large enough, it should be added to the CSM and risk estimates provided for recreational users.
20. Section 3.4, Page 17: Samples identified as "UR" should not be used in the BLRA or ProUCL calculations.
21. Section 4.1.3, Page 20, Section 4.1.7, Page 21, and Section 4.1.8, Page 21: Greater than or equal to 10 percent has not been used to identify additional constituents contributing to the hazard index for cumulative effects. Rather, target organ-specific hazard indices should be calculated to identify constituents that are risk drivers if the total hazard index exceeds 1.
22. Section 4.1.7, Page 21 and Section 4.1.8, Page 21: Do not include lead in the hazard index calculations.
23. Section 4.1.7, Page 21, Section 4.1.8, Page 21, Section 4.3.4, Page 23, and Section 4.3.5, Page 23: Both cancer and non-cancer risk estimates should be presented for chemicals that have both cancer-based and non-cancer-based screening RSLs; currently, only a cancer risk estimate, or a

non-cancer risk estimate is presented for an individual chemical, and therefore cumulative risks are underestimated.

24. Section 4.3.2, Page 22: The term "95% UCL" is used in reference to the exposure point concentrations used for the site-specific risk estimates; however, clarify here and in all places in text and tables that it is actually the "95% UCL on the mean" since there is a difference between these two types of values.
25. Section 4.3.2, Page 22: Describe the typical types of construction projects in the rivers and the surface area of a typical project so that the appropriateness of using a 95% UCL on the mean of the entire sediment dataset can be determined. Depending on the response, it may be more appropriate to divide the sediment dataset into smaller areas based on the size/scope of typical construction projects.
26. Section 4.3.3, Page 23: The ProUCL output in Attachments 2 and 5 for 2,4-dimethylphenol indicates "Warning: Data set has only 3 detected values. This is not enough to compute meaningful or reliable statistics and estimates." Therefore, the maximum detected concentration should be used as the EPC for this chemical.
27. Section 4.4, Page 24: Discuss what a construction worker would be wearing during underwater construction activities and how it would affect exposure assumptions used in the construction worker RSLs and risk estimates.
28. Section 5.4, Page 29, Section 5.4.2, Page 31, Section 5.4.3, Page 32, Section 5.4.4, Page 33, and Section 5.4.6, Page 33: The most recent version of the USEPA RSLs should be used.
29. Section 5.4, Page 29, Section 5.4.2, Page 31, Section 5.4.3, Page 32, and Section 5.4.4, Page 33: The 95% UCL should not be used. A point by point comparison to the PEC is appropriate.
30. Section 5.4, Page 29 and Section 5.4.6, Page 33: Use of a SWAC is not appropriate for PAHs. Remove this analysis.
31. Section 5.4, Page 29, and Section 5.4.7, Page 34: EPA has previously stated it does not concur with using a synoptic database to develop cleanup goals for a site.
32. Section 5.4.1, Page 30: The last sentence on this page list the frequency of exceedance for identified COPC. The values in the text do not match those in Table 13.
33. Section 5.4.2, Page 31: Change the second sentence to read " The PEC is the concentration above which toxicity would be expected." The comparison of TOC normalized samples to PEC lacks sufficient documentation (see general comment).
34. Section 5.4.4, Page 33: Data supporting the site-specific conversion factor must be shown (see general comment).
35. Section 7.1.3.1, Page 39: The low end of the cancer risk estimate range is 2.4E-10 (not 2.6E-10).
36. Section 7.1.3.2, Page 40: Describe if residual NAPL is currently present; if it is, clarify whether it is currently below sand or armor.
37. Section 7.2.2, Page 40: The text states: "Aquatic birds, fish, and benthic macroinvertebrates are exposed to constituents in surface water during their normal activities. Exposure to surface water was evaluated by comparing maximum detected concentrations to surface water Eco SLs based on RAF guidance (Exponent 2007)." The screening values used are protective of aquatic life from direct contact not wildlife through dietary exposure. Either delete "aquatic bird" or add appropriate dose calculations for consumption of surface water.
38. Section 7.3, Page 42: Identify the sediment chemicals of concern based on 3 target risk levels: $1x10^{-6}$, $1x10^{-5}$, and $1x10^{-4}$ and a target organ-specific hazard index of 1, consistent with other sites in the MGP program.