



December 18, 2019

Reference No. 086165-06-12

Mr. Phil Richard
Wisconsin Department of Natural Resources
875 S 4th Avenue
Park Falls, Wisconsin 54552

Dear Mr. Richard:

**Re: Proposed Cost Estimate
Scope of Work – January 1 through December 31, 2020
Penta Wood Products Superfund Site – Siren, Wisconsin
WDNR BRRTS Activity #02-07-000532**

GHD Services Inc. (GHD) is pleased to provide this proposed cost estimate as Wisconsin Department of Natural Resources (WDNR) requested in a letter dated November 20, 2019 for the Penta Wood Products Superfund Site (Site) located in Siren, Wisconsin. The primary purpose of the scope of work (SOW) is to continue the groundwater monitoring and sampling while the United States Environmental Protection Agency (USEPA) reviews the upcoming expected recommendation for a remedy change for the Site. The tasks and assumptions required to complete the SOW and associated cost estimate are discussed below.

1. Revised Scope of Work

GHD would perform the scope of work as discussed below.

Task 1 – Site safety plan preparation

Complete an annual review of the Site-Specific Health and Safety Plan and update accordingly based on the planned work during 2020.

Task 2 – Housekeeping and grounds keeping

Continue general housekeeping and grounds keeping at the Site including:

- Mowing (typically one time every 3 weeks during May through September, assume eight events)
- Snowplowing after each 3-inch snowfall during January and December to allow for well access during quarterly groundwater/LNAPL level monitoring during January 2020 (assume four events)
- Annual fire extinguisher and backflow preventer inspection

Task 3 – Entrance gate replacement

Remove the existing entrance gate and install a new entrance gate along Daniels 70 (approximate 20-foot width).



Task 4 – Security fence replacement

Remove existing security fence along Daniels 70 and install new 6-foot chain-link fence (approximate length of 245 feet).

Task 5 – Quarterly groundwater/LNAPL level monitoring

Conduct groundwater/LNAPL level monitoring at all Site wells on a quarterly basis in January, April, July, and October 2020. In addition, conduct continuing obligations and well inspections during the quarterly monitoring events.

Task 6 – Semiannual groundwater well sampling

Conduct groundwater sampling at twenty-six (26) Site monitoring and extraction wells on a semiannual basis in April and October 2020. Collect quality assurance and quality control (QA/QC) samples during each event. Submit all samples for the following laboratory analyses:

- Pentachlorophenol (PCP)
- Naphthalene
- Benzene, toluene, ethylbenzene, and xylenes (BTEX)
- Dissolved metals (arsenic, copper, iron, manganese, and zinc)
- Natural attenuation parameters (alkalinity, hardness, nitrate, sulfate, total organic carbon, dissolved methane, and chloride)

Prior to sampling, purge each well and monitor field parameters (temperature, conductivity, pH, dissolved oxygen, oxidation reduction potential, turbidity, total iron, and total sulfide).

Task 7 – Semiannual residential well sampling

Conduct residential well sampling at six (6) residential properties surrounding the Site on a semiannual basis in April and October 2020. Also, conduct sampling at the shop well at the Wegner property. Prepare notification letters and sample result letters and send to the property owners. In addition, conduct sampling at the onsite water supply well on a semiannual basis. Collect quality assurance and quality control (QA/QC) samples during each event. Submit all samples for the following laboratory analyses:

- Pentachlorophenol (PCP)
- Naphthalene
- Benzene, toluene, ethylbenzene, and xylenes (BTEX)

Prior to sampling, purge each well and monitor field parameters (temperature, conductivity, and pH).

Task 8 – Semiannual reporting

Prepare a final remediation system shutdown pilot study report and submit to USEPA in January 2020 with a recommendation to change the remedy presented in the Record of Decision. Prepare semiannual reports documenting all Site work and submit to USEPA during July 2020 and January 2021. Include



summary tables and figures and an evaluation of the monitoring and sampling data with recommendations in the reports. In addition, participate in semiannual progress calls with WDNR and USEPA.

Task 9 – Monthly reporting

Prepare monthly status updates with each invoice. Include a brief description of work that was completed and an update on project budget. Periodically provide updates to the WDNR project manager through phone calls and emails.

Task 10 – Regulatory communications

Participate in unscheduled calls and meetings with WDNR and USEPA as WDNR determines necessary.

Task 11 – Additional work

Develop cost estimates and work plans to conduct additional potential work that may arise during the completion of this scope of work as WDNR determines necessary.

Task 12 – Remedy change

Work with WDNR and USEPA to change the Site remedy currently identified in the Record of Decision to a monitored natural attenuation type of remedy as WDNR determines necessary. If requested, provide supporting data and information related to the remediation system shutdown pilot study including participating in phone calls and meetings.

Task 13 – Wetland excavation and surface debris mitigation support

Work with WDNR and USEPA in preparation of conducting wetland excavation and surface debris mitigation as WDNR determines necessary.

2. Cost Estimate

The cost estimate and price sheet for each task listed above is included in Attachment A. The cost estimate for completing the SOW in 2020 is \$232,925.50.

This proposed cost is estimated based on time and materials. GHD's cost estimate includes revised GHD staff hourly rates as compared to the previous contract. The revised GHD rates represent an average 10-percent discount on standard GHD rates. GHD will continue to only bill WDNR based on actual time and materials for work performed. The costs are estimated for WDNR contract administration and budgeting purposes. Actual costs will not exceed the estimated task subtotals included on the attached tables without prior approval from WDNR.



If you have any questions or require additional information after reviewing this proposed cost estimate, please do not hesitate to contact us at (651) 639-0913.

Sincerely,

GHD

A handwritten signature in blue ink, appearing to read "Tim Ree", with a stylized flourish at the end.

Tim Ree

TR/sb/78

Encl.

cc: Shelley Fox, WDNR (via email)
Shawn Horn, GHD (via email)

Attachment A
Proposed Cost Estimate Price Sheet

Attachment A

**Proposed Cost Estimate Price Sheet - 2020 Scope of Work
Penta Wood Products Superfund Site
Siren, Wisconsin**

Task	Description	Unit	Estimated Quantity	Unit Cost	Extended Cost
1	Site safety plan preparation	Plan	1	\$ 1,289.00	\$ 1,289.00
2	House keeping and grounds keeping	Time and materials	1	\$ 17,289.00	\$ 17,289.00
3	Entrance gate replacement	Gate	1	\$ 8,594.60	\$ 8,594.60
4	Security fence replacement	Time and materials	1	\$ 14,440.15	\$ 14,440.15
5	Quarterly groundwater/LNAPL level monitoring	Event	4	\$ 3,862.20	\$ 15,448.80
6	Semiannual groundwater well sampling	Event	2	\$ 35,656.13	\$ 71,312.25
7	Semiannual residential well sampling	Event	2	\$ 7,519.35	\$ 15,038.70
8	Semiannual reporting	Report	3	\$ 9,720.00	\$ 29,160.00
9	Monthly reporting	Report	13	\$ 1,181.00	\$ 15,353.00
10	Regulatory communications	Pre-approved by WDNR	1	\$ 15,000.00	\$ 15,000.00
11	Additional work	Pre-approved by WDNR	1	\$ 10,000.00	\$ 10,000.00
12	Remedy change	Pre-approved by WDNR	1	\$ 10,000.00	\$ 10,000.00
12	Wetland excavation and surface debris mitigation support	Pre-approved by WDNR	1	\$ 10,000.00	\$ 10,000.00
Total Contract Cost (January 1 through December 31, 2020)					\$ 232,925.50