RAC V TECHNICAL STATUS REPORT

January 1, 2005 to January 28, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	January 28, 2005

COPIES:

RPM:	Tony Rutter, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

System operation during the reporting period can be described as routine. Typical operation and maintenance tasks were performed and the system operated as designed. An estimated 2.63 million gallons were treated and discharged during the reporting period, and to date, a total of 21.1 million gallons of water have been treated. During the reporting period, the free product recovery system removed approximately 725 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 9,305 gallons.

On January 13, a regulator within the propane system failed causing the vaporizer to over-pressurize the system resulting in a pressure relief valve to vent propane. The problem was discovered at approximately 6:00 p.m. by the propane supplier, who immediately notified the operator. The operator went to the site and assisted the propane supplier in shutting down the propane vaporizer, and thus heat to the building. The overnight temperature was expected to be -20°F. The operator notified the Site Manager (SM) and they discussed temporary heating options to get through the night. The operator had also contacted the HVAC subcontractor, who was working 4 hours away, and requested he call the propane supplier and discuss the situation at approximately 8:00 p.m. Despite the extremely cold weather and long travel time, the HVAC subcontractor drove to the site, arriving at approximately 1:30 a.m. on January 14.

After arriving at the site, the HVAC subcontractor was able to temporarily restore propane service and restart the heaters until a replacement part could be obtained. Later in the day on January 14, two replacement regulators were acquired (one

replacement, one spare) and one was installed and the propane system resumed normal operation.

On January 19, North Shore Environmental was onsite to load and transport filter cake to the approved offsite disposal facility.

On January 19, the backwash system solicitation was sent to several interested companies. This solicitation includes the installation of a backwash pump, piping back to the equalization and/or filtrate storage tank, and the installation of an additional pipe support for the RDVF feed.

On January 22, the make-up air unit in the main treatment room failed. On January 24, the HVAC subcontractor arrived to investigate and found the air filters were clogged with snow. The filters were cleaned and the unit resumed normal operation.

On January 19, the analytical laboratory ASC of Lancaster, New York contacted Steve Paukner/CH2M HILL to alert him that ASC is going out of business and will no longer accept samples. CH2M HILL quickly developed a subcontracting plan to obtain the services of a new laboratory (Severn Trent Laboratories, Chicago, Illinois) at the current subcontract prices through June 30, 2006. The SM contacted the RPM to alert him of the situation and discussed the need to revise the Quality Assurance Project Plan (QAPP).

The results of the system and WPDES PCP sampling are summarized in the table below.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turn-around time samples. If no breakthrough was detected in the GAC1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during this reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (TSS; mg/L)	Chloride (mg/L)	Diesel Range Organics (DRO; mg/L)	Total Organic Carbon (TOC; mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (TSS; mg/L)	Chloride (mg/L)	Diesel Range Organics (DRO; mg/L)	Total Organic Carbon (TOC; mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800	7.0	--	--	*NR	*NR	--	--	--	*NR	0.0595JB	*NR	*NR	*NR	--	--	--	*NR	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													

Notes:
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*NR = Sample results are not yet available from the laboratory.
-- = Not sampled.
Qualifiers:
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Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		48
3-DU	09/30/03	09/30/03	06/30/06		50
4-PB	09/30/03	09/30/03	06/30/06		90
5-MS	09/30/03	09/30/03	03/30/04		100
6-RI	09/30/03	09/30/03	03/30/04		100
7-CV	09/30/03	09/30/03	06/30/06		60
8-AI	09/30/03	09/30/03	06/30/06		47
9-PJ	09/30/03	09/30/03	06/30/06		48
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

The propane system regulator was repaired on January 14.

The clogged air filters on make-up air unit (MAU) 1 were cleaned and the unit resumed normal operation on January 24.

The hazardous waste disposal subcontractor has supplied an all-terrain forklift to move the small dumpsters used to collect the filter cake. This piece of equipment has removed the need for expanding the concrete pad on the west side of the building. A small pad will still be needed at the overhead door on the original building.

3. Problem Areas and Recommended Solutions

On November 21, the pump in Well No. 7 stopped operating. CH2M HILL will investigate possible causes for the failure. The pump may need to be pulled from the well and replaced. CH2M HILL is working on a subcontract agreement with a qualified drilling company to perform the repair.

Winter weather made installation of the additional concrete pad infeasible. A new and reduced solicitation for the work will be issued in the spring.

The clogging of the air filters with snow may be reduced or eliminated with the installation of a hood over the intake opening. CH2M HILL recommends adding this work to the backwash system installation subcontract work.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

None.

5. **Activities Planned Next Reporting Period**

CH2M HILL expects to conduct ongoing routine operation and maintenance activities, including normal effluent sampling based on the substantive requirements of the WPDES permit.

CH2M HILL also plans to award the solicitation for the backwash system.

CH2M HILL plans to complete the subcontract documentation with Severn Trent Laboratories of Chicago, Illinois.

CH2M HILL plans to submit a revised QAPP which will include the new laboratory standard operating procedures (SOPs).

6. **Key Personnel Changes**

None.

7. **Subcontractor Services**

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	Calgon Carbon
Haz. Waste Disposal:	North Shore Environmental
Mechanical Engineering:	Stack Brothers
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	U.S. Water Services Utility Chemicals

8. **Travel**

Travel for Jim Spruill/OMI was reported in the October and November Technical Status Reports.

9. **Laboratories**

On January 19, the analytical laboratory ASC of Lancaster, New York notified CH2M HILL of the company's plan to cease conducting business. Severn Trent Laboratories of Chicago, Illinois has verbally agreed to honor ASC's subcontract with CH2M HILL through June 30, 2006.

The 2005-2006 analytical services subcontract will be awarded to Severn Trent Laboratories of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. **Project Performance**

The treatment system is functioning as designed and routine operation and maintenance activities are presently being performed.

On January 13, CH2M HILL's operator and HVAC subcontractor, Steve Cross/STS, provided exceptional service in responding to a propane regulator failure. The outside temperature during the night of January 13 was expected to be -20°F and without heat in the building even for a short time, the potential for severe damage to piping and pumps was high. The CH2M HILL operator and Steve Cross/STS worked through the late night and

early morning to restore heat to the building and make the necessary repairs. As a result of their actions, no damage to piping or pumps occurred.

RAC V TECHNICAL STATUS REPORT

January 29, 2005 to February 25, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	February 25, 2005

COPIES:

RPM:	Tony Rutter, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
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1. Progress Made This Reporting Period

System operation during the reporting period can be described as routine. Typical operation and maintenance tasks were performed and the system operated as designed. An estimated 1.4 million gallons were treated and discharged during the reporting period. To date, a total of 22.5 million gallons of water have been treated. During the reporting period, the free product recovery system removed approximately 715 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 10,020 gallons.

On February 2, North Shore Environmental was onsite to load and transport filter cake to the approved offsite disposal facility.

On February 3, an addendum to the backwash system solicitation was issued to include fabricating and installing galvanized sheet metal hoods for the makeup air unit inlets. These hoods are designed to prevent the inlet screens from blinding with snow or dust.

On February 15, the system was shut down due to high differential pressure across the lead 10,000-pound carbon vessel. A carbon change out was immediately scheduled for February 23-25. The new carbon will be soaked for 24 hours and the system will be restarted on February 28.

On February 17, CH2M HILL received responses from two companies for the backwash system solicitation. This solicitation includes installing a backwash pump, piping back to the equalization and/or filtrate storage tank, and installing an additional pipe support for the RDVF feed. CH2M HILL is evaluating the solicitation responses.

On February 23, CH2M HILL submitted a revised Quality Assurance Project Plan (QAPP) with the new laboratory's (Severn Trent Laboratories, Chicago, Illinois) standard operating procedures.

The results of the system and WPDES PCP sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
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SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

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49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turn-around time samples. If no breakthrough was detected in the GAC1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = Pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during this reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

29-Nov-04		7.0									0.0962U												
07-Dec-04		7.0									0.0943U												
13-Dec-04		7.0									0.0637J												
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U												
03-Jan-05		7.0									0.0952U												
10-Jan-05		7.0									0.114B												
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J												
02-Feb-05		7.0									0.074J												
08-Feb-05		7.0									0.039J												
15-Feb-05		7.0									0.051J												

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.
*NR = Sample results are not yet available from the laboratory.
-- = Not sampled.

mg/L = milligrams per liter

µg/L = micrograms per liter

Qualifiers:
B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		52
3-DU	09/30/03	09/30/03	06/30/06		50
4-PB	09/30/03	09/30/03	06/30/06		90
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		60
8-AI	09/30/03	09/30/03	06/30/06		50
9-PJ	09/30/03	09/30/03	06/30/06		52
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

None.

3. Problem Areas and Recommended Solutions

On November 21, the pump in Well No. 7 stopped operating. CH2M HILL is investigating possible causes for the failure. The pump may need to be pulled from the well and replaced. CH2M HILL is working on a subcontract agreement with a qualified drilling company to perform the repair.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

On February 17, a copy of the backwash system statement of work and design drawings were sent to USEPA.

5. Activities Planned Next Reporting Period

CH2M HILL expects to conduct ongoing routine operation and maintenance activities, including normal effluent sampling based on the substantive requirements of the WPDES permit.

CH2M HILL also plans to award the solicitation for the backwash system.

CH2M HILL plans to have the pump in Well No. 7 replaced.

6. Key Personnel Changes

None.

7. Subcontractor Services

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	Calgon Carbon
Haz. Waste Disposal:	North Shore Environmental
Mechanical Engineering:	Stack Brothers
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	U.S. Water Services Utility Chemicals

8. Travel

None.

9. Laboratories

On January 19, the analytical laboratory ASC of Lancaster, New York notified CH2M HILL of the company's plan to cease conducting business. Severn Trent Laboratories of Chicago, Illinois has verbally agreed to honor ASC's subcontract with CH2M HILL through June 30, 2006.

The 2005-2006 analytical services subcontract will be awarded to Severn Trent Laboratories of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. Project Performance

The treatment system is functioning as designed and routine operation and maintenance activities are presently being performed. The treatment system modifications added in 2003-2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are no longer being fouled with oil and are now able to effectively adsorb dissolved pentachlorophenol (PCP). Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 ug/l.

