

September 6, 2013

Mr. David South
Washington State Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

SUBJECT: JULY 2013 QUARTERLY COMPLIANCE MONITORING REPORT
PROJECT NUMBER: WEYER-EW

Dear Mr. South:

This Quarterly Compliance Monitoring Report (CMR) for the Weyerhaeuser Everett West Site (Site) has been prepared in accordance with the requirements of the Consent Decree No. 94-2-67559-2 (Consent Decree; State of Washington 1994) between Weyerhaeuser Company (Weyerhaeuser) and Washington State Department of Ecology (Ecology), specifically with the requirements of Washington Administrative Code (WAC) 173-340-410 and WAC 173-340-720. Except where noted, compliance monitoring and reporting is being conducted in accordance with the procedures outlined in the Groundwater Compliance Monitoring Plan for Weyerhaeuser Everett West Site (Emcon 1995), the Weyerhaeuser Everett West Groundwater Compliance Monitoring Plan Addendum (CMP; Floyd|Snider 2011), and a memorandum clarifying the quarterly reporting requirements (Floyd|Snider 2012). The Site is located at 101 East Marine View Drive in Everett, Washington, as shown in Figure 1.

Compliance monitoring is designed to meet the monitoring requirements specified in the Consent Decree and the substantive requirements of regulations issued pursuant to the Washington State Model Toxics Control Act (MTCA). The goal of this report is to provide documentation of site groundwater quality relative to the attainment of cleanup requirements. The results of the July 2013 quarterly groundwater monitoring event for the Site are presented in this report.

COMPLIANCE MONITORING

Compliance Monitoring Activities

The eighth quarterly compliance monitoring event was conducted on July 23, 2013. Except where noted, field methods used in compliance monitoring were carried out in accordance with the CMP. Field activities are summarized below.

Water Level Measurements

To provide an accurate indication of the potentiometric surface, water level measurements were collected from MW-1202R, MW-1203R, MW-1301R, MW-1501R, and MW-1701 within 45 minutes of each other. Water level measurements were also collected prior to the start of well purging and during low-flow sampling.

Groundwater Sampling

Sample collection and handling was conducted in accordance with the CMP. Groundwater samples from MW-1202R, MW-1203R, MW-1301R, and MW-1501 were collected using standard low-flow sampling methods, field filtered, and submitted to Weyerhaeuser Analytical Chemistry under chain of custody for dissolved arsenic analysis. A field duplicate sample was collected from MW-1202R and submitted for analysis under a fictitious sample name (MW-1602R).

Groundwater sample collection was consistent with the CMP provisions regarding tidal conditions. As shown in Table 1, water levels in the monitoring wells were at least 9 feet higher than the stage height of the tidally influenced Snohomish River at the time of sampling, which is consistent with the procedure for collecting representative groundwater samples described in the CMP.

Data Validation

A Tier 1 data quality review was performed on all analytical results for samples collected during the July 2013 compliance monitoring event. Consistent with the CMP, the analytical data were validated in accordance with the following guidelines and standard operating procedures:

- U.S. Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (USEPA 1994 and 2004)

The data quality review included evaluation of sample chain-of-custody procedures, sample preservation and analytical holding times, blank contamination, precision (replicate analyses), accuracy (compound recovery), adherence to the target analyte list, detection limits, and data package completeness. The data are determined to be of acceptable quality for use as reported by the laboratory.

Compliance Monitoring Results

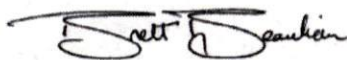
Water level measurements are presented in Table 1 and Figure 2. Analytical results of the July 2013 monitoring event are presented in Table 2 and summarized below. Analytical results are being submitted to Ecology's Environmental Information Management (EIM) database in conjunction with this report. Laboratory analytical reports will be presented in the annual monitoring report and are available on request.

Dissolved arsenic was detected in groundwater samples from all four monitoring wells. The highest concentration of arsenic detected was 2.5 µg/L in MW-1301R, while the lowest concentration was 0.8 µg/L in MW-1501R. All concentrations detected were less than the site groundwater arsenic CUL of 5 µg/L.

