

PACIFIC ENVIRONMENTAL & REDEVELOPMENT CORPORATION

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March 27, 2009

Ms. Glynis Carrosino
Site Manager
Washington State Department of Ecology
Northwest Regional Office
3190 160th Ave. SE
Bellevue WA 98008-5452

RE: Removal of the Consent Decree for the Weyerhaeuser Everett West Site.

Dear Ms. Carrosino,

On behalf of the Weyerhaeuser Company I am requesting the removal of the Consent Decree covering the Weyerhaeuser Everett West Site (Site). In this letter I will outline why I believe this to be appropriate.

Background:

The Site is located at 101 East Marine View Drive, Everett, Washington, 98201 (Figure 1). Weyerhaeuser Company (Weyerhaeuser) and the Washington State Department of Ecology (Ecology) entered a Consent Decree which outlined the actions necessary to remediate the Site on October 21, 1994. These actions are detailed below, along with a statement on the status of the work and any appropriate discussion.

1. Soil Remediation:

a. Area 11 – Sandblast Fill Area. Weyerhaeuser was required to excavate soil to the cleanup action level of 500 mg/kg Chromium and 10 mg/kg PCBs or the surface of groundwater. Chromium and PCBs in soil were the constituents of potential concern (COPC)s in this area.

b. Area 12 – Old Mill C. Weyerhaeuser was required to excavate soil to the cleanup action level of 1,000 mg/kg Total Petroleum Hydrocarbons (TPH) or the surface of groundwater. TPH in soil was the COPC in this

area.

c. Area 13 – Powerhouse, Recovery and Causticizing Areas. Weyerhaeuser was required to excavate soil to the cleanup action level of 1,000 mg/kg Total Petroleum Hydrocarbons (TPH) or the surface of groundwater. TPH in soil was the COPC in this area

d. Area 14 – Wood Chip Pile. Weyerhaeuser was required to excavate soil to the cleanup action level of 1,000 mg/kg Total Petroleum Hydrocarbons (TPH) and 1.0 mg/kg Mercury or the surface of groundwater. TPH and mercury in soil were the COPCs in this area.

e. Area 15 - Fuel Tank Area. Weyerhaeuser was required to dismantle and scrap the 577,000 gallon fuel tank, remove the contaminated foundation located below the tank and excavate soil to the cleanup action level of 1,000 mg/kg Total Petroleum Hydrocarbons (TPH) or the surface of groundwater. TPH in soil was the COPC in this area

 f. Area 16 - Pulp Mill. Weyerhaeuser was required to excavate soil around the old lube oil shed to the cleanup action level of 1,000 mg/kg TPH or the surface of groundwater. TPH in soil was the COPC in this area

g. Weyerhaeuser was required to backfill each excavation with clean fill. This was done during each of the listed efforts.

This work was completed in 1995 with the findings memorialized in the document entitled *Soil Remediation Completion Report for Weyerhaeuser Everett West Site Report*, drafted in February, 1995 by EMCON Consultants. In this report EMCON concluded that all soil remediation work required by the Consent Decree had been completed. Ecology concurred with EMCON's conclusions in a July 25, 1995 Memorandum to William Miller, Plant Manager, Weyerhaeuser – Everett Site by Mike Palko where Mr. Palko states "Ecology believes that Weyerhaeuser has satisfactory completed the remedial actions set forth in the Consent Decree. The department certifies that in our best professional judgment the property has met all the requirements stated in the West Site Consent Decree."

- 2. Groundwater: Weyerhaeuser was required to perform groundwater monitoring. The results of this effort are described in the following paragraphs. In addition, the Groundwater Monitoring action specifies a "Five Year Review" and exchange of proposals addressing the question on whether continued groundwater monitoring is necessary to protect public health and the environment. This five year review did not occur. Our proposal to end groundwater monitoring and to remove this Consent Decree is presented.
- 3. Deed Restriction: Weyerhaeuser was required to deed restrict the contaminated areas on the Site that remain above the cleanup standards and prevent withdrawal of water for domestic purposes from the surface aquifer on the Site. A copy of this restriction is attached. Whereas no known soil remains above the cleanup standards for this Site this deed restriction should be amended to restrict the withdrawal of groundwater for domestic purposes only.