RAC V TECHNICAL STATUS REPORT

February 26, 2005 to March 25, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	March 25, 2005

COPIES:

RPM:	Tony Rutter, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

System operation during the reporting period can be described as routine. Typical operation and maintenance tasks were performed and the system operated as designed. An estimated 2.6 million gallons were treated and discharged during the reporting period. To date, a total of 25.1 million gallons of water have been treated. During the reporting period, the free product recovery system removed approximately 587 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 10,607 gallons.

The new granular activated carbon was installed on February 23-25 and soaked for 24 hours, and the system restarted on February 28. The system operated normally, but the lead carbon vessel experienced high differential pressure much sooner than expected and the system was shut down on March 25 for the weekend and restarted on March 28. Another carbon changeout was scheduled. CH2M HILL is investigating the cause of the premature pressure increase.

On March 9 and March 20-21, North Shore Environmental was onsite to load and transport 14 tons of filter cake, 12 supersacks of spent carbon, and 3,404 gallons of oil/water mixture to the approved offsite disposal facility.

On March 7, CH2M HILL sent a Notice of Intent to Award the backwash subcontract to Environmental Field Services of Westfield, IN. The work is tentatively scheduled to start in early April.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) PCP sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turn-around time samples. If no breakthrough was detected in the GAC1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = Pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during this reporting period, except for an elevated arsenic concentration in the February 28 sample.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.
*NR = Sample results are not yet available from the laboratory.
-- = Not sampled.

mg/L = milligrams per liter

µg/L = micrograms per liter

Qualifiers:
B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		55
3-DU	09/30/03	09/30/03	06/30/06		90
4-PB	09/30/03	09/30/03	06/30/06		90
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		60
8-AI	09/30/03	09/30/03	06/30/06		50
9-PJ	09/30/03	09/30/03	06/30/06		55
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

None.

3. Problem Areas and Recommended Solutions

On November 21, the pump in Well No. 7 stopped operating. CH2M HILL is investigating possible causes for the failure. The pump may need to be pulled from the well and replaced. CH2M HILL is working on a subcontract agreement with a qualified drilling company to perform the repair.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

On February 23, CH2M HILL submitted a revised Quality Assurance Project Plan (QAPP) with the new laboratory's (Severn Trent Laboratories, Chicago, Illinois) standard operating procedures.

5. Activities Planned Next Reporting Period

CH2M HILL expects to conduct ongoing routine operation and maintenance activities, including normal effluent sampling based on the substantive requirements of the WPDES permit.

CH2M HILL will award the solicitation for the backwash system; it is expected that the work will be started and completed by the end of April.

CH2M HILL plans to have the pump in Well No. 7 replaced as soon as the subcontract is in place.

CH2M HILL plans to prepare and issue a new chemical supply solicitation. The current subcontract expired in March, but was extended through May 2005.

Brust Excavating plans to start erosion repairs on the east side of the CAMU as soon as weather and soil conditions permit the use of heavy equipment.

6. **Key Personnel Changes**

None.

7. **Subcontractor Services**

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	Calgon Carbon
Haz. Waste Disposal:	North Shore Environmental
Mechanical Engineering:	Stack Brothers
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	U.S. Water Services Utility Chemicals

8. **Travel**

None.

9. **Laboratories**

On January 19, the analytical laboratory ASC of Lancaster, New York, notified CH2M HILL of the company's plan to cease conducting business. Severn Trent Laboratories of Chicago, Illinois has verbally agreed to honor ASC's subcontract with CH2M HILL through June 30, 2006.

The 2005-2006 analytical services subcontract has been awarded to Severn Trent Laboratories of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. **Project Performance**

The treatment system modifications added in 2003-2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved pentachlorophenol (PCP). Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 µg/L.

RAC V TECHNICAL STATUS REPORT

March 26, 2005 to April 29, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	April 29, 2005

COPIES:

RPM:	Tony Rutter, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

System operation during the reporting period was intermittent due to a changeout of the lead carbon vessel and the installation of the backwash system. An estimated 1.2 million gallons (MG) were treated and discharged during the reporting period. To date, a total of 26.3 MG of water have been treated. During the reporting period, the free product recovery system removed approximately 184 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 10,791 gallons.

New granular activated carbon was installed in the lead vessel on April 11.

During the night of April 21, a malfunction occurred with the toilet that resulted in the holding tank filling up and overflowing back through the floor drain. The operator had the holding tank emptied and cleaned and disinfected the bathroom and office areas. The malfunction was likely caused by sand preventing the flushing mechanism from completely shutting off. The operator has discussed the installation of a sediment trap on the potable water system with a local plumber.

On April 25, Environmental Field Services of Westfield, Indiana mobilized to the site to begin installation of the backwash system. The majority of the work was completed by the end of the day on April 29.

Solicitations for supplying chemicals and diatomaceous earth were sent out on April 29 and responses are due on May 6. The current chemical supply subcontract expires May 15. The new chemical supply subcontract will be valid through June 30, 2006.

In January 2005, the plant operator transferred from CH2M HILL Inc. to its sister company, Operations Management International Inc. (OMI), which specializes in the operation of water and wastewater treatment systems, including groundwater remediation systems. Due to CH2M HILL Inc.'s internal accounting procedures for processing OMI's invoices, the invoices lag approximately 1 month behind the reporting period. CH2M HILL will continue to work with OMI to generate, process, review, and approve monthly invoices in a timely fashion to minimize invoicing delays to USEPA.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) pentachlorophenol (PCP) sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U
60	04/05/2005	25,914	--	--	0.11U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turn-around time samples. If no breakthrough was detected in the GAC1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = Pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during this reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--
16-Mar-05		7.0									0.11U													
22-Mar-05	3,500	7.0	5.0U	22	0.094U	0.37B	1.0U	1.0U	2.0U	1.4U	0.11U	4.7U	0.93	0.5U	1.0U	1.0U	1.0U	1.0U	7.4B	44	50U	2,400	ND	ND
30-Mar-05		7.0									0.11U													
05-Apr-05		7.0									0.11U													

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.
*NR = Sample results are not yet available from the laboratory.
*ND = Compound not detected in sample.
-- = Not sampled.

mg/L = milligrams per liter
µg/L = micrograms per liter

Qualifiers:B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		58
3-DU	09/30/03	09/30/03	06/30/06		95
4-PB	09/30/03	09/30/03	06/30/06		95
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		60
8-AI	09/30/03	09/30/03	06/30/06		53
9-PJ	09/30/03	09/30/03	06/30/06		58
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

None.

3. Problem Areas and Recommended Solutions

On November 21, the pump in Well No. 7 stopped operating. CH2M HILL is investigating possible causes for the failure. The pump may need to be pulled from the well and replaced. This work is scheduled for the week of May 9.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

On April 22, CH2M HILL submitted the raw laboratory data for validation requested by USEPA on March 29.

On April 15, CH2M HILL submitted responses to USEPA's comments on the QAPP—Revision 2.

On April 29, CH2M HILL submitted an addendum to the QAPP because the subcontracted laboratory, Severn Trent Laboratories (STL)-Chicago, sent hardness samples to their North Canton, Ohio laboratory to remain consistent with the QAPP—Revision 2.

5. Activities Planned Next Reporting Period

CH2M HILL expects to conduct ongoing routine operation and maintenance activities, including normal effluent sampling based on the substantive requirements of the WPDES permit.

The spring 2005 groundwater sampling event is scheduled for the week of May 9.

Final inspection of the backwash system installation is scheduled for May 11.

The QAPP—Revision 2 will be finalized as soon as USEPA approval of CH2M HILL's responses is received.

CH2M HILL plans to have the pump in Well No. 7 replaced on May 11.

Brust Excavating plans to start erosion repairs on the east side of the CAMU as soon as weather and soil conditions permit the use of heavy equipment.

6. Key Personnel Changes

None.

7. Subcontractor Services

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	Calgon Carbon
Haz. Waste Disposal:	North Shore Environmental
Tank Cleaning and Decontamination Services	MidAmerica
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	U.S. Water Services Utility Chemicals
Backwash System	Environmental Field Services, Inc.

8. Travel

None.

9. Laboratories

On January 19, the analytical laboratory, ASC of Lancaster, New York, notified CH2M HILL of the company's plan to cease conducting business. Severn Trent Laboratories of Chicago, Illinois has verbally agreed to honor ASC's subcontract with CH2M HILL through June 30, 2006.

The 2005-2006 analytical services subcontract has been awarded to Severn Trent Laboratories of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. Project Performance

The treatment system modifications added in 2003-2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved pentachlorophenol (PCP). Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 µg/L.

The backwash system installation work was completed within one week of the start of work and is functioning as designed. The addition of this system will reduce the amount of time and effort the operator spends on backwashing.

RAC V TECHNICAL STATUS REPORT

April 30, 2005 to May 27, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	May 27, 2005

COPIES:

RPM:	Tony Rutter, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

As reported last period, the backwash system installation was completed on April 29. The system was restarted on May 2 and system operation during the reporting period was normal. An estimated 2.1 million gallons (MG) were treated and discharged during the reporting period. To date, a total of 28.4 MG of water have been treated. During the reporting period, the free product recovery system removed approximately 178 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 10,969 gallons.

On May 4-5, North Shore Environmental was on site to load and transport 13 tons of filter cake, 9 supersacks (18,000 pounds) of spent carbon, and 1 drum of debris to the approved offsite disposal facilities.

The spring groundwater sampling event was conducted from May 9 to May 11. Water level elevation data was collected from all monitoring wells and a total of five monitoring and five residential wells were sampled.

The final inspection of the backwash system was conducted on May 10.

On May 11, well pump No. 7 was removed and inspected by drillers from Water Development Corporation (WDC). It was determined that the splines on the motor were worn out and the pump needed to be replaced. CH2M HILL discussed the situation with WDC and requested a quote for a new pump. The pump was ordered and WDC returned to the site on May 19 to install the new pump. The pump was tested and resumed operation.

The chemical and diatomaceous earth subcontract will be awarded to Glacier Pure, Inc., a veteran-owned small business located in Algonquin, Illinois. The new chemical supply subcontract will be valid through June 30, 2006.

Brust Excavating initiated erosion control repairs along the east side of the CAMU.

In January 2005, the plant operator transferred from CH2M HILL Inc. to its sister company, Operations Management International Inc. (OMI), which specializes in the operation of water and wastewater treatment systems, including groundwater remediation systems. Due to CH2M HILL Inc.'s internal accounting procedures for processing OMI's invoices, the invoices lag approximately 1 month behind the reporting period. CH2M HILL will continue to work with OMI to generate, process, review, and approve monthly invoices in a timely fashion to minimize invoicing delays to USEPA.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) pentachlorophenol (PCP) sampling are summarized in the following table.