Mr. David South, Ecology
September 6, 2013

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Sincerely yours,
FLOYD I SNIDER



Brett Beaulieu, LHG
Hydrogeologist

Encl.: Table 1 Water Level Elevation and Tidal Information
Table 2 Dissolved Arsenic Analytical Results
Figure 1 Vicinity Map
Figure 2 Groundwater Elevation Contours
Copies: Ken Johnson, Weyerhaeuser Company

REFERENCES

- Emcon. 1995. *Groundwater Compliance Monitoring Plan for Weyerhaeuser Everett West Site, Everett, Washington*. Prepared for Weyerhaeuser Company. 2 March.
- Floyd|Snider. 2011. Memorandum to David South: Weyerhaeuser Everett West Groundwater Compliance Monitoring Plan Addendum. November.
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- National Oceanic and Atmospheric Administration (NOAA). *NOAA Tides and Currents*. 2013. Everett, WA Station ID 9447659. <http://tidesandcurrents.noaa.gov/noaatidepredictions/>.
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- . 2004. Office of Superfund Remediation and Technology Innovation (OSRTI). *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review Final Draft*. Washington, D.C. July.

Tables

Table 1
Water Level Elevation and Tidal Information

Well ID	TOC Elevation (feet NAVD88)	Date	Time of Measurement	Depth to Water (feet)	Water Level Elevation (feet NAVD88)	Time of Sampling	Approximate Tidal Elevation at Time of Sampling ¹ (feet MLLW)	Approximate Tidal Elevation at Time of Sampling ¹ (feet NAVD88)	Approximate Height of Water Table above Snohomish River (feet)
Potentiometric surface measurements									
MW-1202R	12.08	7/23/2013	10:04	6.24	5.84	NA	NA	NA	NA
MW-1203R	15.70	7/23/2013	10:12	9.65	6.05	NA	NA	NA	NA
MW-1301R	14.44	7/23/2013	9:43	7.79	6.65	NA	NA	NA	NA
MW-1501R	11.80	7/23/2013	9:52	3.52	8.28	NA	NA	NA	NA
MW-1701	14.78	7/23/2013	9:30	3.95	10.83	NA	NA	NA	NA
Water levels at time of well purging									
MW-1202R	12.08	7/23/2013	11:57	6.68	5.40	12:30	-2.2	-4.5	9.9
MW-1203R	15.70	7/23/2013	12:53	9.69	6.01	13:20	-0.7	-3.0	9.1
MW-1301R	14.44	7/23/2013	10:20	7.80	6.64	10:45	-1	-3.3	10.0
MW-1501R	11.80	7/23/2013	11:11	3.65	8.15	11:35	-2.3	-4.6	12.8

Note:

¹ Information is sourced from the National Oceanic and Atmospheric Administration (NOAA) 2013.

Abbreviations:

MLLW Mean Lower Low Water

NA Information is not available

NAVD88 North American Vertical Datum of 1988

TOC Top of casing

Table 2
Dissolved Arsenic Analytical Results
(µg/L)

Location	MW-1202R		MW-1203R		MW-1301R		MW-1501R	
Sample Date								
7/23/2013	1.0	1.1 D	1.1	--	2.5	--	0.8	--
4/26/2013	1.3	--	0.9	--	0.7	--	0.9	1.1 D
1/17/2013	1.6	--	0.9	--	1.0	--	0.5	0.5 D
12/21/2012	1.0	1.2 D	0.7	--	0.9	--	0.6	--
9/28/2012	1.3	--	1.3	1.5 D	6.9	--	1.6	--
6/21/2012	3.1	--	0.7	0.8 D	1.6	--	0.6	--
3/22/2012	1.4	--	0.6	--	0.8	0.8 D	0.8	--
12/19/2011	2.7	--	1.4	--	1.7	1.8 D	1.6	--

Note:

Bold Indicates that a concentration is greater than the site cleanup level.

Qualifier:

D Indicates sample is a field duplicate.

