



January 30, 2017

Reference No. 086165-03-14

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

Dear Phil:

**Re: Monthly Status Update – December 2016
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Services Inc. (GHD) has prepared this monthly status update for the period of December 2016 for the Penta Wood Products Superfund Site (Site). The project budget and costs are summarized in the following Tables 1 through 4. All problems, resolutions, and/or recommended solutions with an assessment of data collected during this period will be provided in the next Quarterly Report – October through December 2016. 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-Task 01 Well repairs

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

Phase 03-Task 02 Drilling and well installation

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

Phase 03-Task 03 System decommissioning

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

Phase 03-Task 04 Site safety plan

- The Site safety plan was updated to include the water treatment chemical removal tasks.

Phase 03-Task 05 Site QA/QC plan

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

Phase 03-Task 06 Waste characterization

- Wood debris, drum remnants, and saw dust sampling and characterization was coordinated. Samples were collected on December 8, 2016.
- Water treatment chemical characterization was coordinated.



Phase 03-Task 07 *Waste disposal*

- Profiling and disposal of the water treatment chemicals were coordinated. Samples were collected on December 19, 2016. The samples were shipped to the disposal facility following hazardous material requirements.
- Communicated with the disposal company.
- RCRA waste generator rules were evaluated to determine appropriate status for the Site related to future water treatment chemical removal.

Phase 03-Task 08 *Housekeeping and grounds keeping*

- Snowplowing and annual fire extinguisher inspection/maintenance was coordinated.
- The current invoice includes subcontractor (Maurer Power) costs to troubleshoot electrical use on August 24, 2016.

Phase 03-Task 09 *Quarterly groundwater/LNAPL level monitoring*

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

Phase 03-Task 10 *Baseline groundwater well sampling*

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

Phase 03-Task 11 *Quarterly groundwater well sampling*

- The January 2017 quarterly groundwater sampling event was coordinated.

Phase 03-Task 12 *Semiannual residential well sampling*

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

Phase 03-Task 13 *Quarterly reporting*

- Portions of the draft Quarterly Report – October through December 2016 were prepared.

Phase 03-Task 14 *Monthly reporting*

- Periodic project updates were provided to WDNR.
- The project budget was updated.
- The Monthly Status Report – November 2016 was prepared and subsequently submitted on December 19, 2016.

Phase 03-Task 15 *Regulatory communications*

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



Phase 03-Task 16 *Microcosm and bio-trap study*

- The microcosm and bio-trap study continued.

Phase 03-Task 17 *Shallow soil and sediment investigation*

- A soil and sediment sampling plan was developed for Area 29.

Phase 04-Tasks 01 through 09

- No costs will be billed to these tasks until 2017.

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/38

Encl.

cc: Stephanie Linebaugh, USEPA (via email)
 Viral Patel, USEPA (via email)
 Judy Fassbender, WDNR Madison (via email)
 David Swimm, WDNR Madison (via email)
 John Robinson, WDNR Wausau (via email)
 Gary Edelstein, WDNR Madison (via email)
 Duane Klein, WDNR Madison (via email)
 Ron Frehner, GHD (via email)
 Brian Sandberg, GHD (via email)
 Pete Storlie, GHD (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	Project Costs			
			Current Invoice Cost (through 1/1/2017)	Previous Invoiced Cost	Total Invoiced Cost (through 1/1/2017)	Budget Remaining (through 1/1/2017)
02	Original Scope of Work (Table 2)	\$ 1,271,421.94	\$ -	\$ 180,027.59	\$ 180,027.59	\$ 1,091,394.35
Original Scope of Work Total		\$ 1,271,421.94	\$ -	\$ 180,027.59	\$ 180,027.59	\$ 1,091,394.35

Revised Scope of Work

Phase	Description	Budget	Project Costs			
			Current Invoice Cost (through 1/1/2017)	Previous Invoiced Cost	Total Invoiced Cost (through 1/1/2017)	Budget Remaining (through 1/1/2017)
03	2015-2016 Revised Scope of Work (Table 3)	\$ 786,897.18	\$ 17,386.29	\$ 609,061.37	\$ 626,447.66	\$ 160,449.52
04	2017 Revised Scope of Work (Table 4)	\$ 140,152.84	\$ -	\$ -	\$ -	\$ 140,152.84
Revised Scope of Work Total		\$ 927,050.02	\$ 17,386.29	\$ 609,061.37	\$ 626,447.66	\$ 300,602.36

Overall Budget Status ¹

Original Budget	\$ 1,271,421.94
Total Invoiced Cost (through 11/27/2016)	\$ 806,475.25
Overall Budget Remaining (through 11/27/2016)	\$ 464,946.69

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	Project Costs			
						Current Invoice Cost (through 1/1/2017)	Previous Invoiced Cost	Total Invoiced Cost (through 1/1/2017)	Budget Remaining (through 1/1/2017)
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