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28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U
60	04/05/2005	25,914	--	--	0.11U
61	04/20/2005		--	--	0.11U
62	05/04/2005		--	--	0.11U
63	05/12/2005		--	--	*
64	05/18/2005		--	--	*

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turn-around time samples. If no breakthrough was detected in the GAC1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = Pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during this reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--
16-Mar-05		7.0									0.11U													
22-Mar-05	3,500	7.0	5.0U	22	0.094U	0.37B	1.0U	1.0U	2.0U	1.4U	0.11U	4.7U	0.93	0.5U	1.0U	1.0U	1.0U	1.0U	7.4B	44	50U	2,400	ND	ND
30-Mar-05		7.0									0.11U													
05-Apr-05		7.0									0.11U													
20-Apr-05	--	7.0	--	--	0.098U	0.69B	--	--	--	--	0.066J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--
04-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-May-05	*NR	7.0	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR
18-May-05	*NR	7.0	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.
*NR = Sample results are not yet available from the laboratory.
*ND = Compound not detected in sample.
-- = Not sampled.

mg/L = milligrams per liter
µg/L = micrograms per liter

Qualifiers:B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		61
3-DU	09/30/03	09/30/03	06/30/06		98
4-PB	09/30/03	09/30/03	06/30/06		98
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		71
8-AI	09/30/03	09/30/03	06/30/06		55
9-PJ	09/30/03	09/30/03	06/30/06		61
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

The pump in Well No. 7 was replaced and resumed operation on May 19.

3. Problem Areas and Recommended Solutions

None.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

None.

5. Activities Planned Next Reporting Period

CH2M HILL expects to conduct ongoing routine operation and maintenance activities, including normal effluent sampling based on the substantive requirements of the WPDES permit.

CH2M HILL plans to submit the finalized QAPP, with the signature page.

Brust Excavating will complete erosion repairs on the east side of the CAMU as long as weather and soil conditions permit the use of heavy equipment.

CH2M HILL plans to submit a draft waste Handling Plan and revised O&M Manual for USEPA and WDNR review.

6. Key Personnel Changes

None.

7. Subcontractor Services

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	Calgon Carbon
Haz. Waste Disposal:	North Shore Environmental
Tank Cleaning and Decontamination Services	MidAmerica
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	Glacier Pure, Inc.
Backwash System	Environmental Field Services, Inc.

8. Travel

Bill Andrae/MKE, Keli McKenna/MKE, Dave Shekoski/MKE, and Carolyn Fehn/MKE traveled to the site on May 9. Dave Shekoski and Carolyn Fehn returned on May 11 and Bill Andrae and Keli McKenna returned on May 12. Travel charges for Carolyn Fehn will be invoiced during the next reporting period.

9. Laboratories

The 2005-2006 analytical services subcontract has been awarded to Severn Trent Laboratories of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. Project Performance

The treatment system modifications added in 2003-2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved PCP. Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 µg/L.

The backwash system installation work was completed within one week of the start of work and is functioning as designed. The addition of this system will reduce the amount of time and effort the operator spends on backwashing.

RAC V TECHNICAL STATUS REPORT

May 28, 2005 to June 24, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	June 24, 2005

COPIES:

RPM:	Tom Williams, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

System operation during the reporting period was intermittent due to power interruptions and system maintenance. An estimated 1.87 million gallons (MG) were treated and discharged during the reporting period. To date, a total of 30.3 MG of water have been treated. During the reporting period, the free product recovery system removed approximately 412 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 11,381 gallons.

During the reporting period, the site was subject to several severe thunderstorms which directly or indirectly resulted in a loss of power to the site or power surges that disrupted the operation of certain pieces of equipment that resulted in system shutdowns. The operator responded to the alarms in a timely manner and restarted the system as soon as practical.

On June 2, the operator was informed that Residential Well No. 1 (Bill Ellis) was being replaced with a new well. The old well was properly abandoned, and the new well will need to be sampled for pentachlorophenol (PCP), naphthalene, and benzene, toluene, ethylbenzene, and xylenes (BTEX).

From June 13-15, the Operations Management International Inc. (OMI) project manager visited the site to discuss the operation of the system with the operator and to conduct an operations audit.

A draft Waste Handling Plan was submitted to the USEPA and WDNR on June 15.

The system was shut down on June 17 through the end of the reporting period for the scheduled maintenance activities described below.

On June 17, the new backwash pump failed. Environmental Field Services (EFS) was contacted and instructed to have the pump inspected and repaired as soon as possible. This repair work is covered under the 1-year warranty period.

Brust Excavating completed erosion control repairs along the east side of the CAMU.

On June 20, North Shore Environmental was on site to load and transport 14 tons of filter cake to the approved offsite disposal facilities.

On June 23-24, Calgon Carbon was onsite to change out the carbon in one of the 10,000-pound vessels.

In January 2005, the plant operator transferred from CH2M HILL Inc. to its sister company, Operations Management International Inc. (OMI), which specializes in the operation of water and wastewater treatment systems, including groundwater remediation systems. Due to CH2M HILL Inc.'s internal accounting procedures for processing OMI's invoices, the invoices lag approximately 1 month behind the reporting period. CH2M HILL will continue to work with OMI to generate, process, review, and approve monthly invoices in a timely fashion to minimize invoicing delays to USEPA.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) PCP sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
60	04/05/2005	25,914	--	--	0.11U
61	04/20/2005	26,311	--	--	0.11U
62	05/04/2005	26,740	--	--	0.11U
63	05/12/2005	27,345	--	--	0.11U
64	05/18/2005	27,942	--	--	0.11U
65	05/27/2005	28,692	0.11U	0.14	0.056J
66	06/01/2005	28,927	--	--	0.11U
67	06/08/2005	29,638	--	--	0.11U
68	06/15/2005	30,396	--	--	0.10U

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turn-around time samples. If no breakthrough was detected in the GAC1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during this reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--
16-Mar-05		7.0									0.11U													
22-Mar-05	3,500	7.0	5.0U	22	0.094U	0.37B	1.0U	1.0U	2.0U	1.4U	0.11U	4.7U	0.93	0.5U	1.0U	1.0U	1.0U	1.0U	7.4B	44	50U	2,400	ND	ND
30-Mar-05		7.0									0.11U													
05-Apr-05		7.0									0.11U													
20-Apr-05	--	7.0	--	--	0.098U	0.69B	--	--	--	--	0.066J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--
04-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
18-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-May-05	0.11U	7.0	--	--	0.093U	0.63B	--	--	--	1.2U	0.056J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
01-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
08-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
15-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.10U	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.
*NR = Sample results are not yet available from the laboratory.
*ND = Compound not detected in sample.
-- = Not sampled.

mg/L = milligrams per liter
µg/L = micrograms per liter

Qualifiers:
B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		64
3-DU	09/30/03	09/30/03	06/30/06		98
4-PB	09/30/03	09/30/03	06/30/06		98
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		71
8-AI	09/30/03	09/30/03	06/30/06		55
9-PJ	09/30/03	09/30/03	06/30/06		64
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

None.

3. Problem Areas and Recommended Solutions

The backwash pump is not operating properly. EFS, the company that supplied and installed the pump, has been contacted to have the pump repaired.

The cover for the oil/water separator is difficult for the operator to open alone. A set of hinges and pneumatic cylinders will be installed to assist the operator in safely opening and closing the cover.

The leak detection sensor for the caustic tank was tripped during a severe thunderstorm. System Technology Services, Inc. (STS), the instrumentation and controls subcontractor, will inspect and replace the sensor, if necessary, as well as inspect the containment space for leaks.

Calgon Carbon's performance during carbon changeouts this past year has been poor. CH2M HILL plans not to exercise the 1-year option period from June 2005 through June 2006 and award the subcontract to another vendor.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

A draft Waste Handling Plan was submitted to USEPA and WDNR on June 15.

5. **Activities Planned Next Reporting Period**

CH2M HILL expects to conduct ongoing routine operation and maintenance activities, including normal effluent sampling based on the substantive requirements of the WPDES permit.

CH2M HILL plans to submit the finalized quality assurance project plan (QAPP), with the signature page.

Brust Excavating plans to clean out the sedimentation basins.

CH2M HILL plans to submit a revised Operations and Maintenance (O&M) Manual for USEPA and WDNR review.

CH2M HILL plans to award the Contaminated Media Removal Subcontract to another vendor.

6. **Key Personnel Changes**

None.

7. **Subcontractor Services**

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	Calgon Carbon
Hazardous Waste Disposal:	North Shore Environmental
Tank Cleaning and Decontamination Services:	MidAmerica
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	Glacier Pure, Inc.
Backwash System:	Environmental Field Services, Inc.

8. **Travel**

Travel for Carolyn Fehn was reported in last month's Technical Status Report.

Dave Kitchel/OMI traveled to the site on June 13 and left on June 15. Travel charges will be invoiced during the next reporting period.

9. **Laboratories**

The 2005-2006 analytical services subcontract has been awarded to Severn Trent Laboratories of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. **Project Performance**

The treatment system modifications added in 2003-2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved PCP. Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 micrograms per liter (µg/L).

RAC V TECHNICAL STATUS REPORT

June 25, 2005 to July 29, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	July 29, 2005

COPIES:

RPM:	Tom Williams, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

System operation during the reporting period was normal. An estimated 2.22 million gallons (MG) were treated and discharged during the reporting period. To date, a total of 32.5 MG of water have been treated. During the reporting period, the free product recovery system removed approximately 726 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 12,107 gallons.

On July 7, the operator (Bill Ellis) sampled the new Residential Well No. 1, including a duplicate sample event. The new well was sampled for pentachlorophenol (PCP), naphthalene, and benzene, toluene, ethylbenzene, and xylenes (BTEX). The results for PCP were 0.043J micrograms per liter (µg/L) and 0.035J µg/L, while all other compounds were not detected.

On July 7, the air compressors and air dryers were serviced by an authorized manufacturer's repair technician.

On July 10, the site was subject to a loss of power to the site or power surges that disrupted the operation of certain pieces of equipment that resulted in system shutdowns. The operator responded to the alarms in a timely manner and restarted the system as soon as practical.

