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April 28, 2010

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DEPT. OF ECOLOGY
TCP-NWRO

920.071.01

Weyerhaeuser NR Company
PO Box 9777
Mail Stop EC2 2C1
Federal Way, Washington 98063

Attention: Mr. Ken Johnson

**GROUNDWATER SAMPLING RESULTS – MARCH 2010
WEYERHAEUSER EVERETT EAST SITE
EVERETT, WASHINGTON
CONSENT DECREE 97-2027738**

Dear Mr. Johnson:

PES Environmental, Inc. (PES) has prepared this letter to document the results of the March 2010 groundwater sampling activities conducted at the Weyerhaeuser NR Company (Weyerhaeuser) Everett East Site. The groundwater sampling event was conducted to comply with the State of Washington Department of Ecology's (Ecology's) request to conduct eight consecutive quarters of confirmational monitoring from one remaining on-site groundwater monitoring well (MW-RA-8-3). The following information summarizes the results of our work.

Site Background. Weyerhaeuser Everett East site is comprised of a 72-acre parcel located along the western bank of the Snohomish River in Everett, Washington. The site was formerly occupied by a lumber and sawmill complex. Weyerhaeuser entered into a Consent Decree (No. 97-2027738) with Ecology in 1997, which required environmental investigation, remediation, and confirmational groundwater monitoring to be conducted at the site. Environmental activities in compliance with the Consent Decree, including groundwater monitoring, were conducted between 1997 and 2005. In August 2005, per Ecology's approval, eight of the nine site groundwater monitoring wells were abandoned. One well MW-RA-8-3 was left in place due to periodic detections of pentachlorophenol (PCP) which exceeded the applicable cleanup level of 7.29 micrograms per liter ($\mu\text{g/L}$). To comply with the conditions set forth in the Consent Decree, Ecology requested that groundwater sampling be conducted until PCP concentrations remain below the cleanup level of 7.29 $\mu\text{g/L}$ for eight consecutive quarters. In April 2009, Ecology approved Weyerhaeuser's request to resume quarterly monitoring in well MW-RA-8-3 for PCP as the sole contaminant of concern.

Quarterly Groundwater Sampling Activities. The fourth quarterly groundwater monitoring event was conducted on March 4, 2010. The event consisted of collecting one groundwater sample identified as "MW-RA-8-3-030410" from monitoring well MW-RA-8-3 using United States Environmental Protection Agency (USEPA) low flow protocols, including the collection of field

Mr. Ken Johnson
April 28, 2009
Page 2

measurements for pH, conductivity, dissolved oxygen, and temperature to ensure that the sample was representative of aquifer conditions. Field measurements collected during the event are presented on the Groundwater Sampling Form (Attachment A).

Laboratory Analytical Results. One groundwater sample identified as "MW-RA-8-3-030410" was delivered to Weyerhaeuser Analysis and Testing Services (WATS), in Federal Way, Washington (a state approved laboratory) for quantitative analysis immediately following the sampling event on March 4, 2010. Laboratory analysis was performed for pentachlorophenol by USEPA Method 8270C. The laboratory analytical data was reviewed in accordance with USEPA data validation guidelines. A copy of the WATS analytical laboratory report (10-0382) and data validation memorandum are included in Attachment B.

Based on the laboratory analytical results, PCP was not detected at a level above the Method Reporting Limit (MRL) of 5.0 µg/L in the water sample. The March 2010 analytical result is presented in Table 1, which also includes a summary of the PCP results from 2005 to date.

Summary of Results and Projected Work.

PCP was not detected above the MRL (5.0 µg/L) in the March 4, 2010 sample from MW-RA-8-3. The fifth quarterly monitoring event is scheduled to be conducted in June 2010.

PES appreciates the opportunity to assist Weyerhaeuser with this project. Please call one of the undersigned at (206) 529-3980 if you have any questions.

Sincerely,

PES ENVIRONMENTAL, INC.



