



October 4, 2016

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 – August 2016
Penta Wood Products Superfund Site
Siren, Wisconsin**

GHD Services Inc. (GHD) has prepared this monthly status update for the period of August 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 – July through September 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

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

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

- Disposal facility requirements were assessed for disposing the stored water treatment chemicals at an offsite facility.



Phase 03-Task 07 *Waste disposal*

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

Phase 03-Task 08 *Housekeeping and grounds keeping*

- A subcontractor (Austin Lake Landscaping) was coordinated for mowing at the Site. Subcontractor oversight was performed and coordinated with other Site work when possible.
- The current invoice includes subcontractor costs for mowing completed on May 9 and 23, June 6 and 21, and July 13, 2016.

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

- Quarterly groundwater and LNAPL level monitoring was coordinated for the October 2016 event.

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 July 2016 quarterly groundwater sampling results were evaluated.
- The current invoice includes laboratory costs for the July 2016 groundwater sample analyses.

Phase 03-Task 12 *Semiannual residential well sampling*

- Notification letters were issued for the October 2016 residential well sampling event.
- Residential well construction logs were reviewed to determine screen intervals.

Phase 03-Task 13 *Quarterly reporting*

- Portions of the Quarterly Report – July through September 2016 was prepared.

Phase 03-Task 14 *Monthly reporting*

- The July 2016 quarterly groundwater sampling results were provided to WDNR. GHD and WDNR held a conference call on August 15, 2016 to discuss the results and determine a corrective action due to pentachlorophenol concentrations detected in some outlying wells. Continued monitoring was the selected corrective action.
- The bi-monthly conference call with WDNR, USEPA, and GHD was held on August 22, 2016.
- The Monthly Status Report – July 2016 was prepared and subsequently submitted on August 24, 2016.



Phase 03-Task 15 Regulatory communications

- No costs were billed to this task in the current invoice. 2016.

Phase 03-Task 16 Microcosm and bio-trap study

- Microcosm study testing continued.
- The bio-trap testing was completed.
- The current invoice includes the GHD Innovative Technology Group laboratory costs for microcosm testing and the Microbial Insights costs for the bio-trap testing.

Phase 03-Task 17 Shallow soil and sediment investigation

- Portions of a plan were developed for collecting surface soil and sediment samples within previous soil excavation areas.

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, appearing to read "Tim Ree", is written over a light blue rectangular background.

Tim Ree

TR/md/33

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

Purchase Order

Phase	Description	Purchase Order Budget
02	Purchase Order (Table 2)	\$ 1,271,421.94
Purchase Order Total		\$ 1,271,421.94

Project Costs

Current Invoice Cost (through 8/28/2016)	Previous Invoiced Cost	Total Invoiced Cost (through 8/28/2016)	Purchase Order Budget Remaining (through 8/28/2016)
\$ -	\$ 180,027.59	\$ 180,027.59	\$ 1,091,394.35
\$ -	\$ 180,027.59	\$ 180,027.59	\$ 1,091,394.35

Change Order

Phase	Description	Change Order Budget
03	2015-2016 Change Order (Table 3)	\$ 751,912.27
04	2017 Change Order (Table 4)	\$ 140,152.84
Change Order Total		\$ 892,065.11

Project Costs

Current Invoice Cost (through 8/28/2016)	Previous Invoiced Cost	Total Invoiced Cost (through 8/28/2016)	Change Order Budget Remaining (through 8/28/2016)
\$ 41,827.76	\$ 493,660.17	\$ 535,487.93	\$ 216,424.34
\$ -	\$ -	\$ -	\$ 140,152.84
\$ 41,827.76	\$ 493,660.17	\$ 535,487.93	\$ 356,577.18

Total Budget Status ¹	\$ 1,271,421.94	\$ 41,827.76	\$ 673,687.76	\$ 715,515.52	\$ 555,906.42
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Note:

- 1 The total change order budget is less than the original 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 completed under the change order are compared against the original purchase order budget.

