Fort Ord HTW BCT Meeting – Operable Unit 1 (OU-1) On-Post

Fort Ord HTW BCT Meeting 1:00 PM, 12 November 2008 Monterey, California

MEETING MINUTES (prepared by HydroGeoLogic, Inc.)

1. Groundwater Remediation System Update

The Northwest Treatment System (NWTS) has operated continuously since last update on 14 October 2008. The total volume pumped through 03 November 2008 is 72,285,810 gallons. The average treatment rate over the last four weeks has been 86.3 gallons per minute. To date, the NWTS has removed approximately 3.1 pounds of trichloroethene (TCE) and 0.3 pounds of cis-1,2-dichloroethene (DCE).

The routine bimonthly performance samples from the treatment system and extraction wells were collected on 29 September 2008. Validated results are not yet available. The preliminary analytical results are summarized below:

- The system influent TCE concentration increased slightly to 3.8 micrograms per liter $(\mu g/L)$ up from 3.6 $\mu g/L$ in July 2008.
- The system influent cis-1,2-DCE concentration was essentially unchanged at 0.42 μ g/L (from 0.41 μ g/L in July 2008).
- The system effluent concentrations were below detection limit for all compounds monitored. Cis-1,2-DCE, however, was reported below the method detection limit at 0.12 µg/L. The other compounds of concern were not detected.
- TCE concentrations at individual extraction wells and in the NWTS influent were slightly higher than those reported in July 2008 but only EW-OU1-71-A showed an increase of more than 0.3 μ g/L. TCE concentrations reported in 2008 for all extraction wells are summarized in Table 1.
- All extraction wells showed TCE concentrations less than 5.0 µg/L except the two wells located in the central portion of the plume: MW-OU1-87-A (9.1 µg/L) and EW-OU1-71-A (14 µg/L).

2. <u>Long-term Monitoring Update</u>

Third quarter samples, including annually sampled wells, were collected during the period from 29 September 2008 through 02 October 2008. Validated analytical results are not yet available. The preliminary analytical results are summarized below:

Original GWETS Zone (MW-OU1-25-A and south)

• All nine wells $\leq 3.8 \ \mu g/L$ TCE. IW-OU1-01-A and MW-OU1-23-A were at 3.7 $\mu g/L$ and 3.8 $\mu g/L$ while all other wells were $< 1.9 \ \mu g/L$.

<u>MW-OU1-87-A Extraction Region (South-Central FONR between EW-OU1-53-A and PZ-OU1-49-A1)</u>

• TCE ranged between 2.6 μ g/L and 11 μ g/L. Four wells along the "spine" of plume showed 8 μ g/L to 11 μ g/L while all others <5.0 μ g/L.

Central Extraction Region (Pumping wells EW-OU1-71-A, MW-OU1-85-A and MW-OU1-46-AD)

All monitoring wells were <2.4 μg/L. Pumping well EW-OU1-71-A showed TCE at 15 μg/L while MW-OU1-85-A had TCE at 4.3 μg/L. The MW-OU1-46-AD sample was 2.9 μg/L.

Boundary Wells Extraction Region (Between MW-OU1-46-AD and boundary road extraction wells)

• Except for the two wells screened only in the Channel Fill (MW-OU1-61-A and MW-OU1-67-A) and wells MW-OU1-50-A and MW-OU1-82-A all wells were non-detect or less than the 0.5 μ g/L method detection limit. Only MW-OU1-50 (11 μ g/L) and MW-OU1-61-A (7.1 μ g/L) exceeded the ACL. Recent data suggests the start of a declining trend at these locations. TCE was $\leq 1.8 \mu$ g/L at MW-OU1-82-A and MW-OU1-67-A.

Well MW-OU1-04-A was not sampled during the third quarter. The well was inaccessible because the LBNL research project was recently completed and the pumps were not operating. The installed LBNL equipment had not yet been removed and we could not gain access to collect a sample. LBNL staff subsequently removed their equipment and HGL installed a PDB on 27 October 2008. This well will be sampled again during the fourth quarter LTM in December 2008.

