



January 18, 2019

Reference No. 086165-05-07

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

Dear Phil:

**Re: Monthly Status Update – December 2018
Penta Wood Products Superfund Site
Siren, Wisconsin
WDNR BRRTS Activity #02-07-000532**

GHD Services Inc. (GHD) has prepared this monthly status update for the period of December 2018 for the Penta Wood Products Superfund Site (Site). The project budget and costs are summarized in the following Tables 1 through 5. All problems, resolutions, and/or recommended solutions with an assessment of data collected during this period will be provided in the next Semiannual Report – July through December 2018. The following is a brief summary of the work completed.

Phase 02-Tasks 01 through 23

- No costs were billed to these tasks in the current invoice.

Phase 03-Tasks 01 through 17

- No costs were billed to these tasks in the current invoice.

Phase 04-Tasks 01 through 11

- No costs were billed to these tasks in the current invoice.

Phase 05-Task 01 Site safety plan preparation

- No costs were billed to this task in the current invoice.

Phase 05-Task 02 Housekeeping and grounds keeping

- Potential snowplowing for the January 2019 groundwater/LNAPL level monitoring event was coordinated. GHD subcontractor health and safety information was reviewed to renew contracts for 2019.

Phase 05-Task 03 Quarterly groundwater/LNAPL level monitoring

- The January 2019 quarterly groundwater/LNAPL level monitoring event was coordinated.

Phase 05-Task 04 Semiannual groundwater well sampling

- The October 2018 semiannual groundwater well sampling data was evaluated.



Phase 05-Task 05 Semiannual residential well sampling

- The October 2018 semiannual residential well sample analytical data was evaluated.

Phase 05-Task 06 Semiannual reporting

- Portions of the Semiannual Report – July through December 2018 were prepared.

Phase 05-Task 07 Monthly reporting

- Periodic project updates were provided to WDNR.
- The project budget was updated.
- The Monthly Status Report – November 2018 was prepared and submitted on December 12, 2018.

Phase 05-Task 08 Tier II reporting (2017 wastes)

- No costs were billed to this task in the current invoice.

Phase 05-Task 09 Regulatory communications

- No costs were billed to this task in the current invoice.

Should you have questions, please do not hesitate to contact us.

Sincerely,

GHD

A handwritten signature in blue ink that appears to read 'Tim Ree'.

Tim Ree

TR/sb/65

Encl.

cc: Stephanie Linebaugh, USEPA (via email)
 Judy Fassbender, WDNR Madison (via email)
 Chris Saari, WDNR Ashland (via email)
 Adrian Herrera, WDNR Madison (via email)

Table 1

**Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Project Number 086165

Original Scope of Work and Purchase Order

Phase	Description	Budget
02	Original Scope of Work (Table 2)	\$ 1,271,421.94
Original Scope of Work Total		\$ 1,271,421.94

Project Costs

Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)
\$ -	\$ 180,027.59	\$ 180,027.59	\$ 1,091,394.35
\$ -	\$ 180,027.59	\$ 180,027.59	\$ 1,091,394.35

Revised Scope of Work

Phase	Description	Budget
03	2015-2016 Revised Scope of Work (Table 3)	\$ 786,897.18
04	2017 Revised Scope of Work (Table 4)	\$ 188,770.15
05	2018 Revised Scope of Work (Table 5)	\$ 183,434.25
Revised Scope of Work Total		\$ 1,159,101.58

Project Costs

Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)
\$ -	\$ 759,555.68	\$ 759,555.68	\$ 27,341.50
\$ -	\$ 160,896.05	\$ 160,896.05	\$ 27,874.10
\$ 4,452.62	\$ 156,573.17	\$ 161,025.79	\$ 22,408.46
\$ 4,452.62	\$ 1,077,024.90	\$ 1,081,477.52	\$ 77,624.06

Overall Budget Status ¹

Original Budget	\$ 1,271,421.94
Total Invoiced Cost (through 12/29/2018)	\$ 1,261,505.11
Overall Budget Remaining (through 12/29/2018)	\$ 9,916.83
Contingency	\$ 64,000.00
Overall Budget Remaining with Contingency (through 12/29/2018)	\$ 73,916.83

Note:

- ¹ The total revised scope of work budget is less than the original scope of work purchase order budget. For overall project budget tracking purposes, the combined costs for work completed under the original purchase order and the revised scope of work are compared against the original purchase order budget.