Daniel A. Balbiani, P.E.
Principal Engineer



Erin Shaver, L.G.
Project Geologist

Enclosures: Table 1: Summary of Analytical Data
Attachment A: Groundwater Sampling Form – MW-RA-8-3
Attachment B: Laboratory Analytical Data Report and Data Validation Memo

cc: Mr. Jeff King

Table 1

**Pentachlorophenol Concentration in Groundwater
Everett East Site, Everett, Washington
Weyerhaeuser NR Company**

Sample Location	Date Collected	Pentachlorophenol (PCP) ug/L
MW-RA-8-3	9/28/2005 ^a	13
	9/14/2006 ^a	3J
	9/21/2007 ^a	<5.0
	9/23/2008 ^a	<5.0
	6/2/2009	<5.0
	9/8/2009	<5.0
	12/16/2009	<5.0
	3/4/2010	<5.0
Cleanup Level ^b		7.9
Notes: a) Samples collected by Delta Environmental Consultants, Inc. b) Washington State Department of Ecology Model Toxics Cleanup Act (MTCA) Method A Cleanup Level. J = Indicates analyte detected at concentration below the method reporting limit of 5.0 ug/L ug/L = micrograms per liter		

ATTACHMENT A

Groundwater Sampling Form – MW-RA-8-3



Page: 1 of 1
 Date/Time: 3/4/10 1030
 Project Name: EAST EVERETT
 Job No: 820
 Recorded By: L DooDY
 Sampled By: L DooDY

GROUNDWATER SAMPLING FORM

Well Type: Monitoring Extraction Other
 Well Material: PVC Stainless Steel Other
 Well No: MW-RA-8-

WELL PURGING

PURGE VOLUME
 Casing Diameter (D in inches)
 2-inch 4-inch 6-inch Other _____
 Total Depth of Casing (TD in feet below top of casing): _____
 Water-Level Depth (WL in feet below top of casing): 7.50
 Pump rate: approximately 150 mL/minute

PURGING METHOD
 Bailer - type: _____
 Submersible Centrifugal Bladder
 Peristaltic - Type: _____

PUMP INTAKE SETTING
 Bottom Top Middle: 9.00
 Depth in feet (BTOC): _____
 Screen interval feet (BTOC) from _____ to _____

FIELD PARAMETER MEASUREMENTS

START TIME: _____ STOP TIME: _____ TOTAL GALLONS REMOVED: _____

Time	Gallons Removed	pH	Conductivity (µmhos/cm)	Temperature (°C)	DTW (feet bgs)	DO	Observations (color, well condition, odor, cloudiness etc.)
1030	MB	6.26	373.5	10.8	7.91	0.55	
1035		6.29	370.1	10.4	NM	0.49	
1040		6.29	369.1	10.3	8.13	0.49	
1045		6.29	368.3	10.3	NM	0.48	

Notes: _____

WELL SAMPLING

Bailer Peristaltic

Sample No.	Time	Volume	Analyses	Bottle Type	Preservative
MW-RA-8-3-030410	1100	500ML	PCP	UNPre Amber	NONE

QUALITY CONTROL SAMPLES

Duplicate Sample No.	Time	Volume	Analyses	Bottle Type	Preservative
Field Blank Sample No.	Time	Volume	Analyses	Bottle Type	Preservative

ATTACHMENT B

Laboratory Analytical Data Report and Data Validation Memo



Weyerhaeuser
The future is growing™

P.O. Box 9777, WTC 2F25
Federal Way, WA 98063
32901 Weyerhaeuser Way South
Federal Way, WA 98003
253 924-6242
Fax 253 924-6654
dennis.catalano@weyerhaeuser.com

April 5, 2010

PES Environmental
ATTN: Erin Shaver
1215 4th Ave
Seattle, WA 98161

Dear Erin:

Subject: Service Request 10-0382 Everett East Site – March 2010

Enclosed are the test results for the Everett East Site samples you requested we analyze for you. This work has been performed under our Service Request No. 10-0382.

If you have technical questions regarding these results, please contact me at 253 924-6242. Weyerhaeuser will be billed internally for this work.

Thank you for the opportunity to be of service to your organization. I hope we can be of assistance in the future.