3. <u>NWTS Operation Relative to Carbon Change-out</u>

HGL submitted a letter to the U.S. Army that summarized the agreement reached at the September BCT meeting concerning the criteria for carbon change-out based on cis-1,2-DCE concentrations in the performance sample routinely collected at the mid-point of the granular activated carbon (GAC) process (i.e., as influent to the lag vessels). As agreed, the carbon will be changed if the TCE concentration in the mid-point sample exceeds 0.5 μ g/L or if the cis-1,2-DCE concentration exceeds 3.0 μ g/L in the NWTS effluent.

TCE was detected at 0.19 μ g/L in the mid-point NWTS sample in the September 2008 sampling event. If this detection is confirmed and exceeds the 0.50 μ g/L threshold in the November 2008 performance monitoring sample event, then HGL will initiate a carbon change-out for the lead GAC units.

4. <u>Other</u>

Attendees are shown in Attachment A.

					Table	1					
TCE and Cis-1,2-DCE in OU-1 FONR Groundwater Remediation System - 2008 Performance Monitoring											
				E-4	XX 7 - 11						
Sample Date	MW-87	EW-71	MW-85	Extractio MW-46AD	EW-60	EW-62	EW-63	EW-66	INFLUENT	NWTS MIDPOINT	EFFLUENT
Sample Date	11111-07	E/(-/1	11111-05			TCE (µg/L)	L 11-05	E 11-00	INFLUENT		EFFLUENT
1/18/2008	11	11	8.9	8.2	ND	ND	ND	1.2	6.0	ND	ND
3/18/2008	11	11	6.7	5.8	0.29	ND	ND	1.2	5.6	ND	ND
5/27/2008	9.7	18	2.5	6.1	ND	ND	ND	1.8	3.9	ND	ND
7/21/2008	9.1	14	4.4	3.4	0.78	ND	ND	1.4	3.6	ND	ND
9/29/2008	9.3	15	4.3	2.9	0.90	ND	ND	1.7	3.8	.19 J	ND
		u.		1	cis-	1,2-DCE (µg	/L)	r.			
1/18/2008	1.20	1.40	1.00	1.20	ND	ND	ND	0.11	0.66	ND	ND
3/18/2008	1.20	1.50	0.74	0.63	ND	ND	ND	ND	0.59	0.11	ND
5/27/2008	0.88	2.10	0.26	0.74	ND	ND	ND	ND	0.36	0.21	ND
7/21/2008	0.80	1.50	0.52	0.37	ND	ND	ND	ND	0.41	0.34	ND
9/29/2008	0.99	1.60	0.54	.30 J	ND	ND	ND	.13 J	0.42	0.42	.12J
	italic	<mark>s indicate d</mark> a	ita not yet va	alidated							

ATTACHMENT A

ATTENDANCE LIST

SUBJECT: <u>HTW – BCT Meeting</u> <u>November 12, 2008</u> <u>1:00 p.m Fort Ord BRAC office</u>

Check (✓)	Name	Organization	Phone	E-mail address		
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ston	Peter Kelsall	Shaw E&I	831/883-5810 ext. 810	Peter.Kelsall@shawgrp.com		
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	Eric Schmidt	Shaw E&I	831/883-5809	Eric.Schmidt@shawgrp.com		
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M	Marc Edwards	COE	831/242-4828	Marc.A.Edwards@usace.army.mil		
	Michael Taraszki	MACTEC E&C	415/884-3325	mdtaraski@mactec.com		
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	Christopher Prescott	USACE		Christopher.E.Prescott@usace.army.mil		
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Those	Roy Evans	HGL	303/984-1167 xt. 5	revans@hgl.com		

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Check (√)	Name	Organization	Phone	E-mail address		
	Scott GABLE	HGL	916 3353586	sgable engl.com		