Table 2

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

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

Annual Tasks			Purchase Order Budget				Project Costs			
Task	Description	Unit	Estimated Annual Quantity	Unit Cost	Annual Budget	Purchase Order Budget (8/1/2015-7/31/2017)	Current Invoice Cost (through 8/28/2016)	Previous Invoiced Cost	Total Invoiced Cost (through 8/28/2016)	Purchase Order Budget Remaining (through 8/28/2016)
01	Routine O&M	Labor hours/rate estimated material equipment and rental costs and travel	1	\$ 319,744.46	\$ 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	1	\$ 9,064.00	\$ 9,064.00	\$ 18,128.00	\$ -	\$ -	\$ -	\$ 18,128.00
03	Waste disposal	Costs plus markup	1	\$ 91,200.36	\$ 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	1	\$ 17,889.60	\$ 17,889.60	\$ 35,779.20	\$ -	\$ 2,742.13	\$ 2,742.13	\$ 33,037.07
05	Monthly soil gas monitoring	Each round	7	\$ 3,286.80	\$ 23,007.60	\$ 46,015.20	\$ -	\$ 5,525.48	\$ 5,525.48	\$ 40,489.72
06	Treat syst inf (PCP)	Each round	24	\$ 99.23	\$ 2,381.40	\$ 4,762.80	\$ -	\$ 756.00	\$ 756.00	\$ 4,006.80
07	Treat syst eff (PCP)	Each round	52	\$ 226.73	\$ 11,789.70	\$ 23,579.40	\$ -	\$ 3,696.71	\$ 3,696.71	\$ 19,882.69
08	Treat syst eff (DRO, naphthalene)	Each round	12	\$ 132.30	\$ 1,587.60	\$ 3,175.20	\$ -	\$ 504.00	\$ 504.00	\$ 2,671.20
09	Treat syst eff (metals, chloride)	Each round	4	\$ 194.70	\$ 778.80	\$ 1,557.60	\$ -	\$ 64.05	\$ 64.05	\$ 1,493.55
10	Treat syst eff (BTEX, phenol, dioxin)	Each round	1	\$ 495.60	\$ 495.60	\$ 991.20	\$ -	\$ -	\$ -	\$ 991.20
11	Semi-annual GW/LNAPL level monitoring	Each round	2	\$ 894.00	\$ 1,788.00	\$ 3,576.00	\$ -	\$ 746.25	\$ 746.25	\$ 2,829.75

Table 2

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

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

Annual Tasks			Purchase Order Budget				Project Costs			
Task	Description	Unit	Estimated Annual Quantity	Unit Cost	Annual Budget	Purchase Order Budget (8/1/2015-7/31/2017)	Current Invoice Cost (through 8/28/2016)	Previous Invoiced Cost	Total Invoiced Cost (through 8/28/2016)	Purchase Order Budget Remaining (through 8/28/2016)
12	Annual GW well sampling	Each round	1	\$ 20,284.30	\$ 20,284.30	\$ 40,568.60	\$ -	\$ 20,228.08	\$ 20,228.08	\$ 20,340.52
13	Semi-annual GW well sampling	Each round	1	\$ 8,511.20	\$ 8,511.20	\$ 17,022.40	\$ -	\$ -	\$ -	\$ 17,022.40
14	Semi-annual residential well sampling	Each round	2	\$ 5,388.18	\$ 10,776.35	\$ 21,552.70	\$ -	\$ 5,388.63	\$ 5,388.63	\$ 16,164.07
15	Semi-annual reporting	Each	2	\$ 8,282.00	\$ 16,564.00	\$ 33,128.00	\$ -	\$ 1,236.00	\$ 1,236.00	\$ 31,892.00
16	Monthly status reporting	Each	12	\$ 3,523.83	\$ 42,286.00	\$ 84,572.00	\$ -	\$ 12,787.33	\$ 12,787.33	\$ 71,784.67
17	Regulatory communications	Pre-approved and determined by DNR	1	\$ 15,000.00	\$ 15,000.00	\$ 30,000.00	\$ -	\$ -	\$ -	\$ 30,000.00
18	Site Safety Plan	Estimated cost not to exceed	1	\$ 1,942.00	\$ 1,942.00	\$ 3,884.00	\$ -	\$ 275.50	\$ 275.50	\$ 3,608.50
19	Site QA/QC Plan	Estimated cost not to exceed	1	\$ 4,200.00	\$ 4,200.00	\$ 8,400.00	\$ -	\$ -	\$ -	\$ 8,400.00
Annual Tasks Subtotal					\$ 599,290.97	\$ 1,198,581.94	\$ -	\$ 145,545.57	\$ 145,545.57	\$ 1,053,036.37