Table 2

**Original Scope of Work and Purchase Order Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Project Number 086165
Phase 02 - August 1, 2015 - July 31, 2017

Original Scope of Work and Purchase Order Budget						Project Costs			
Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)
01	Routine O&M	Labor hours/rate estimated material equipment and rental costs and travel	2	\$ 319,744.46	\$ 639,488.92	\$ -	\$ 91,595.41	\$ 91,595.41	\$ 547,893.51
02	Waste characterization	Labor hours/rate estimated material equipment and rental costs and travel	2	\$ 9,064.00	\$ 18,128.00	\$ -	\$ -	\$ -	\$ 18,128.00
03	Waste disposal	Costs plus markup	2	\$ 91,200.36	\$ 182,400.72	\$ -	\$ -	\$ -	\$ 182,400.72
04	Housekeeping and grounds keeping	Labor hours/rate estimated material equipment and rental costs and travel	2	\$ 17,889.60	\$ 35,779.20	\$ -	\$ 2,742.13	\$ 2,742.13	\$ 33,037.07
05	Monthly soil gas monitoring	Each round	14	\$ 3,286.80	\$ 46,015.20	\$ -	\$ 5,525.48	\$ 5,525.48	\$ 40,489.72
06	Treat syst inf (PCP)	Each round	48	\$ 99.23	\$ 4,762.80	\$ -	\$ 756.00	\$ 756.00	\$ 4,006.80
07	Treat syst eff (PCP)	Each round	104	\$ 226.73	\$ 23,579.40	\$ -	\$ 3,696.71	\$ 3,696.71	\$ 19,882.69
08	Treat syst eff (DRO, naphthalene)	Each round	24	\$ 132.30	\$ 3,175.20	\$ -	\$ 504.00	\$ 504.00	\$ 2,671.20
09	Treat syst eff (metals, chloride)	Each round	8	\$ 194.70	\$ 1,557.60	\$ -	\$ 64.05	\$ 64.05	\$ 1,493.55
10	Treat syst eff (BTEX, phenol, dioxin)	Each round	2	\$ 495.60	\$ 991.20	\$ -	\$ -	\$ -	\$ 991.20
11	Semi-annual GW/LNAPL level monitoring	Each round	4	\$ 894.00	\$ 3,576.00	\$ -	\$ 746.25	\$ 746.25	\$ 2,829.75
12	Annual GW well sampling	Each round	2	\$ 20,284.30	\$ 40,568.60	\$ -	\$ 20,228.08	\$ 20,228.08	\$ 20,340.52
13	Semi-annual GW well sampling	Each round	2	\$ 8,511.20	\$ 17,022.40	\$ -	\$ -	\$ -	\$ 17,022.40
14	Semi-annual residential well sampling	Each round	4	\$ 5,388.18	\$ 21,552.70	\$ -	\$ 5,388.63	\$ 5,388.63	\$ 16,164.07

Table 2

**Original Scope of Work and Purchase Order Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Project Number 086165
Phase 02 - August 1, 2015 - July 31, 2017

Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Project Costs				
						Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)	
15	Semi-annual reporting	Each	4	\$ 8,282.00	\$ 33,128.00	\$ -	\$ 1,236.00	\$ 1,236.00	\$ 31,892.00	
16	Monthly status reporting	Each	24	\$ 3,523.83	\$ 84,572.00	\$ -	\$ 12,787.33	\$ 12,787.33	\$ 71,784.67	
17	Regulatory communications	Pre-approved and determined by DNR	2	\$ 15,000.00	\$ 30,000.00	\$ -	\$ -	\$ -	\$ 30,000.00	
18	Site Safety Plan	Estimated cost not to exceed	2	\$ 1,942.00	\$ 3,884.00	\$ -	\$ 275.50	\$ 275.50	\$ 3,608.50	
19	Site QA/QC Plan	Estimated cost not to exceed	2	\$ 4,200.00	\$ 8,400.00	\$ -	\$ -	\$ -	\$ 8,400.00	
20	Alternate remedy recommendation ¹	Estimated cost not to exceed	1	\$ 27,750.00	\$ 27,750.00	\$ -	\$ 30,695.89	\$ 30,695.89	\$ (2,945.89)	
21	WPDES permit updates	Estimated cost not to exceed	1	\$ 3,288.00	\$ 3,288.00	\$ -	\$ -	\$ -	\$ 3,288.00	
22	Heating/ventilation system repairs	Labor, material, and contractor costs	1	\$ 20,752.00	\$ 20,752.00	\$ -	\$ 1,787.50	\$ 1,787.50	\$ 18,964.50	
23	Well repairs	Labor, material, and contractor costs	1	\$ 21,050.00	\$ 21,050.00	\$ -	\$ 1,998.63	\$ 1,998.63	\$ 19,051.37	
					Purchase Order Budget Total	\$ 1,271,421.94	\$ -	\$ 180,027.59	\$ 180,027.59	\$ 1,091,394.35