On July 14, North Shore Environmental was on site to load and transport 12 drums of tank sludge/sediment, 9 supersacks of carbon, 4 drums of debris, and 1 supersack of corrugated drain pipe to the approved offsite disposal facilities.

On July 15, Calgon Carbon (Calgon) visited CH2M HILL's office to discuss their performance at the Penta Wood site with regards to carbon changeouts. CH2M HILL expressed concerns with Calgon's performance, especially with respect to health and safety. CH2M HILL indicated that it was considering not extending Calgon's subcontract through June 30, 2006. On July 22, Calgon sent CH2M HILL a written response to the concerns raised by CH2M HILL along with proposed corrective actions. CH2M HILL reviewed the letter and determined the response was inadequate; therefore, Calgon was notified that their subcontract would not be renewed.

On July 21, the caustic tank leak detection sensor was repaired and the belts for the odorous air fans were replaced by Steve Cross/STS.

On July 22, a new solicitation for carbon changeout services was sent out to five firms interested in working at the Penta Wood site.

Verbal approval of the draft Waste Handling Plan submitted on June 15 to the USEPA and WDNR was received by CH2M HILL on July 26.

On July 27-29, Bill Andrae and Mike Lehman were onsite to inspect and reset the product recovery pumps. The amount of product in some of the wells ranged from 1 to 4 feet. They also assisted the operator in some routine maintenance activities that required the efforts of more than one person.

On July 29, Brust Excavating completed cleaning out the sedimentation basins and erosion control repairs along the east side of the CAMU.

CH2M HILL has been preparing the 2004 Groundwater Report. The format of the report has been modified from previous annual groundwater sampling result technical memorandums to a comprehensive sitewide annual report as recommended in the first five year review report prepared by the Wisconsin Department of Natural Resources (WDNR) and agreed upon by the USEPA.

Environmental Field Services (EFS) is continuing the work with the pump manufacturer of the new backwash pump to have the pump repaired as soon as possible. This repair work is covered under the 1-year warranty period.

In January 2005, the plant operator transferred from CH2M HILL Inc. to its sister company, Operations Management International Inc. (OMI), which specializes in the operation of water and wastewater treatment systems, including groundwater remediation systems. Due to CH2M HILL Inc.'s internal accounting procedures for processing OMI's invoices, the invoices lag approximately 1 month behind the reporting period. CH2M HILL will continue to work with OMI to generate, process, review, and approve monthly invoices in a timely fashion to minimize invoicing delays to USEPA.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) PCP sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U
60	04/05/2005	25,914	--	--	0.11U
61	04/20/2005	26,311	--	--	0.11U
62	05/04/2005	26,740	--	--	0.11U
63	05/12/2005	27,345	--	--	0.11U
64	05/18/2005	27,942	--	--	0.11U
65	05/27/2005	28,692	0.11U	0.14	0.056J
66	06/01/2005	28,927	--	--	0.11U
67	06/08/2005	29,638	--	--	0.11U
68	06/15/2005	30,396	--	--	0.10U
69	06/29/2005	30,642	5,900	--	0.040J
70	07/08/2005	31,195	--	--	0.11U
71	07/13/2005	31,673	--	--	0.11U
72	07/20/2005	32,156	*	*	*

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turn-around time samples. If no breakthrough was detected in the GAC1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turn-around time samples.

-- = Samples were not obtained.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)

Notes (continued):

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There was an exceedance for arsenic during this reporting period.

RAC V TECHNICAL STATUS REPORT

July 30, 2005 to August 26, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	August 26, 2005

COPIES:

RPM:	Tom Williams, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

An estimated 298,400 gallons were treated and discharged during the reporting period. To date, a total of 32.8 million gallons (MG) of water have been treated. During the reporting period, the free product recovery system removed approximately 81 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 12,188 gallons.

On August 2, the system shut down due to high differential pressure in the GAC 1 vessel. As stated in last month's report, Calgon Carbon was notified on July 22 that their subcontract would not be renewed for future carbon changeouts. Immediately after, a new solicitation for carbon changeout services was sent out to five firms interested in working at the Penta Wood site. Responses to the solicitation were received on August 10 and the evaluation process was completed on August 17. The technically qualified, lowest cost firm was USFilter/Westates. CH2M HILL entered into contract negotiations with USFilter/Westates and, as of the end of this reporting period, the contract negotiations have not been completed. As a result, a carbon changeout has not been completed during this reporting period.

On August 24 and 25, Environmental Field Services (EFS) was onsite to install additional butterfly valves to assist in the backwash process and to install a set of hinges and pneumatic cylinders to assist the operator in safely opening, keeping open, and closing the cover. The cover for the oil/water separator was difficult for the operator to open alone, and presented a health and safety concern. EFS also installed a new gearbox on the polymer metering pump which will allow lower polymer dosages to be used.

On August 19, CH2M HILL submitted the draft 2004 Groundwater Report. The format of the report has been modified from previous annual groundwater sampling result technical memorandums to a comprehensive sitewide annual report, as recommended in the first 5-year review report prepared by the Wisconsin Department of Natural Resources (WDNR) and agreed upon by USEPA.

Also on August 19, CH2M HILL submitted the final version of the Quality Assurance Project Plan (QAPP) Revision II, which included the completed signature page.

EFS is continuing the work with the pump manufacturer of the new backwash pump to have the pump repaired as soon as possible. EFS notified CH2M HILL that the motor is scheduled to be replaced during the next reporting period. This repair work is covered under the 1-year warranty period.

On August 22, Dave Shekoski and Craig LaCosse traveled to the site to install the new sampling pumps and the vendor-supplied product recovery pump. The pumps were scheduled to arrive Monday afternoon; however, CH2M HILL was notified late in the afternoon that the new sampling pumps had not been shipped and that shipping was delayed until August 25. The site visit was cancelled and Dave Shekoski and Craig LaCosse returned to Milwaukee on August 23.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) pentachlorophenol (PCP) sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U
60	04/05/2005	25,914	--	--	0.11U
61	04/20/2005	26,311	--	--	0.11U
62	05/04/2005	26,740	--	--	0.11U
63	05/12/2005	27,345	--	--	0.11U
64	05/18/2005	27,942	--	--	0.11U
65	05/27/2005	28,692	0.11U	0.14	0.056J
66	06/01/2005	28,927	--	--	0.11U
67	06/08/2005	29,638	--	--	0.11U
68	06/15/2005	30,396	--	--	0.10U
69	06/29/2005	30,642	5,900	--	0.040J
70	07/08/2005	31,195	--	--	0.11U
71	07/13/2005	31,673	--	--	0.11U
72	07/20/2005	32,156	9,200	0.17	0.044J
73	07/28/2005	32,775	--	--	0.11U
74	08/04/2005	33,108	--	--	0.11U

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turnaround time samples. If no breakthrough was detected in the GAC 1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit, and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during this reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--
16-Mar-05		7.0									0.11U													
22-Mar-05	3,500	7.0	5.0U	22	0.094U	0.37B	1.0U	1.0U	2.0U	1.4U	0.11U	4.7U	0.93	0.5U	1.0U	1.0U	1.0U	1.0U	7.4B	44	50U	2,400	ND	ND
30-Mar-05		7.0									0.11U													
05-Apr-05		7.0									0.11U													
20-Apr-05	--	7.0	--	--	0.098U	0.69B	--	--	--	--	0.066J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--
04-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
18-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-May-05	0.11U	7.0	--	--	0.093U	0.63B	--	--	--	1.2U	0.056J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
01-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
08-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
15-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.10U	--	--	--	--	--	--	--	--	--	--	--	--	--
29-Jun-05	5,900	7.0	6.0	29	0.091U	0.66B	1.0U	1.0U	1.0U	2.3U	0.040J	4.8U	0.95U	0.50U	5.0U	5.0U	5.0U	9.1	10U	96	5,500	2,500	--	--
08-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
13-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
20-Jul-05	9,200	7.0	--	--	0.093U	0.64B	--	--	--	--	0.044J	4.7U	0.93U	--	--	--	--	--	--	--	--	--	--	--
28-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
04-Aug-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.
*NR = Sample results are not yet available from the laboratory.
*ND = Compound not detected in sample.
-- = Not sampled.

mg/L = milligrams per liter
µg/L = micrograms per liter

Qualifiers:
B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		70
3-DU	09/30/03	09/30/03	06/30/06		99
4-PB	09/30/03	09/30/03	06/30/06		98
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		71
8-AI	09/30/03	09/30/03	06/30/06		74
9-PJ	09/30/03	09/30/03	06/30/06		70
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

The carbon changeout performance issue has been addressed with the selection of a new vendor. CH2M HILL expects to have the subcontract in place next month.

3. Problem Areas and Recommended Solutions

The backwash pump is not operating properly. EFS, the company that supplied and installed the pump, has been in contact with the pump manufacturer to resolve the problem.

The product recovery pump in Well Nest No. 3 is not functioning properly. A product recovery pump manufacturer contacted CH2M HILL about supplying a new and different product recovery pump for a trial period at no cost to USEPA. The recovery pump is designed to pump only product, and not water and product as the current recovery pumps do. CH2M HILL plans to install the pump during the next reporting period.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. **Deliverables Submitted**

On August 19, CH2M HILL submitted the draft 2004 Groundwater Report. The format of the report has been modified from previous annual groundwater sampling result technical memorandums to a comprehensive sitewide annual report, as recommended in the first 5-year review report prepared by WDNR and agreed upon by USEPA.

On August 19, CH2M HILL submitted the final version of the QAPP Revision II, which included the completed signature page.

5. **Activities Planned Next Reporting Period**

CH2M HILL expects to conduct ongoing routine operations and maintenance (O&M) activities, including normal effluent sampling based on the substantive requirements of the WPDES permit. CH2M HILL plans to perform the following activities during the next reporting period:

- Install a new recovery pump in Well Nest No. 3
- Install new sampling pumps in 13 monitoring wells to reduce labor costs during the groundwater sampling events
- Submit a revised O&M Manual for USEPA and WDNR review
- The annual groundwater sampling event is scheduled for the week of September 26

6. **Key Personnel Changes**

None.

7. **Subcontractor Services**

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	To Be Determined
Hazardous Waste Disposal:	North Shore Environmental
Tank Cleaning and Decontamination Services:	MidAmerica
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	Glacier Pure, Inc.
Backwash System:	Environmental Field Services, Inc.

8. **Travel**

Travel for Bill Andrae and Mike Lehman was reported in last month's Technical Status Report.