Regards,

Dennis Catalano
Operations Manager

Enclosure



Weyerhaeuser

Service Request

Analytical Chemistry and Microstructure

10-0382

Title: East Everett - March 2010

Group	Analysis	Component List	Test Description	No. Tests	Mult	Charge Amount	Line Total
CHROM	1-EXT3520B		BNA in Water prep Continuous Liq/Liq 4-P-3520C	1	1.00	0.00	0.00
CHROM	BNAW-8270C	BNA-PENTA	BNA in Water by EPA 8270C	1	1.00	303.00	303.00

Total charges for CHROM group (\$) 303.00

Total charges for Service Request 10-0382 (\$) 303.00

Weyerhaeuser Analytical & Testing Services
32901 Weyerhaeuser Way South
Federal Way, WA 98001

Service Request 10-0382
WA Cert. # C1219

Report
Everett East Site - March 2010

Client ID		MW-RA-8-3- 030410	Method Blank 03/08/10
Sample Date and Time		03/04/10 11:00	
Lab ID		10-0382-001	PSBL2W1_030810
		ug/L	ug/L
Analyte	CAS		
Pentachlorophenol	87-86-5	<5	<5
Surrogates	Limits	%Rec	%Rec
2-Fluorophenol	49-105	80%	85%
Phenol-d5	61-105	86%	96%
Nitrobenzene-d5	59-109	89%	85%
2-Fluorobiphenyl	59-99	87%	77%
2,4,6-Tribromophenol	56-105	82%	82%
Terphenyl-d14	64-136	90%	91%
2-Chlorophenol-d4	63-106	95%	94%
1,2-Dichlorobenzene-d4	54-87	68%	71%
Date Extracted		03/08/10	03/08/10
Date Analyzed		03/24/10	03/22/10

Limited sample volume.

Method: EPA 8270C

Approved: Randy Eatherton *RE*

Telephone: (253) 924-6431

Date: 04/01/10

MEMORANDUM

TO: Weyerhaeuser – Everett East
Project File 920.071.01.001

DATE: April 27, 2010

FROM: Erin Shaver

RE: Review of Water Quality Monitoring Data for Weyerhaeuser Everett East Site, Everett, Washington (Well MW-RA-8-3), March 3, 2010

This report summarizes a review of analytical results for a groundwater sample collected by PES personnel on March 3, 2010 from well MW-RA-8-3, located at the Weyerhaeuser Everett East Site in Everett, Washington. A laboratory analysis for pentachlorophenol by United States Environmental Protection Agency (USEPA) Method 8270C was performed on the sample. The analysis was performed by Weyerhaeuser Analysis and Testing Services (WATS), in Federal Way, Washington. WATS report 10-0382 was reviewed.

DATA QUALIFICATIONS

The comments in this review refer to the laboratory's performance in meeting the data review criteria of USEPA's Contract Laboratory Program National Functional Guidelines for Organics Data Review (USEPA, 1999) and method-specific QC guidelines (USEPA, 1983, 1986, 1991).

No data qualifiers were assigned to data in this report.

Data Package

The data package was checked for transcription errors, omissions, or other anomalies. None were noted.

Handling Times and Preservation

The sample was collected using recommended handling and preservation procedures. The sample receipt information provided by the analytical laboratory indicated that the sample in data package 10-0382 was received at a cooler temperature of 4.0 degrees Centigrade (°C). This temperature was within the recommended preservation temperature range of

Due to insufficient sample, a matrix spike and duplicate matrix spike sample were not prepared from the project sample. In lieu of a MS/DMS, the laboratory analyzed a Laboratory Control Sample (LCS). This substitution is acceptable for this project. No data was qualified due to the lack of a MS/DMS analysis.

Laboratory Control Sample Results

A laboratory control sample (LCS) is spiked with target analytes and analyzed to provide information on laboratory and analytical method accuracy. The laboratory identified the LCS as a blank spike on the laboratory report. USEPA guidelines recommend analyzing one LCS with each batch and for each method for organic analyses. The LCS analysis was performed at the appropriate frequency and the LCS results were all within the laboratory QC criteria for phenols. No qualifiers were assigned.

Duplicate Results

Due to insufficient sample volume, a duplicate sample was not prepared with this analytical batch. Because pentachlorophenol was not detected in the primary sample and there were no other QC issues associated with the sample lot, the lack of the duplicate was not considered sufficient cause to qualify the data.

OVERALL ASSESSMENT OF DATA QUALITY

The data were judged to be acceptable for their intended use. No data qualifiers were assigned.