Cleanup Standards:

The cleanup standards selected to evidence protection of public health, welfare and the environment in the Consent Decree are listed in the following table:

			Groundwater Cleanup
COPC	Standard	Standard	Standard
TPH	200 mg/kg	1,000 mg/kg	1,000 µg/l
Arsenic	N/A	· N/A	5 µg/l
PCBs	10 mg/kg	N/A	N/A
Chromium	500 mg/kg	N/A	N/A
Mercury	1.0 mg/kg	N/A	N/A
Total Xylenes	20 mg/kg	N/A	N/A
Ethylbenzene	20 mg/kg	N/A	N/A

Groundwater Monitoring:

Requirements of the Consent Decree: Under the Consent Decree Weyerhaeuser was required to monitor groundwater on a quarterly basis for three years (1994, 1995 and 1996) and annually for two years (1997 and 1998). Each groundwater sample was to be analyzed for TPH and dissolved arsenic. This was done and reports stating the findings of each sampling event where issued to Ecology. After the end of the five year period, Ecology and Weyerhaeuser were to exchange proposals to amend the groundwater program through an amendment to the Consent Decree. This was not done. Annual groundwater sampling has continued to date with reports issued to Ecology upon completion.

Seven monitoring wells were installed on-site to determine groundwater quality at the Site in June of 1993 (Figure 2). Quarterly sampling began in February of 1994 and continued to November of 1995 when the frequency of sampling was decreased to annually. In 2004 Shaw Environmental discovered that four of the seven Site monitoring wells (MW-1201, MW-1202, MW-1203 and MW-1501) were destroyed by Site activities. MW-1302 was destroyed by Site activities in 2008. MW 1701, the Site background well, was reported, by Shaw, to be abandoned in February of 1998 but was found to be competent during the April 2008 Groundwater sampling event and was added to the annual sampling at that time. Only one well, MW-1301, has been sampled continuously since sampling began.

In addition for the scheduled annual groundwater sampling, in April 2008, at Ecology's request four temporary wells where installed, and groundwater samples were taken. The locations of these temporary wells were selected through consultation with Ecology. The purpose of two of these temporary wells was to determine groundwater conditions in areas of the Site that were previously characterized by the monitoring wells destroyed by Site activities. The purpose of the additional two temporary wells was to attempt to establish a correlation between each of the two existing monitoring wells (MW-1301 AND MW-1701) and the temporary well located adjacent to it.

During the September 2008 sampling event TPH-O AND TPH-D analyses were not perform by agreement with Ecology.

<u>Results:</u> The results of all groundwater sampling conducted at the Site are summarized in the tables presented as appendices. The location of each well is illustrated of Figure 1.

The TPH-D and/or the TPH-O cleanup standards have been exceeded or equaled in three groundwater samples collected on-site. The TPH-O concentrations equaled the cleanup standard (1,000 $\mu g/l$) in both MW-1301 and MW-1302 during the September 2005 sampling event. The cleanup standard for TPH-D was exceeded in MW-1302 during both the September 2005 (1,100 $\mu g/l$) and the January 1993 (1,200 $\mu g/l$) sampling events. The elevated concentrations in the September 2005 sampling event are attributed to oil spill reported by the property owner to have occurred from the pumping of bilge liquids from an abandoned tanker located near MW-1302. The January 1993 TPH-D exceedance was followed by 10 years of groundwater sampling (until the September 2005 event) where the TPD-D concentrations were below the cleanup standard. No exceedance of neither the TPH-D and/or the TPH-O cleanup standards have occurred since the September 2005 event.

The dissolved arsenic Site specific cleanup standard was not exceeded in any sample collected from any monitoring well between February 2006 and April 2008. April 2008 concentrations of dissolved arsenic above the cleanup standard were detected in MW-1301 (at 9.9 μ g/l) and in the temporary well (B-3) installed adjacent to background well MW-1701 (7.8 μ g/l). This later exceedance was not confirmed by concentrations in the sample collected from MW-1701 (2.8 μ g/l). This was the first detection of dissolved arsenic in MW-1701 since May 1996 (3 μ g/l). Dissolved arsenic continued to be present in groundwater samples taken from MW-1301 (at 11.3 μ g/l) during the last sampling event (September 2008). Dissolved arsenic also continued to be present, but below the cleanup standard, in the groundwater sample taken from MW-1701 (at 4.3 μ g/l) during the last sampling event (September 2008).