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 1/1/2017)	Previous Invoiced Cost	Total Invoiced Cost (through 1/1/2017)	Budget Remaining (through 1/1/2017)	
14	Semi-annual residential well sampling	Each round	4	\$ 5,388.18	\$ 21,552.70	\$ -	\$ 5,388.63	\$ 5,388.63	\$ 16,164.07	
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	Current Invoice Cost (through 1/1/2017)	Previous Invoiced Cost	Total Invoiced Cost (through 1/1/2017)	Budget Remaining (through 1/1/2017)
01	Well repairs	Lump sum	1	\$ 20,663.30	\$ 20,663.30	\$ -	\$ 20,584.70	\$ 20,584.70	\$ 78.60
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	\$ 394.50	\$ 2,927.78	\$ 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	\$ 2,793.96	\$ 8,001.15	\$ 10,795.11	\$ 10,014.89
07	Waste disposal	Lump sum	1	\$ 173,149.00	\$ 173,149.00	\$ 5,200.65	\$ 144,627.34	\$ 149,827.99	\$ 23,321.01
08	Housekeeping and grounds keeping	Lump sum	1	\$ 16,545.30	\$ 16,545.30	\$ 945.15	\$ 14,187.68	\$ 15,132.83	\$ 1,412.47
09	Quarterly fluid level monitoring	Event	4	\$ 3,471.65	\$ 13,886.60	\$ -	\$ 4,309.80	\$ 4,309.80	\$ 9,576.80

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

Task	Description	Unit	2015-2016 Revised Scope of Work and Budget			Project Costs			
			Estimated Quantity	Unit Cost	Budget	Current Invoice Cost (through 1/1/2017)	Previous Invoiced Cost	Total Invoiced Cost (through 1/1/2017)	Budget Remaining (through 1/1/2017)
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	\$ 1,938.28	\$ 56,389.07	\$ 58,327.35	\$ 20,507.49
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	\$ 1,964.00	\$ 31,085.37	\$ 33,049.37	\$ 306.63
14	Monthly reporting	Report	14	\$ 2,792.65	\$ 39,097.10	\$ 2,768.50	\$ 32,563.23	\$ 35,331.73	\$ 3,765.37
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	\$ 650.00	\$ 38,691.94	\$ 39,341.94	\$ 6,451.46
17	Shallow soil and sediment investigation	Pre-approved and determined by DNR	1	\$ 55,119.50	\$ 55,119.50	\$ 731.25	\$ 19,951.92	\$ 20,683.17	\$ 34,436.33
2015-2016 Budget Subtotal					\$ 751,912.27	\$ 17,386.29	\$ 609,061.37	\$ 626,447.66	\$ 125,464.61

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

Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Project Costs				
						Current Invoice Cost (through 1/1/2017)	Previous Invoiced Cost	Total Invoiced Cost (through 1/1/2017)	Budget Remaining (through 1/1/2017)	
2015-2016 Revised Scope of Work and Budget										
WDNR Approved Additional Costs										
11	Quarterly monitoring well sampling ¹	Event	3	\$ 2,813.37	\$ 8,440.11	\$ -	\$ -	\$ -	\$ 8,440.11	
01	Well repairs ²	Lump sum	1	\$ 8,184.00	\$ 8,184.00	\$ -	\$ -	\$ -	\$ 8,184.00	
11	Quarterly monitoring well sampling ³	Event	1	\$ 2,260.38	\$ 2,260.38	\$ -	\$ -	\$ -	\$ 2,260.38	
17	Shallow soil and sediment investigation ⁴	Lump sum	1	\$ 16,100.42	\$ 16,100.42	\$ -	\$ -	\$ -	\$ 16,100.42	
2015-2016 Approved Additional Costs Subtotal					\$ 34,984.91	\$ -	\$ -	\$ -	\$ 34,984.91	
2015-2016 Budget Total					\$ 786,897.18	\$ 17,386.29	\$ 609,061.37	\$ 626,447.66	\$ 160,449.52	

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 \$2,224.00 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 1/1/2017)	Previous Invoiced Cost	Total Invoiced Cost (through 1/1/2017)	Budget Remaining (through 1/1/2017)
01	Site safety plan	Plan	1	\$ 1,310.50	\$ 1,310.50	\$ -	\$ -	\$ -	\$ 1,310.50
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	\$ -	\$ -	\$ -	\$ 15,381.60
04	Quarterly fluid level monitoring	Event	4	\$ 3,471.60	\$ 13,886.40	\$ -	\$ -	\$ -	\$ 13,886.40
05	Semiannual monitoring well sampling	Event	2	\$ 26,278.28	\$ 52,556.56	\$ -	\$ -	\$ -	\$ 52,556.56
06	Semiannual residential well sampling	Event	2	\$ 4,194.89	\$ 8,389.78	\$ -	\$ -	\$ -	\$ 8,389.78
07	Semiannual reporting	Report	2	\$ 6,201.00	\$ 12,402.00	\$ -	\$ -	\$ -	\$ 12,402.00
08	Monthly reporting	Report	12	\$ 1,594.00	\$ 19,128.00	\$ -	\$ -	\$ -	\$ 19,128.00
09	Regulatory communications	Pre-approved and determined by DNR	1	\$ 15,000.00	\$ 15,000.00	\$ -	\$ -	\$ -	\$ 15,000.00
2017 Budget Total					\$ 140,152.84	\$ -	\$ -	\$ -	\$ 140,152.84