Dave Shekoski and Craig LaCosse were on site August 22–23. Travel charges will be invoiced during the next reporting period.

9. Laboratories

The 2005–2006 analytical services subcontract has been awarded to Severn Trent Laboratories of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. Project Performance

The treatment system modifications added in 2003–2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved PCP. Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 µg/L.

RAC V TECHNICAL STATUS REPORT

August 27, 2005 to September 30, 2005

WORK ASSIGNMENT NUMBER: 201-RALR-05WE

SITE NAME: Penta Wood Products-OU1, WI

ACTIVITY: Long-Term Response Action

CH2M HILL JOB NUMBER: 184202

PREPARED BY: Bill Andrae, Site Manager
Keli McKenna, Assistant Site Manager

PERIOD ENDING: September 30, 2005

COPIES:

RPM:	Tom Williams, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

An estimated 1.05 million gallons (MG) were treated and discharged during the reporting period. To date, a total of 33.85 MG of water have been treated. During the reporting period, the free product recovery system removed approximately 203 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 12,391 gallons.

A carbon changeout was performed on two vessels by the new subcontractor USFilter/Westates on September 15. The new carbon beds were filled with clean water and allowed to soak over the weekend to remove entrained air within the granular activated carbon. The system was restarted on September 19 and the system operated with minimal interruption through the end of the reporting period.

On September 12, CH2M HILL submitted replacement title pages for the Waste Handling Plan and the 2004 Annual Report. The title pages were submitted in lieu of issuing final documents since there were no comments on the draft documents.

On September 21, the backup generator received its annual service.

Environmental Field Services, Inc. (EFS) continues to work with the pump manufacturer of the new backwash pump to have it repaired as soon as possible. The motor was replaced and new thermal overload breakers have been ordered, but not yet installed. The pump is able to function to allow adequate backwashing. This repair work is covered under the 1-year warranty period.

The new sampling pumps were installed by the treatment system operator in advance of the annual groundwater sampling event.

On September 26, Bill Andrae, Dave Shekoski, Heather Hodach, Carolyn Fehn, and Tory Schultz arrived at the site to conduct the 2005 annual groundwater sampling event. This sampling event marks the first time the new electric submersible pumps were used to conduct low flow sampling. The pumps were easy to use and performed very well, except for one pump. One pump malfunctioned and will be sent back to the manufacturer for repair or replacement. The sampling team also installed the new product recovery pump on September 30 in Well Nest No. 3; however, the team could not get the pump to operate correctly before leaving the site. CH2M HILL will work with the manufacturer to get the pump operating during the next reporting period.

CH2M HILL was notified by the RPM that an optimization study will be conducted on the Penta Wood treatment system and includes a site visit. The site visit is scheduled for October 12.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) pentachlorophenol (PCP) sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U
60	04/05/2005	25,914	--	--	0.11U
61	04/20/2005	26,311	--	--	0.11U
62	05/04/2005	26,740	--	--	0.11U
63	05/12/2005	27,345	--	--	0.11U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
64	05/18/2005	27,942	--	--	0.11U
65	05/27/2005	28,692	0.11U	0.14	0.056J
66	06/01/2005	28,927	--	--	0.11U
67	06/08/2005	29,638	--	--	0.11U
68	06/15/2005	30,396	--	--	0.10U
69	06/29/2005	30,642	5,900	--	0.040J
70	07/08/2005	31,195	--	--	0.11U
71	07/13/2005	31,673	--	--	0.11U
72	07/20/2005	32,156	9,200	0.17	0.044J
73	07/28/2005	32,775	--	--	0.11U
74	08/04/2005	33,108	--	--	0.11U
75	09/22/2005	33,463	*	*	*
76	09/29/2005	34,020	*	*	*

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turnaround time samples. If no breakthrough was detected in the GAC 1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit, and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. The results for the sample collected on September 22 and 29 will be reported next reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--
16-Mar-05		7.0									0.11U													
22-Mar-05	3,500	7.0	5.0U	22	0.094U	0.37B	1.0U	1.0U	2.0U	1.4U	0.11U	4.7U	0.93	0.5U	1.0U	1.0U	1.0U	1.0U	7.4B	44	50U	2,400	ND	ND
30-Mar-05		7.0									0.11U													
05-Apr-05		7.0									0.11U													
20-Apr-05	--	7.0	--	--	0.098U	0.69B	--	--	--	--	0.066J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--
04-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
18-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-May-05	0.11U	7.0	--	--	0.093U	0.63B	--	--	--	1.2U	0.056J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
01-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
08-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
15-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.10U	--	--	--	--	--	--	--	--	--	--	--	--	--
29-Jun-05	5,900	7.0	6.0	29	0.091U	0.66B	1.0U	1.0U	1.0U	2.3U	0.040J	4.8U	0.95U	0.50U	5.0U	5.0U	5.0U	9.1	10U	96	5,500	2,500	--	--
08-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
13-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
20-Jul-05	9,200	7.0	--	--	0.093U	0.64B	--	--	--	--	0.044J	4.7U	0.93U	--	--	--	--	--	--	--	--	--	--	--
28-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
04-Aug-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
22-Sept-05	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR
29-Sept-05	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.
*NR = Sample results are not yet available from the laboratory.
*ND = Compound not detected in sample.
-- = Not sampled.

mg/L = milligrams per liter
µg/L = micrograms per liter

Qualifiers:
B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		73
3-DU	09/30/03	09/30/03	06/30/06		99
4-PB	09/30/03	09/30/03	06/30/06		98
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		86
8-AI	09/30/03	09/30/03	06/30/06		75
9-PJ	09/30/03	09/30/03	06/30/06		73
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

None.

3. Problem Areas and Recommended Solutions

The backwash pump is not operating properly. EFS, the company that supplied and installed the pump, has been in contact with the pump manufacturer to resolve the problem. New thermal overload switches have been ordered, but not received yet.

The new product recovery pump in Well Nest No. 3 is not yet operational. CH2M HILL will work with the manufacturer to get the pump operating during the next reporting period.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

On September 12, CH2M HILL submitted replacement title pages for the Waste Handling Plan and the 2004 Annual Report. The title pages were submitted in lieu of issuing final documents since there were no comments on the draft documents.

5. Activities Planned Next Reporting Period

CH2M HILL expects to conduct ongoing routine operations and maintenance (O&M) activities, including normal effluent sampling based on the substantive requirements of the WPDES permit. CH2M HILL plans to perform the following activities during the next reporting period:

- Resolve new recovery pump operation issue in Well Nest No. 3
- Submit a revised O&M Manual for USEPA and WDNR review

- Participate in the optimization study site visit scheduled for October 12

6. **Key Personnel Changes**

None.

7. **Subcontractor Services**

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	To Be Determined
Hazardous Waste Disposal:	North Shore Environmental
Tank Cleaning and Decontamination Services:	MidAmerica
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	Glacier Pure, Inc.
Backwash System:	Environmental Field Services, Inc.

8. **Travel**

Travel for Craig La Cosse and Dave Shekoski was reported in last month's Technical Status Report.

On September 26, Bill Andrae, Dave Shekoski, Heather Hodach, Carolyn Fehn, and Tory Schultz arrived at the site to conduct the 2005 annual groundwater sampling event. Bill Andrae returned to Milwaukee on September 28 and the remaining field team members returned on September 30. Travel charges will be invoiced during the next reporting period.

9. **Laboratories**

The 2005–2006 analytical services subcontract has been awarded to Severn Trent Laboratories of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. **Project Performance**

The treatment system modifications added in 2003–2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved PCP. Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 µg/L.

RAC V TECHNICAL STATUS REPORT

October 1, 2005 to October 28, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	October 28, 2005

COPIES:

RPM:	Tom Williams, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

An estimated 1.66 million gallons (MG) were treated and discharged during the reporting period. To date, a total of 35.51 MG of water have been treated. During the reporting period, the free product recovery system removed approximately 411 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 12,802 gallons.

On October 4, North Shore Environmental was onsite to load and transport 12 tons of filter cake, 12 super sacks of carbon, 1 super sack of debris, and 3 drums of debris to the approved offsite disposal facilities.

On October 7, the groundwater pump in extraction well EW-04 failed and will need to be replaced. The failure is similar to that observed when the pump in EW-07 failed and the pump needed replacement.

On October 11, CH2M HILL participated in a remediation system evaluation conducted at the site by USEPA and GeoTrans, Inc., a USEPA contractor that specializes in conducting these evaluations. CH2M HILL provided background information on the site as well as system operation information as needed. The new product recovery pump in Well Nest No. 3 was repaired and started operation during this site visit.

Environmental Field Services, Inc. (EFS) had the new thermal overload breakers for the new backwash pump installed on October 25. The pump is scheduled to be aligned on October 31. This repair work is covered under the 1-year warranty period.

On October 26, the ferric pump began malfunctioning. On October 28, the I&C/HVAC subcontractor, System Technology Services, Inc. (STS), was onsite to perform routine preventative maintenance on the HVAC system and determined that the problem with the ferric pump is a relay switch. A new switch will be ordered and installed.

CH2M HILL returned a malfunctioning electric submersible pump used for groundwater sampling to the manufacturer, who promptly repaired the unit and returned it to the site. The pump was reinstalled in well MW-09 which was sampled on October 18 using the pump.