Notes:

- ¹ WDNR approved an increase of \$3,000.00 to the Task 20 unit price due to additional work associated with evaluating existing monitoring well network, proposing additional well locations, confirming field locations; developing a microcosm and bio-trap study work plan; assessing microbial biological tools (MBTs) and environmental molecular diagnostics (EMDs).

Table 3

**2015-2016 Revised Scope of Work and Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Project Number 086165
Phase 03 - November 1, 2015 - December 31, 2016

**2015-2016 Revised Scope of Work
and Budget**

Project Costs

Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Project Costs			
						Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)
01	Well repairs	Lump sum	1	\$ 20,663.30	\$ 20,663.30	\$ -	\$ 20,663.30	\$ 20,663.30	\$ -
02	Drilling and well installation	Lump sum	1	\$ 63,369.90	\$ 63,369.90	\$ -	\$ 60,825.82	\$ 60,825.82	\$ 2,544.08
03	System decommissioning	Lump sum	1	\$ 82,778.80	\$ 82,778.80	\$ -	\$ 82,730.39	\$ 82,730.39	\$ 48.41
04	Site safety plan	Plan	1	\$ 3,372.50	\$ 3,372.50	\$ -	\$ 3,322.28	\$ 3,322.28	\$ 50.22
05	Site QA/QC plan	Plan	1	\$ 6,829.50	\$ 6,829.50	\$ -	\$ 4,958.97	\$ 4,958.97	\$ 1,870.53
06	Waste characterization	Lump sum	1	\$ 20,810.00	\$ 20,810.00	\$ -	\$ 17,752.46	\$ 17,752.46	\$ 3,057.54
07	Waste disposal	Lump sum	1	\$ 173,149.00	\$ 173,149.00	\$ -	\$ 172,925.73	\$ 172,925.73	\$ 223.27
08	Housekeeping and grounds keeping	Lump sum	1	\$ 16,545.30	\$ 16,545.30	\$ -	\$ 15,132.83	\$ 15,132.83	\$ 1,412.47
09	Quarterly fluid level monitoring	Event	4	\$ 3,471.65	\$ 13,886.60	\$ -	\$ 13,730.30	\$ 13,730.30	\$ 156.30

Table 3

**2015-2016 Revised Scope of Work and Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Project Number 086165
Phase 03 - November 1, 2015 - December 31, 2016

**2015-2016 Revised Scope of Work
and Budget**

Project Costs

Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Project Costs				
						Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)	
10	Baseline groundwater sampling	Event	1	\$ 74,916.75	\$ 74,916.75		\$ 74,432.36	\$ 74,432.36	\$ 484.39	
11	Quarterly monitoring well sampling	Event	3	\$ 26,278.28	\$ 78,834.84	\$ -	\$ 78,834.84	\$ 78,834.84	\$ -	
12	Semiannual residential well sampling	Event	2	\$ 4,194.89	\$ 8,389.78	\$ -	\$ 8,374.91	\$ 8,374.91	\$ 14.87	
13	Quarterly reporting	Report	4	\$ 8,339.00	\$ 33,356.00	\$ -	\$ 33,293.12	\$ 33,293.12	\$ 62.88	
14	Monthly reporting	Report	14	\$ 2,792.65	\$ 39,097.10	\$ -	\$ 38,060.73	\$ 38,060.73	\$ 1,036.37	
15	Regulatory communications	Pre-approved and determined by DNR	1	\$ 15,000.00	\$ 15,000.00	\$ -	\$ 4,418.94	\$ 4,418.94	\$ 10,581.06	
16	Microcosm and bio-trap study	Lump sum	1	\$ 45,793.40	\$ 45,793.40	\$ -	\$ 45,656.95	\$ 45,656.95	\$ 136.45	
17	Shallow soil and sediment investigation	Pre-approved and determined by DNR	1	\$ 55,119.50	\$ 55,119.50	\$ -	\$ 55,119.50	\$ 55,119.50	\$ -	
					2015-2016 Budget Subtotal	\$ 751,912.27	\$ -	\$ 730,233.43	\$ 730,233.43	\$ 21,678.84