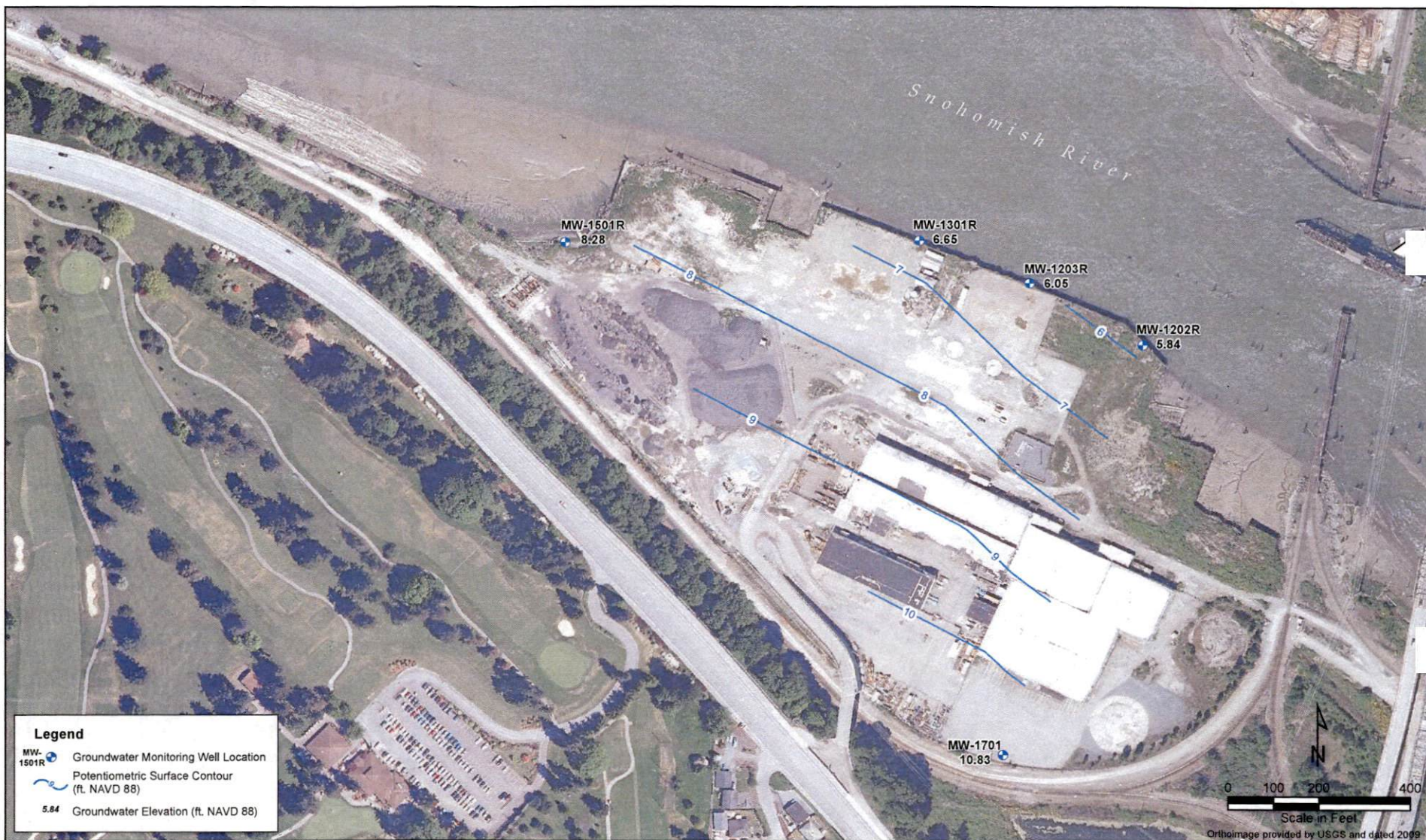
Figures



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**July 2013 Quarterly
Compliance Monitoring Report
Weyerhaeuser Everett West
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**Figure 1
Vicinity Map**



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Figure 2
 Groundwater Elevation Contours
 July 2013