CH2M HILL was notified by Severn Trent Laboratories (STL), the analytical laboratory, that the pentachlorophenol (PCP) sample bottle for MW-20 was broken while in their custody. CH2M HILL notified STL that the well would be resampled and the labor and shipping costs would be paid by STL. Severn Trent Laboratories agreed and MW-20 was resampled on October 25.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) PCP sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U
60	04/05/2005	25,914	--	--	0.11U
61	04/20/2005	26,311	--	--	0.11U
62	05/04/2005	26,740	--	--	0.11U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
63	05/12/2005	27,345	--	--	0.11U
64	05/18/2005	27,942	--	--	0.11U
65	05/27/2005	28,692	0.11U	0.14	0.056J
66	06/01/2005	28,927	--	--	0.11U
67	06/08/2005	29,638	--	--	0.11U
68	06/15/2005	30,396	--	--	0.10U
69	06/29/2005	30,642	5,900	--	0.040J
70	07/08/2005	31,195	--	--	0.11U
71	07/13/2005	31,673	--	--	0.11U
72	07/20/2005	32,156	9,200	0.17	0.044J
73	07/28/2005	32,775	--	--	0.11U
74	08/04/2005	33,108	--	--	0.11U
75	09/22/2005	33,463	--	--	0.11U
76	09/29/2005	34,020	7,300	--	0.12U
77	10/06/2005	34,493	--	--	0.13U
78	10/12/2005	34,918	--	--	0.13U
79	10/19/2005	35,362	--	--	0.11U
80	10/26/2005	35,702	*	*	*
81	11/1/2005	36,053	*	*	*

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turnaround time samples. If no breakthrough was detected in the GAC 1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit, and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during the reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--
16-Mar-05		7.0									0.11U													
22-Mar-05	3,500	7.0	5.0U	22	0.094U	0.37B	1.0U	1.0U	2.0U	1.4U	0.11U	4.7U	0.93	0.5U	1.0U	1.0U	1.0U	1.0U	7.4B	44	50U	2,400	ND	ND
30-Mar-05		7.0									0.11U													
05-Apr-05		7.0									0.11U													
20-Apr-05	--	7.0	--	--	0.098U	0.69B	--	--	--	--	0.066J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--
04-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
18-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-May-05	0.11U	7.0	--	--	0.093U	0.63B	--	--	--	1.2U	0.056J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
01-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
08-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
15-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.10U	--	--	--	--	--	--	--	--	--	--	--	--	--
29-Jun-05	5,900	7.0	6.0	29	0.091U	0.66B	1.0U	1.0U	1.0U	2.3U	0.040J	4.8U	0.95U	0.50U	5.0U	5.0U	5.0U	9.1	10U	96	5,500	2,500	--	--
08-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
13-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
20-Jul-05	9,200	7.0	--	--	0.093U	0.64B	--	--	--	--	0.044J	4.7U	0.93U	--	--	--	--	--	--	--	--	--	--	--
28-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
04-Aug-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
22-Sept-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
29-Sept-05	7,300	7.0	2.0B	24	0.095U	0.50B	1.0U	1.0U	1.0U	0.68U	0.12U	4.6U	0.93U	0.5U	5.0U	5.0U	5.0U	1.0U	10U	35	50U	2,100	--	--
06-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.13U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.13U	--	--	--	--	--	--	--	--	--	--	--	--	--
19-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
26-Oct-05	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR
01-Nov-05	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.
*NR = Sample results are not yet available from the laboratory.
*ND = Compound not detected in sample.
-- = Not sampled.

mg/L = milligrams per liter
µg/L = micrograms per liter

Qualifiers:
B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		76
3-DU	09/30/03	09/30/03	06/30/06		99
4-PB	09/30/03	09/30/03	06/30/06		98
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		86
8-AI	09/30/03	09/30/03	06/30/06		76
9-PJ	09/30/03	09/30/03	06/30/06		76
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

The new product recovery pump in Well Nest No. 3 was repaired and started operation.

3. Problem Areas and Recommended Solutions

The backwash pump is not operating properly. Environmental Field Services, Inc., the company that supplied and installed the pump, has been in contact with the pump manufacturer to resolve the problem. New thermal overload switches were ordered and installed; however, the pump shaft still needs to be aligned.

The groundwater pump in Extraction Well No. 4 is not working and will need to be replaced. The splines on the motor are probably stripped as was observed with the pump in Extraction Well No. 7.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

None.

5. Activities Planned Next Reporting Period

CH2M HILL expects to conduct ongoing routine operations and maintenance (O&M) activities, including normal effluent sampling based on the substantive requirements of the WPDES permit. CH2M HILL plans to perform the following activities during the next reporting period:

- Resolve pump operation issue in Extraction Well No. 4
- Submit a revised O&M Manual for USEPA and WDNR review

6. **Key Personnel Changes**

None.

7. **Subcontractor Services**

Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	To Be Determined
Hazardous Waste Disposal:	North Shore Environmental
Tank Cleaning and Decontamination Services:	MidAmerica
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	Glacier Pure, Inc.
Backwash System:	Environmental Field Services, Inc.

8. **Travel**

Travel in September for Bill Andrae, Carolyn Fehn, Heather Hodach, Tory Schultz, and Dave Shekoski was reported in last month's Technical Status Report.

On October 11 to 13, Bill Andrae/MKE traveled to the site to attend the remediation system evaluation and assist the operator in some maintenance tasks.

9. **Laboratories**

The 2005–2006 analytical services subcontract has been awarded to STL of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. **Project Performance**

The treatment system modifications added in 2003–2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved PCP. Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 microgram(s) per liter.

CH2M HILL supported USEPA by providing historical site information and system operation information during the remediation system evaluation. No significant operational issues were identified during the remediation system evaluation.

RAC V TECHNICAL STATUS REPORT

October 29, 2005 to November 25, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	November 25, 2005

COPIES:

RPM:	Tom Williams, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

An estimated 1.86 million gallons (MG) were treated and discharged during the reporting period. To date, a total of 37.37 MG of water have been treated. During the reporting period, the free product recovery system removed approximately 246 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 13,048 gallons.

On November 1, CH2M HILL received the Certificate of Proper Installation for the backwash pump from Environmental Field Services, Inc. (EFS). The pump is functioning as designed and no further action is required with this issue.

On November 9, the revised Operations and Maintenance (O&M) Manual was submitted to USEPA. Due to its size, the document and manufacturer's literature was submitted in electronic format on a compact disc.

On November 16, the operator noticed a problem with one of the dissolved air flotation (DAF) recirculation pumps. The pump was shut down and the backup pump was started so operation of the system could continue. The pump will be inspected and repaired as soon as possible.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) PCP sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U
60	04/05/2005	25,914	--	--	0.11U
61	04/20/2005	26,311	--	--	0.11U
62	05/04/2005	26,740	--	--	0.11U
63	05/12/2005	27,345	--	--	0.11U
64	05/18/2005	27,942	--	--	0.11U
65	05/27/2005	28,692	0.11U	0.14	0.056J
66	06/01/2005	28,927	--	--	0.11U
67	06/08/2005	29,638	--	--	0.11U
68	06/15/2005	30,396	--	--	0.10U
69	06/29/2005	30,642	5,900	--	0.040J
70	07/08/2005	31,195	--	--	0.11U
71	07/13/2005	31,673	--	--	0.11U
72	07/20/2005	32,156	9,200	0.17	0.044J
73	07/28/2005	32,775	--	--	0.11U
74	08/04/2005	33,108	--	--	0.11U
75	09/22/2005	33,463	--	--	0.11U
76	09/29/2005	34,020	7,300	--	0.12U
77	10/06/2005	34,493	--	--	0.13U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
78	10/12/2005	34,918	--	--	0.13U
79	10/19/2005	35,362	--	--	0.11U
80	10/27/2005	35,796	--	--	0.099J
81	11/01/2005	36,053	--	--	0.11U
82	11/10/2005	36,644	--	--	0.11U
83	11/15/2005	36,997	--	--	0.11U
84	11/22/2005	37,600	*	*	*

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turnaround time samples. If no breakthrough was detected in the GAC 1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit, and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during the reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
5-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--
16-Mar-05		7.0									0.11U													
22-Mar-05	3,500	7.0	5.0U	22	0.094U	0.37B	1.0U	1.0U	2.0U	1.4U	0.11U	4.7U	0.93	0.5U	1.0U	1.0U	1.0U	1.0U	7.4B	44	50U	2,400	ND	ND
30-Mar-05		7.0									0.11U													
05-Apr-05		7.0									0.11U													
20-Apr-05	--	7.0	--	--	0.098U	0.69B	--	--	--	--	0.066J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--
04-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
18-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-May-05	0.11U	7.0	--	--	0.093U	0.63B	--	--	--	1.2U	0.056J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
01-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
08-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
15-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.10U	--	--	--	--	--	--	--	--	--	--	--	--	--
29-Jun-05	5,900	7.0	6.0	29	0.091U	0.66B	1.0U	1.0U	1.0U	2.3U	0.040J	4.8U	0.95U	0.50U	5.0U	5.0U	5.0U	9.1	10U	96	5,500	2,500	--	--
08-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
13-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
20-Jul-05	9,200	7.0	--	--	0.093U	0.64B	--	--	--	--	0.044J	4.7U	0.93U	--	--	--	--	--	--	--	--	--	--	--
28-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
04-Aug-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
22-Sept-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
29-Sept-05	7,300	7.0	2.0B	24	0.095U	0.50B	1.0U	1.0U	1.0U	0.68U	0.12U	4.6U	0.93U	0.5U	5.0U	5.0U	5.0U	1.0U	10U	35	50U	2,100	--	--
06-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.13U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.13U	--	--	--	--	--	--	--	--	--	--	--	--	--
19-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-Oct-05	--	7.0	--	--	0.093U	0.61B	--	--	--	--	0.099J	4.7U	--	--	--	--	--	--	--	--	--	--	--	--
01-Nov-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
10-Nov-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
15-Nov-05	--	7.0	--	--	0.024J	0.59B	--	--	--	--	0.11U	4.7U	--	--	--	--	--	--	--	--	--	--	--	--
22-Nov-05	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.
*NR = Sample results are not yet available from the laboratory.
*ND = Compound not detected in sample.
– = Not sampled.

mg/L = milligrams per liter
µg/L = micrograms per liter

Qualifiers:
B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		79
3-DU	09/30/03	09/30/03	06/30/06		99
4-PB	09/30/03	09/30/03	06/30/06		98
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		86
8-AI	09/30/03	09/30/03	06/30/06		78
9-PJ	09/30/03	09/30/03	06/30/06		79
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

The backwash pump shaft was aligned and the Certificate of Proper Installation was received by CH2M HILL.

3. Problem Areas and Recommended Solutions

One of the DAF recirculation pumps is not operating as designed. The pump will be inspected and repaired.

The groundwater pump in Extraction Well No. 4 is not working and will need to be replaced. The splines on the motor are probably stripped as was observed with the pump in Extraction Well No. 7.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

On November 9, the revised O&M Manual was submitted to USEPA. Due to its size, the document and manufacturer's literature was submitted in electronic format on a compact disc.

5. Activities Planned Next Reporting Period

CH2M HILL expects to conduct ongoing routine O&M activities, including normal effluent sampling based on the substantive requirements of the WPDES permit. CH2M HILL plans to perform the following activities during the next reporting period:

- Resolve pump operation issue in Extraction Well No. 4
- Resolve pump operation issue with the DAF recirculation pump

6. **Key Personnel Changes**

None.