Table 3

**2015-2016 Revised Scope of Work and Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Project Number 086165
Phase 03 - November 1, 2015 - December 31, 2016

2015-2016 Revised Scope of Work and Budget						Project Costs			
Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)
WDNR Approved Additional Costs									
11	Quarterly monitoring well sampling ¹	Event	3	\$ 2,813.37	\$ 8,440.11	\$ -	\$ 8,440.11	\$ 8,440.11	\$ -
01	Well repairs ²	Lump sum	1	\$ 8,184.00	\$ 8,184.00	\$ -	\$ 3,850.70	\$ 3,850.70	\$ 4,333.30
11	Quarterly monitoring well sampling ³	Event	1	\$ 2,260.38	\$ 2,260.38	\$ -	\$ 950.72	\$ 950.72	\$ 1,309.66
17	Shallow soil and sediment investigation ⁴	Lump sum	1	\$ 16,100.42	\$ 16,100.42	\$ -	\$ 16,080.72	\$ 16,080.72	\$ 19.70
					2015-2016 Approved Additional Costs Subtotal	\$ -	\$ 29,322.25	\$ 29,322.25	\$ 5,662.66
					2015-2016 Budget Total	\$ -	\$ 759,555.68	\$ 759,555.68	\$ 27,341.50

Notes:

- ¹ WDNR approved an increase of \$8,440.11 (\$2,813.37 per event unit cost) to the Task 11 budget due to additional work associated with collection and laboratory analysis of three additional groundwater monitoring well samples (MW23, MW25, and EW13S) during three quarterly events.
- ² WDNR approved an increase of \$8,184.00 to the Task 01 budget due to additional well repair work.
- ³ WDNR approved an increase of \$2,260.38 to the Task 11 budget due to sampling at wells MW4 and MW14 during one quarterly event.
- ⁴ WDNR approved an increase of \$16,100.42 to the Task 17 budget to complete the shallow soil and sediment investigation.

Table 4

**2017 Revised Scope of Work and Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Project Number 086165
Phase 04 - January 1, 2017 - December 31, 2017

**2017 Revised Scope of Work
and Budget**

Project Costs

Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Project Costs				
						Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)	
01	Site safety plan	Plan	1	\$ 1,310.50	\$ 1,310.50	\$ -	\$ 1,303.56	\$ 1,303.56	\$ 6.94	
02	Site QA/QC plan	Plan	1	\$ 2,098.00	\$ 2,098.00	\$ -	\$ -	\$ -	\$ 2,098.00	
03	Housekeeping and grounds keeping	Lump sum	1	\$ 15,381.60	\$ 15,381.60	\$ -	\$ 9,818.21	\$ 9,818.21	\$ 5,563.39	
04	Quarterly fluid level monitoring	Event	4	\$ 3,471.60	\$ 13,886.40	\$ -	\$ 8,992.02	\$ 8,992.02	\$ 4,894.38	
05	Semiannual monitoring well sampling	Event	2	\$ 26,278.28	\$ 52,556.56	\$ -	\$ 52,556.56	\$ 52,556.56	\$ -	
06	Semiannual residential well sampling	Event	2	\$ 4,194.89	\$ 8,389.78	\$ -	\$ 8,346.51	\$ 8,346.51	\$ 43.27	
07	Semiannual reporting	Report	2	\$ 6,201.00	\$ 12,402.00	\$ -	\$ 12,187.23	\$ 12,187.23	\$ 214.77	
08	Monthly reporting	Report	12	\$ 1,594.00	\$ 19,128.00	\$ -	\$ 18,439.83	\$ 18,439.83	\$ 688.17	
09	Regulatory communications	Pre-approved and determined by DNR	1	\$ 15,000.00	\$ 15,000.00	\$ -	\$ 9,098.16	\$ 9,098.16	\$ 5,901.84	
					2017 Budget Subtotal	\$ 140,152.84	\$ -	\$ 120,742.08	\$ 120,742.08	\$ 19,410.76