Table 2
Purchase Order Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin

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

Annual Tasks		Purchase Order Budget				Project Costs					
Task	Description	Unit	Estimated Annual Quantity	Unit Cost	Annual Budget	Purchase Order Budget (8/1/2015-7/31/2017)	Current Invoice Cost (through 8/28/2016)	Previous Invoiced Cost	Total Invoiced Cost (through 8/28/2016)	Purchase Order Budget Remaining (through 8/28/2016)	
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	
						Additional Tasks Subtotal	\$ 72,840.00	\$ -	\$ 34,482.02	\$ 34,482.02	\$ 38,357.98
						Purchase Order Total	\$ 1,271,421.94	\$ -	\$ 180,027.59	\$ 180,027.59	\$ 1,091,394.35

Notes:

- Task 20 unit price estimated to increase by \$3,000.00 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 (BMTs) and environmental molecular diagnostics (EMDs).

Table 3

**2015-2016 Change Order 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			Change Order Budget Remaining (through 8/28/2016)
						Current Invoice Cost (through 8/28/2016)	Previous Invoiced Cost	Total Invoiced Cost (through 8/28/2016)	
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	\$ -	\$ 2,280.28	\$ 2,280.28	\$ 1,092.22
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	\$ 325.00	\$ 4,929.10	\$ 5,254.10	\$ 15,555.90
07	Waste disposal	Lump sum	1	\$ 173,149.00	\$ 173,149.00	\$ -	\$ 135,967.94	\$ 135,967.94	\$ 37,181.06
08	Housekeeping and grounds keeping	Lump sum	1	\$ 16,545.30	\$ 16,545.30	\$ 3,856.55	\$ 8,168.78	\$ 12,025.33	\$ 4,519.97
09	Quarterly fluid level monitoring	Event	4	\$ 3,471.65	\$ 13,886.60	\$ 486.25	\$ 2,548.06	\$ 3,034.31	\$ 10,852.29

Table 3

**2015-2016 Change Order 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 8/28/2016)	Previous Invoiced Cost	Total Invoiced Cost (through 8/28/2016)	Change Order Budget Remaining (through 8/28/2016)	
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 ¹	Event	3	\$ 26,278.28	\$ 78,834.84	\$ 11,809.70	\$ 15,789.99	\$ 27,599.69	\$ 51,235.15	
12	Semiannual residential well sampling	Event	2	\$ 4,194.89	\$ 8,389.78	\$ 661.63	\$ 4,722.03	\$ 5,383.66	\$ 3,006.12	
13	Quarterly reporting	Report	4	\$ 8,339.00	\$ 33,356.00	\$ 1,222.20	\$ 22,513.57	\$ 23,735.77	\$ 9,620.23	
14	Monthly reporting	Report	14	\$ 2,792.65	\$ 39,097.10	\$ 4,057.38	\$ 21,725.95	\$ 25,783.33	\$ 13,313.77	
15	Regulatory communications	Pre-approved and determined by DNR	1	\$ 15,000.00	\$ 15,000.00	\$ -	\$ -	\$ -	\$ 15,000.00	
16	Microcosm and bio-trap study	Lump sum	1	\$ 45,793.40	\$ 45,793.40	\$ 19,084.05	\$ 18,175.19	\$ 37,259.24	\$ 8,534.16	
17	Shallow soil and sediment investigation	Pre-approved and determined by DNR	1	\$ 55,119.50	\$ 55,119.50	\$ 325.00	\$ 13,307.04	\$ 13,632.04	\$ 41,487.46	
					2015-2016 Change Order Total ²	\$ 751,912.27	\$ 41,827.76	\$ 493,660.17	\$ 535,487.93	\$ 216,424.34

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 Additional costs detailed in Note 1 above increase the change order budget to \$760,352.38.

Table 4

**2017 Change Order Budget Summary
Penta Wood Products Superfund Site
Siren, Wisconsin**

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

Task	Description	Unit	Estimated Quantity	Unit Cost	Budget	Project Costs				
						Current Invoice Cost (through 8/28/2016)	Previous Invoiced Cost	Total Invoiced Cost (through 8/28/2016)	Change Order Budget Remaining (through 8/28/2016)	
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 Change Order Total	\$ 140,152.84	\$ -	\$ -	\$ -	\$ 140,152.84

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