7. **Subcontractor Services**

Electrical Service:	Northwestern WI Electric Co.
Telephone:	Siren Telephone Company
Septic Service:	A-1 Septic Service
Nonhazardous Waste Disposal:	Allied Waste Services
Polymer:	US Water Services
Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	USFilter/Westates
Hazardous Waste Disposal:	North Shore Environmental
Tank Cleaning and Decontamination Services:	MidAmerica
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	Glacier Pure, Inc.
Backwash System:	Environmental Field Services, Inc.
Well Pump Inspection and Replacement:	WDC Exploration and Wells

8. **Travel**

None.

9. **Laboratories**

The 2005–2006 analytical services subcontract has been awarded to STL of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. **Project Performance**

The treatment system modifications added in 2003–2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved PCP. Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 microgram(s) per liter.

RAC V TECHNICAL STATUS REPORT

November 26, 2005 to December 30, 2005

WORK ASSIGNMENT NUMBER:	201-RALR-05WE
SITE NAME:	Penta Wood Products-OU1, WI
ACTIVITY:	Long-Term Response Action
CH2M HILL JOB NUMBER:	184202
PREPARED BY:	Bill Andrae, Site Manager Keli McKenna, Assistant Site Manager
PERIOD ENDING:	December 30, 2005

COPIES:

RPM:	Tom Williams, USEPA, Region 5
PM:	Isaac H. Johnson, CH2M HILL, Milwaukee, WI
RTL:	Phil Smith, CH2M HILL, Milwaukee, WI
WDNR:	Bill Schultz, WDNR, Rhinelander, WI
WDNR:	Dave Hantz, WDNR, Madison, WI
WDNR:	Pete Prusak, WDNR, Cumberland, WI

1. Progress Made This Reporting Period

Cost accounting standard (CAS) adjustments have been processed during this reporting period.

An estimated 2.2 million gallons (MG) were treated and discharged during the reporting period. To date, a total of 39.57 MG of water have been treated. During the reporting period, the free product recovery system removed approximately 528 gallons of oil/water mixture, bringing the total recovered volume since March 2004 to approximately 13,574 gallons.

On November 29, North Shore Environmental was on site to load and transport 13.5 tons of filter cake to the approved offsite disposal facility.

On December 6, the malfunctioning dissolved air flotation (DAF) recirculation pump was inspected and repaired by a pump technician. The pump is operating as expected.

On December 13, CH2M HILL received an electronic copy of the draft remediation system evaluation report from USEPA. CH2M HILL reviewed the report and provided responses to the recommendations to USEPA on December 27.

In early December, the operator noticed that the temperature in the free product storage tank was below the target temperature. An electrician inspected the tank heaters on December 13 and determined that a fuse had blown. The fuse was replaced and the heat pads resumed operation; however, one of the heating pads still appears to be malfunctioning. The heating pad will be reinspected and repaired as soon as possible.

On December 15, WDC Drilling and Exploration was on site to replace the pump in Extraction Well No. 4. The new pump was started and operated as expected.

However, on December 27, the new pump stopped pumping which was most likely due to an electrical problem. The electrical system for the pump will be inspected and repaired as soon as possible.

On December 19-21, US Filter/Westates was onsite to perform a carbon change out. The carbon was soaked over the weekend and the system was restarted on December 26.

On December 26, CH2M HILL submitted responses to the RSE recommendations.

On December 26, CH2M HILL received numerous validated data packages for the October annual sampling event from USEPA. CH2M HILL will review the packages to determine if all the data has been received.

The results of the system and Wisconsin Pollutant Discharge Eliminations System (WPDES) PCP sampling are summarized in the following table.

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
1	02/27/2004	30	2,600	0.18	0.025J
2	02/28/2004	97	2,800	0.076J	0.026J
3	03/01/2004	202	3,000	4.5	0.10U
4	03/02/2004	254	2,600	0.11	0.12U
5	03/09/2004	288	2,700	0.084J	0.11U
6	03/10/2004	332	3,000	0.21	0.11U
7	03/11/2004	357	3,700	0.48	0.11U
8	03/12/2004	392	3,100	0.41	0.11U
9	03/15/2004	467	3,500	0.18	0.1U
10	04/13/2004	631	X	X	X
11	04/27/2004	1,049	14,300B	0.832B	0.0271JB
12	04/28/2004	1,121	XX	0.125B	0.0183JB
13	05/06/2004	1,280	15,500B	0.0877JB	0.125B
14	05/13/2004	1,687	12,400B	0.161B	0.0260B
15	05/24/2004	2,327	12,300B	0.142B	0.0282B
16	06/10/2004	3,274	12,000B	0.293B	0.0943U
17	06/16/2004	3,920	22,600	69.9	0.137
18	06/17/2004	3,984	14,500	458	0.050U
19	06/23/2004	4,468	*NA	*NA	*NA
20	06/24/2004	4,587	14,400	2,000E	0.127
21	06/28/2004	4,700	*NA	*NA	*NA
22	06/30/2004	4,965	*NA	*NA	*NA
23	07/01/2004	5,200	11,900B	209B	0.081JB
24	07/14/2004	5,806	15,300	51.3	0.126
25	07/20/2004	5,856	--	--	0.0952U
26	07/29/2004	6,865	10,400	3,180	0.0971U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
27	08/04/2004	7,482	10,400	3,130	0.103
28	08/16/2004	8,172	8,100	4,710	0.348
29	08/27/2004	8,400	10,100	--	0.151
30	09/16/2004	9,388	7,530B	0.199B	0.0724JB
31	09/23/2004	10,124	--	27.8B	0.393B
32	09/28/2004	10,200	10,900B	--	0.102B
33	10/05/2004	10,986	--	366	0.0990
34	10/14/2004	11,782	--	843	0.265B
35	10/19/2004	12,272	8,310B	--	0.0702JB
36	10/26/2004	13,040	--	--	0.0861J
37	11/04/2004	13,450	--	--	0.0447J
38	11/10/2004	14,120	--	--	0.0442J
39	11/17/2004	14,890	--	--	0.0971U
40	11/22/2004	15,260	9,140	--	0.0900J
41	11/29/2004	15,930	--	--	0.0962U
42	12/07/2004	16,729	--	--	0.0943U
43	12/13/2004	17,280	--	--	0.0637J
44	12/14/2004	17,382	--	1,030	--
45	12/20/2004	17,987	9,100	--	0.0962U
46	12/30/2004	18,392	--	--	0.0952U
47	01/03/2005	18,792	--	--	0.0952U
48	01/10/2005	19,483	--	--	0.114B
49	01/18/2005	20,273	10,800	--	0.0595JB
50	01/25/2005	20,948	--	--	0.049J
51	02/02/2005	21,676	--	510	0.074J
52	02/08/2005	22,242	--	--	0.039J
53	02/15/2005	22,635	--	--	0.051J
54	02/28/2005	22,705	--	0.27	0.035J
55	03/08/2005	23,532	--	--	0.033J
56	03/16/2005	24,362	--	--	0.11U
57	03/22/2005	24,946	--	--	0.11U
58	03/24/2005	25,453	--	0.27	--
59	03/30/2005	25,477	3,500	--	0.11U
60	04/05/2005	25,914	--	--	0.11U
61	04/20/2005	26,311	--	--	0.11U
62	05/04/2005	26,740	--	--	0.11U
63	05/12/2005	27,345	--	--	0.11U
64	05/18/2005	27,942	--	--	0.11U
65	05/27/2005	28,692	0.11U	0.14	0.056J
66	06/01/2005	28,927	--	--	0.11U

SYSTEM, EFFLUENT, AND WPDES PCP SAMPLING RESULTS

Sample Event	Date	Volume (kgal)	DAF PCP (µg/L)	GAC1 PCP (µg/L)	Effluent PCP (µg/L)
67	06/08/2005	29,638	--	--	0.11U
68	06/15/2005	30,396	--	--	0.10U
69	06/29/2005	30,642	5,900	--	0.040J
70	07/08/2005	31,195	--	--	0.11U
71	07/13/2005	31,673	--	--	0.11U
72	07/20/2005	32,156	9,200	0.17	0.044J
73	07/28/2005	32,775	--	--	0.11U
74	08/04/2005	33,108	--	--	0.11U
75	09/22/2005	33,463	--	--	0.11U
76	09/29/2005	34,020	7,300	--	0.12U
77	10/06/2005	34,493	--	--	0.13U
78	10/12/2005	34,918	--	--	0.13U
79	10/19/2005	35,362	--	--	0.11U
80	10/27/2005	35,796	--	--	0.099J
81	11/01/2005	36,053	--	--	0.11U
82	11/10/2005	36,644	--	--	0.11U
83	11/15/2005	36,997	--	--	0.11U
84	11/22/2005	37,600	--	--	0.11U
85	12/01/2005	37,965	--	--	0.13U
86	12/08/2005	38,718	--	--	0.14U
87	12/14/2005	39,330	--	--	0.11U
88	12/27/2005	39,588	*	*	*

Notes:

* = Sample results are not yet available from the laboratory or the analysis is on hold per instruction from CH2M HILL. Some samples were placed on hold pending the results of the quick turnaround time samples. If no breakthrough was detected in the GAC 1 effluent, the earlier samples were not analyzed.

*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.

-- = Samples were not obtained.

X = Samples were collected, but the laboratory failed to perform the analysis using the required reporting limit, and the results were rejected. No payment was made for these samples.

XX = No sample was available – the sample bottle was broken.

µg/L = micrograms per liter

DAF = Dissolved air floatation unit

GAC = granular activated carbon

PCP = pentachlorophenol

Qualifiers:

B = Analyte found in the method blank

J = Estimated value

U = Analyte was not detected at or above the stated limit

The results of the WPDES sampling are summarized in the table on the following page. There were no exceedances during the reporting period.