Given that no activities have occurred on-site to explain the recent increase in dissolved arsenic occurring in groundwater samples and the elevated concentrations resident in the samples taken from the background well in the last two groundwater sampling events we believe that the source of the elevated concentrations is off-site.

Conclusions and Proposal:

The remedial actions specified in the Consent Decree have been met with the exception of the elevated concentrations of dissolved arsenic in groundwater found in recent sampling. These concentrations can only be explained by releases from an off-site source. Off-site sources of contamination were not considered during the draft of the Consent Decree and are outside of its influence.

In addition, Ecology concluded in the FCAP/FEIS for the ASARCO Everett Smelter site located 0.3 miles southeast of the Site (Figure 1) that "Ground water in the Fill/Till is not present in sufficient quantity to serve as a drinking water supply. Water in the Advance Outwash aquifer is not currently used as a drinking water supply, and the City of Everett has indicated it has no plans to use ground water beneath the Everett Smelter Site in the future. The City requires residents to connect to City water and sewer systems (Mark Stone, personal communication. November 7, 1998)." and "Cleanup levels for ground water have been established to protect surface water according to Chapter 173-201 A WAC. Hence, ground water cleanup levels for both the Fill/Till and the Advance Outwash Aquifer are the same as specified in Section 4.1.4 for surface water (arsenic cleanup levels ranging between 190 µg/l and 360 µg/l)." These levels are significantly higher than concentrations in present in Site groundwater.

The logic behind Ecology's selection of groundwater cleanup levels for the ASARCO Everett Smelter could also apply to the Weyerhaeuser Everett West site which, due to its proximity to the Everett Smelter Site, has similar geological conditions. In fact the use of groundwater under the Everett West site is less likely due to the current and planned use of the Site (industrial) and the in-place deed restriction which restricts groundwater use. There are no down gradient users of the groundwater under the Everett West site before it enters the Snohomish River. Using the groundwater cleanup levels for protection of surface water established for the Everett Smelter Site for compliance will mitigate the impacts of releases from Off-Site sources and eliminate the need for future groundwater monitoring. To make the change from the cleanup levels of arsenic in the consent decree would require either a modification of the consent decree or a policy determination from Ecology.

As such, Weyerhaeuser proposes the following actions should occur:

- 1. A review of current conditions (a five-year review) should be conducted;
- 2. The Consent Decree for this Site should be removed; and
- 3. Since no known soil remains above the cleanup standards for this Site this deed restriction should be amended eliminate all conditions other than the restriction of the withdrawal of groundwater for domestic purposes.

Weyerhaeuser is anxious to receive the results of Ecology's five year review and the termination of the consent decree. Please telephone either Ken Johnson, Weyerhaeuser's Project Manager, at 253,924,3426 or myself at 425,238,2212 to discuss these recommendations.

Sincerely;

Seffrey D. King, L.G.