Table 4

**2017 Revised Scope of Work and Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Project Number 086165
Phase 04 - January 1, 2017 - December 31, 2017

2017 Revised Scope of Work and Budget						Project Costs			
Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)
WDNR Approved Additional Costs									
05	Semiannual monitoring well sampling ¹	Event	2	\$ 8,782.42	\$ 17,564.83	\$ -	\$ 9,913.39	\$ 9,913.39	\$ 7,651.44
10	Shallow soil and sediment investigation data evaluation ²	Lump sum	1	\$ 11,089.20	\$ 11,089.20	\$ -	\$ 11,053.13	\$ 11,053.13	\$ 36.07
11	Soil sampling under surface debris ³	Lump sum	1	\$ 19,963.28	\$ 19,963.28	\$ -	\$ 19,187.45	\$ 19,187.45	\$ 775.83
					2017 Approved Additional Costs Subtotal	\$ -	\$ 40,153.97	\$ 40,153.97	\$ 8,463.34
					2017 Budget Total	\$ -	\$ 160,896.05	\$ 160,896.05	\$ 27,874.10

Notes:

- ¹ WDNR approved an increase of \$17,564.83 (\$8,782.42 per event unit cost) to the Task 5 budget due to additional groundwater sampling at wells (MW4, MW14, MW23, MW25, and EW13S) during two semiannual events.
- ² WDNR approved an increase of \$11,089.20 to a new Task 10 budget due to a shallow soil and sediment data evaluation.
- ³ WDNR approved an increase of \$19,963.28 to a new Task 11 budget due to soil sampling under surface debris.

Table 5

**2018 Revised Scope of Work and Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

**GHD Project Number 086165
Phase 05 - January 1, 2018 - December 31, 2018**

Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Project Costs				
						Current Invoice Cost (through 12/29/2018)	Previous Invoiced Cost	Total Invoiced Cost (through 12/29/2018)	Budget Remaining (through 12/29/2018)	
1	Site safety plan preparation	Plan	1	\$ 1,421.50	\$ 1,421.50	\$ -	\$ 539.45	\$ 539.45	\$ 882.05	
2	House keeping and grounds keeping	Time and materials	1	\$ 17,975.25	\$ 17,975.25	\$ 356.25	\$ 13,232.38	\$ 13,588.63	\$ 4,386.62	
3	Quarterly groundwater/LNAPL level monitoring	Event	4	\$ 3,846.50	\$ 15,386.00	\$ 85.25	\$ 10,608.44	\$ 10,693.69	\$ 4,692.31	
4	Semiannual groundwater well sampling	Event	2	\$ 36,248.75	\$ 72,497.50	\$ 750.36	\$ 65,983.91	\$ 66,734.27	\$ 5,763.23	
5	Semiannual residential well sampling	Event	2	\$ 9,169.00	\$ 18,338.00	\$ 368.38	\$ 12,068.39	\$ 12,436.77	\$ 5,901.23	
6	Semiannual reporting	Report	2	\$ 7,653.00	\$ 15,306.00	\$ 2,000.75	\$ 13,217.62	\$ 15,218.37	\$ 87.63	
7	Monthly reporting	Report	12	\$ 2,114.00	\$ 25,368.00	\$ 891.63	\$ 24,449.74	\$ 25,341.37	\$ 26.63	
8	Tier II reporting (2017 wastes)	Report	1	\$ 2,142.00	\$ 2,142.00	\$ -	\$ 1,893.23	\$ 1,893.23	\$ 248.77	
9	Regulatory communications	Pre-approved by WDNR	1	\$ 15,000.00	\$ 15,000.00	\$ -	\$ 14,580.01	\$ 14,580.01	\$ 419.99	
					2018 Budget Total	\$ 183,434.25	\$ 4,452.62	\$ 156,573.17	\$ 161,025.79	\$ 22,408.46