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
10-Jun-04	12,000B	7.0	2.13U	29	0.10U	0.775B	5.0U	5.0U	10.0U	1.78U	0.0943U	5.0U	5.0U	0.5U	5.0U	5.0U	5.0U	0.967B	4.92	111	412	2,230	--	--
16-Jun-04		7.0									0.137													
17-Jun-04		7.0									0.050U													
23-Jun-04		7.0									*NA													
24-Jun-04		7.0									0.127													
01-Jul-04		7.0									0.081JB													
14-Jul-04		7.0									0.126													
20-Jul-04	--	7.0	2.13U	30B	0.10U	1.12	1.0U	1.0U	2.0U	1.78U	0.0952U	4.85U	1.0U	0.5U	1.0U	1.0U	1.0U	0.843B	3.49	79.7	5.48B	2,460	--	--
29-Jul-04		7.0									0.0971U													
04-Aug-04		7.0									0.103													
16-Aug-04		7.0									0.348													
27-Aug-04	--	7.0	4.0U	--	0.10U	0.789B	1.0U	1.0U	2.0U	1.58U	0.151	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	2.19	3.75	98.1	--	--	--	--
16-Sep-04		7.0									0.0724JB													
23-Sep-04		7.0									0.393B													
28-Sep-04	10,900B	7.0	4.0U	28	0.10U	0.811B	1.0U	1.0U	2.0U	2.17U	0.102B	9.43U	1.0U	0.5U	1.0U	1.0U	1.0U	1.0U	5.51	95.5	36.8B	2,470	--	--
05-Oct-04		7.0									0.0990													
14-Oct-04		7.0									0.265B													
19-Oct-04	8,310B	7.0	--	--	0.143B	1.01	--	--	--	0.97U	0.0702JB	9.52U	1.0U	0.5U	--	--	--	0.500B	--	--	--	--	--	--
26-Oct-04		7.0									0.0861J													
04-Nov-04		7.0									0.0447J													
10-Nov-04		7.0									0.0442J													
17-Nov-04		7.0									0.0971U													
22-Nov-04	9,140	7.0	--	--	0.0935U	0.787JB	--	--	--	0.82U	0.0900J	9.43U	1.0U	0.5U	--	--	--	0.727B	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
29-Nov-04		7.0									0.0962U													
07-Dec-04		7.0									0.0943U													
13-Dec-04		7.0									0.0637J													
20-Dec-04	9,100	7.0	4.0U	27	0.0962U	0.905B	1.0U	1.0U	2.0U	1.17U	0.0962U	9.62U	1.0U	0.5U	1.0U	1.0U	1.0U	0.550B	1.66B	66.7	8.35B	2670	--	--
30-Dec-04		7.0									0.0952U													
03-Jan-05		7.0									0.0952U													
10-Jan-05		7.0									0.114B													
18-Jan-05	10,800B	7.0	--	--	0.120	0.923B	--	--	--	2.65U	0.0595JB	9.52U	5.0U	0.5U	--	--	--	0.454B	--	--	--	--	--	--
25-Jan-05		7.0									0.049J													
02-Feb-05		7.0									0.074J													
08-Feb-05		7.0									0.039J													
15-Feb-05		7.0									0.051J													
28-Feb-05	--	7.0	--	--	0.096U	0.67B	--	--	--	0.43U	0.035J	4.7U	0.94U	0.5U	--	--	--	14	--	--	--	--	--	--
08-Mar-05	--	7.0	--	--	--	--	--	--	--	--	0.033J	--	--	--	--	--	--	--	--	--	--	--	--	--
16-Mar-05		7.0									0.11U													
22-Mar-05	3,500	7.0	5.0U	22	0.094U	0.37B	1.0U	1.0U	2.0U	1.4U	0.11U	4.7U	0.93	0.5U	1.0U	1.0U	1.0U	1.0U	7.4B	44	50U	2,400	ND	ND
30-Mar-05		7.0									0.11U													
05-Apr-05		7.0									0.11U													
20-Apr-05	--	7.0	--	--	0.098U	0.69B	--	--	--	--	0.066J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--
04-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
18-May-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-May-05	0.11U	7.0	--	--	0.093U	0.63B	--	--	--	1.2U	0.056J	4.8U	0.95U	0.5U	--	--	--	1.0U	--	--	--	--	--	--

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)
01-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
08-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
15-Jun-05	--	7.0	--	--	--	--	--	--	--	--	0.10U	--	--	--	--	--	--	--	--	--	--	--	--	--
29-Jun-05	5,900	7.0	6.0	29	0.091U	0.66B	1.0U	1.0U	1.0U	2.3U	0.040J	4.8U	0.95U	0.50U	5.0U	5.0U	5.0U	9.1	10U	96	5,500	2,500	--	--
08-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
13-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
20-Jul-05	9,200	7.0	--	--	0.093U	0.64B	--	--	--	--	0.044J	4.7U	0.93U	--	--	--	--	--	--	--	--	--	--	--
28-Jul-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
04-Aug-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
22-Sept-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
29-Sept-05	7,300	7.0	2.0B	24	0.095U	0.50B	1.0U	1.0U	1.0U	0.68U	0.12U	4.6U	0.93U	0.5U	5.0U	5.0U	5.0U	1.0U	10U	35	50U	2,100	--	--
06-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.13U	--	--	--	--	--	--	--	--	--	--	--	--	--
12-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.13U	--	--	--	--	--	--	--	--	--	--	--	--	--
19-Oct-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-Oct-05	--	7.0	--	--	0.093U	0.61B	--	--	--	--	0.099J	4.7U	--	--	--	--	--	--	--	--	--	--	--	--
01-Nov-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
10-Nov-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
15-Nov-05	--	7.0	--	--	0.024J	0.59B	--	--	--	--	0.11U	4.7U	--	--	--	--	--	--	--	--	--	--	--	--
22-Nov-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
01-Dec-05	--	7.0	--	--	--	--	--	--	--	--	0.13U	--	--	--	--	--	--	--	--	--	--	--	--	--
08-Dec-05	--	7.0	--	--	--	--	--	--	--	--	0.14U	--	--	--	--	--	--	--	--	--	--	--	--	--
14-Dec-05	--	7.0	--	--	--	--	--	--	--	--	0.11U	--	--	--	--	--	--	--	--	--	--	--	--	--
27-Dec-05	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR	*NR

WPDES SAMPLING SUMMARY

Date	Pentachlorophenol (µg/L) Influent	pH Field	Total Suspended Solids (mg/L)	Chloride (mg/L)	Diesel Range Organics (mg/L)	Total Organic Carbon (mg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	Total Trimethylbenzene (µg/L)	Dioxin (2,3,7,8 TCDD; pg/L; 3.0 pg/L monthly average limit)	Pentachlorophenol (µg/L; 0.1 µg/L monthly average limit)	Phenol (µg/L)	Naphthalene (µg/L; 8.0 µg/L monthly average limit)	Benzene (µg/L; 0.5 µg/L monthly average limit)	Ethylbenzene (µg/L)	Toluene (µg/L)	Xylene (µg/L)	Arsenic, Total Recoverable (ug/L; 5.0 µg/L monthly average limit)	Copper, Total Recoverable (µg/L)	Zinc, Total Recoverable (µg/L)	Iron, Total Recoverable (µg/L)	Manganese, Total Recoverable (µg/L)	Acid Extractables	Dioxins & Furans (all cogeners)

Notes:
*NA = Sample analysis was on hold and cancelled based on the results of the quick turnaround time samples.
*NR = Sample results are not yet available from the laboratory.
*ND = Compound not detected in sample.
– = Not sampled.

mg/L = milligrams per liter
µg/L = micrograms per liter

Qualifiers:
B = Analyte found in the method blank
J = Estimated value
U = Analyte was not detected at or above the stated limit

Summary of Project Status					
Task No./ Code	Planned Start	Actual Start	Planned Completion	Actual Completion	Percent Complete
1-PP	09/30/03	09/30/03	06/30/06		82
3-DU	09/30/03	09/30/03	06/30/06		99
4-PB	09/30/03	09/30/03	06/30/06		98
5-MS	09/30/03	09/30/03	03/30/04	03/30/04	100
6-RI	09/30/03	09/30/03	03/30/04	03/30/04	100
7-CV	09/30/03	09/30/03	06/30/06		86
8-AI	09/30/03	09/30/03	06/30/06		79
9-PJ	09/30/03	09/30/03	06/30/06		82
11-CO	05/01/06		06/30/06		0

2. Problems Resolved

The malfunctioning DAF recirculation pump was repaired.

The groundwater pump in Extraction Well No. 4 was replaced.

3. Problem Areas and Recommended Solutions

One of the heating pads for the free product storage tank is malfunctioning. It will be inspected and repaired.

The new groundwater pump in Extraction Well No. 4 is experiencing electrical problems. The pump will be inspected and repaired.

Change Order Status, Subcontract No. 308 Clearwater Technologies, Inc. Change Order submitted by CH2M HILL to USEPA (under WA #201)			
CO #1	Final actual quantity adjustment for the Equipment Installation, Option Period 2	$49,034	Approved

4. Deliverables Submitted

On December 26, CH2M HILL submitted responses to the RSE recommendations.

5. Activities Planned Next Reporting Period

CH2M HILL expects to conduct ongoing routine operations and maintenance (O&M) activities, including normal effluent sampling based on the substantive requirements of the WPDES permit. CH2M HILL plans on performing the following activities during the next reporting period:

- Resolve operation issue with LNAPL heating pad
- Resolve operation issue with Extraction Well No. 4 pump

6. **Key Personnel Changes**

None.

7. **Subcontractor Services**

Electrical Service:	Northwestern WI Electric Co.
Telephone:	Siren Telephone Company
Septic Service:	A-1 Septic Service
Nonhazardous Waste Disposal:	Allied Waste Services
Polymer:	US Water Services
Earthworks:	Darcy Brust Excavating
Propane Tank and Gas:	Larry's LP, Inc.
Contaminated Media Removal:	USFilter/Westates
Hazardous Waste Disposal:	North Shore Environmental
Tank Cleaning and Decontamination Services:	MidAmerica
Instrumentation and Controls:	System Technology Services, Inc.
Equipment Installation:	Clearwater Technologies, Inc.
Treatment System Chemicals:	Glacier Pure, Inc.
Backwash System:	Environmental Field Services, Inc.
Well Pump Inspection and Replacement:	WDC Exploration and Wells

8. **Travel**

None.

9. **Laboratories**

The 2005–2006 analytical services subcontract has been awarded to STL of Chicago, Illinois. They are a Wisconsin-certified laboratory.

10. **Project Performance**

The treatment system modifications added in 2003–2004 have significantly improved the overall performance of the granular activated carbon system. The carbon beds are effectively adsorbing dissolved PCP. Concentrations of PCP in the effluent are consistently below the target concentration of 0.1 microgram(s) per liter.

CH2M HILL provided timely responses to the RSE recommendations.