Principal

Pacific Environmental and Redevelopment Corporation

JEFFREY B. KING

TABLES

TABLE 1: WE	LLS CURREN	TLY BEING SA	AMPLED	
,				8
Sample Date	TPH-D (µg/l)	TPH-O (μg/l)	Dissolved Arsenic (µg/i)	Comments
Jun-93	ND	ND	100	Arsenic exceeded Sile CL
Feb-94	160	ND	175	Arsenic exceeded Sile Cl.
May-95	290	ND	54	Arsenic exceeded Site CL
Aug-95	ND ND	ND ND	72	Arsenic exceeded Site CL
Nov-95	510	730	67	Arsenic exceeded Site CL
Feb-96	130	250	39	Arsenic exceeded Site CL
May-96	100	250	43	Arsenic exceeded Site CL
Aug-96	ND	ND	. 74	Arsenic exceeded Site CL
Nov-96	170	140	50	Arsenic exceeded Site CL
Feb-97	ND	ND	17	Arsenic exceeded Site CL
May-97	ND	ND	45	Arsenic exceeded Sile CL
Aug-97	ND	ND	. 50	Arsenic exceeded Site CL
Nov-97	ND	ND D	45	Arsenic exceeded Site CL
Aug-98	ND	ND_	65	Arsenic exceeded Site CL
Aug-99	370	ND	32	Arsenic exceeded Site CL
Sep-04	69	ND	21	Arsenic exceeded Site CL
Sep-05	400	1000	8	Arsenic exceeded Site CL, TPH-O = Site CL
Feb-06	ND	NA .	1.1	
Sep-06	ND	NA	2	
Mar-07	120	NA	3.2	
Apr-08	<49	<19	9.9	Arsenic exceeded Site CL
Apr-08	<49	<19	4,9	Temporary Well B-4 (Presented for comparison)
Sep-09	NA NA	NA	11.3	Arsenic exceeded Site CL
2ah-6a			The second secon	
Sample Date	TPH-D (μg/l)	TPH-O (μg/l)	Dissolved Arsenic (µg/l)	Comments
Jun-93	ND	430	. 4	
Feb-94	ND	ND	1	
May-95	ND	ND	ND	
Aug-95	ND	ND	ND	
Nov-95	ND	690	ND	
Feb-96	100	380	3	
May-96	100	250	3	
Aug-96	ND	ND	ND	
Nov-96	150	400	ND	
Feb-97	ND	280	ND	
May-97	ND	ND	ND	·
Aug-97	500	ND	ND	
Nov-97	ND	ND	ND	
Aug-98	NS	NS	NS	Believed to be Destroyed by Site Activities
Aug-99	NS	NS	. NS	
Sep-04	NS	NS	NS	
Apr-08	51	<19	2.8	
Apr-08	51	<19	7.8	Temporary Well B-3, Arsenic exceeded Site CL (Presented for comparison)
1		NA	4	
Sep-09	NA NA	T IAW	<u></u>	

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TABLE 2: WE	LLS DESTRO	YED IN 2008		
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Sample Date	TPH-D (µg/i)	TPH-O (µg/l)	Dissolved Arsenic (µg/l)	Comments
Jun-93	1,200	430	19	Arsenic/TPH exceeded Site CL
Feb-94	370	ND	2	
May-95	260	ND	6	Arsenic exceeded Site CL
Aug-95	320	ND	4	
Nov-95	660	690	16	Arsenic exceeded Site CL
Feb-96	470	380	3	·
May-96	200	250	3	
Aug-96	85	ND	11	Arsenic exceeded Site CL
Nov-96	540	400	ND	
Feb-97	310	280	ND	
May-97	250	ND	ND	
Aug-97	250	ND	4	
Nov-97	200	ND	3	
Aug-98	100	ND	3	·
Aug-99	560	ND	DA	
Sep-04	220	ND	ND	
Sep-05	1,100	1,000	ND	TPH-O = Site CL
Feb-06	ND	NA NA	ND	
Feb - 06 Dup	ND	NA	ND	
Sep-06	140	NA	ND	
Sept - 06 Dup	180	NA	ND	-
Mar-07	170	NA	>0.5	AND
Mar – 07 Dup	190	NA	>0.5	-
Apr-08	<48	<19	1.5	Temporary Well B-2 - Well Destroyed by Site Activities

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TABLE 3: WEL 2004	LS DESTROY	ED IN		
	1,072377721523			gara ta Tarah di kacamatan da kabupatèn da kacamatan da kabupatèn da kabupatèn da kabupatèn da kabupatèn da ka
Sample Date	TPH-D (µg/l)	TPH-O (µg/l)	Dissolved Arsenic (µg/l)	Comments
Jun-93	250	ND	5	Arsenic = Site CL
Feb-94	ND	ND	1 .	
May-95	ND	ND	ND	
Aug-95	190	ND	3	
Nov-95	740	470	3	ALL REPORTS
Feb-96	180	250	3	AA ACCESSESSION OF THE SECOND
May-96	100	250	3	
Aug-96	210	ND	3	
Nov-96	270	380	ND	
Feb-97	ND	ND	ND	
May-97	ND	ND	ND	
Aug-97	ND	ND	3	
Nov-97	ND	ND	4	
Aug-98	ND	ND	ND	
Aug-99	360	ND	ND	,
Sep-04	NS	NS	NS	Well Destroyed by Site Activities
	Control of the Contro		Land Control Control (Control Control	
Sample Date	TPH-D (µg/l)	TPH-O (µg/l)	Dissolved Arsenic (µg/l)	Comments
Jun-93	ND	ND	20	Arsenic exceeded Site CL
Feb-94	630	380	16	Arsenic exceeded Site Ct.
May-95	240	ND	10	Arsenic exceeded Site CL
Aug-95	180	ND	9	Arsenic exceeded Site CL
Nov-95	380	790	8	Arsenic exceeded Site CL
Feb-96	460	300	8	Arsenic exceeded Site CL
May-96	100	250	10	Arsenic exceeded Site CL
Aug-96	80	ND	8	Arsenic exceeded Site CL
Nov-96	291	230	13	Arsenic exceeded Site CL
Feb-97	280	230	10	Arsenic exceeded Site CL
May-97	210	180	9	Arsenic exceeded Site CL.
Aug-97	140	ND	8	Arsenic exceeded Site CL
Nov-97	300	300	15	Arsenic exceeded Site CL
Aug-98	55	120	26	Arsenic exceeded Site CL
Aug-99	510	ND	ND	
Sep-04	NS	NS	NS	Well Destroyed by Site Activities
สาโอกเด็นกูกสิ่นไป	LIVA KOZA 👼	paragata antar	Commence of the Commence of th	
Sample Date	TPH-D (µg/l)	TPH-O (μg/l)	Dissolved Arsenic (µg/l)	Comments
Jun-93	ND	ND	58	Arsenic exceeded Site Ct.
Feb-94	ND	ND	3	- Control of the Cont
May-95	120	ND	3	
Aug-95	170	ND		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Nov-95	960	860	11	Arsenic exceeded Site CL
Feb-96	230	280	3	
May-96	100	250	4	1-101-01
Aug-96	ND.	ND	15	Arsenic exceeded Site CL
Nov-96	230	250	ND	
Feb-97	ND	ND	3	
May-97	120	ND	ND	
Aug-97	130	ND ND	4 ND	The state of the s
Nov-97	200	ND	ND 10	Arsenic exceeded Site Ct.
Aug-98	ND	ND ND	16	
Aug-99	390	ND	5	Arsenic = Site CL
Sep-04	NS	NS	NS NS	Well Destroyed by Site Activities

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Sample Date	TPH-D (µg/l)	TPH-O (µg/l)	Dissolved Arsenic (µg/l)	Comments
Jun-93	ND	ND	NS	
Feb-94	ND	ND	9	Arsenic exceeded Site CL
May-95	ND	ND	6	Arsenic exceeded Site CL
Aug-95	ND	ND	4	
Nov-95	110	. 330	16	Arsenic exceeded Site CL
Feb-96	200	250	3	
May-96	100	250	3	
Aug-96	ND	ND	11	Arsenic exceeded Site CL
Nov-96	220	220	3	
Feb-97	ND	ND	ND	
May-97	ND	ND	ND	
Aug-97	ND	ND	6	Arsenic exceeded Site CL
Nov-97	ND '	ND .	5	
Aug-98	ND	ND	12	Arsenic exceeded Site CL
Aug-99	440	ND	19	Arsenic exceeded Sile CL
Sep-04	110	ND	12.	Arsenic exceeded Site CL
>Sep-04				Well Destroyed by Site Activities

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TABLE 4: TEMP	ORARY WELLS	NSTALLED/C	LOSED IN SEPTEMBER 20	08
Sample Date	TPH-D (µg/l)	TPH∗O (μg/i)	Dissolved Arsenic (µg/l)	Comments
Well Point B-1	790	<19	2.5	
Well Point B-2	<48	<19	1.5	Replaced MW-1302
Well Point B-3	51	<19	7.8	Adjacent to MW-1701, Arsenic exceeded Site CL
Well Point B-4	<49	<19	4.9	Adjacent to MW-1301

FIGURES



