

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

Fort Ord HTW BCT Meeting
1:00 PM, 08 July 2009
Monterey, California

MEETING MINUTES (prepared by HydroGeoLogic, Inc.)

1. Groundwater Remediation System Update

The Northwest Treatment System (NWTs) has operated continuously since the last update at the BCT meeting on 26 June 2009. Total volume pumped through 01 July 2009 is 99,161,810 gallons with an average weekly treatment rate of approximately 78 gallons per minute (gpm).

The routine bimonthly performance samples from the treatment system and extraction wells were collected on 11 June 2009. Preliminary results have not yet been received. Through 01 July 2009, the NWTs has removed approximately 3.3 pounds (0.27 gallons) of trichloroethene (TCE) and 0.3 pounds (0.03 gallons) of cis-1,2-dichloroethene. This estimate will be adjusted after the 11 June 2009 sampling results are received. Previous results are summarized in Table 1. The next round of performance samples will be collected in September.

2. Long-term Monitoring Update

The next long-term monitoring (LTM) sample event is scheduled for September 2009. Peak TCE concentrations have continued to decline. The maximum TCE concentration reported in the first quarter 2009 LTM event was 10 micrograms per liter at well EW-OU1-53-A. The first quarter 2009 LTM analytical results are shown in the attached Figure 7 from the First Quarter 2009 Groundwater Monitoring Report.

3. Report Submittals

The 2008 First Quarter and 2007 Annual and Fourth Quarter Groundwater Monitoring Reports are in preparation and planned for submittal in July. These reports are secondary deliverables.

Table 2 summarizes the status of near-term deliverables. Recent submittals include:

- Draft 2008 Annual and Fourth Quarter Groundwater Monitoring Report (06 May 2009)
 - Comments due 60 days after submittal of 2008 First Quarter report
- Draft Final FONR System Construction Report (primary deliverable; 28 May 2009)
 - Comments due this month
- First Quarter 2009 Groundwater Monitoring Report (22 June 2009)
 - Comments due in August

The DTSC comments on the Final Interim Hydraulic Control Pilot Project Evaluation Report have been resolved. A letter indicating that that no further edits are needed and corrected cover pages will be submitted this week.

4. Other

BCT draft meeting minutes (April and May, 2009) for OU-1 on-Post remediation were distributed on 19 May for review. No edits are needed before posting as final. Attendees are shown in Attachment A.

Table 1

TCE and Cis-1,2-DCE in OU-1 FONR Groundwater Remediation System - Performance Monitoring

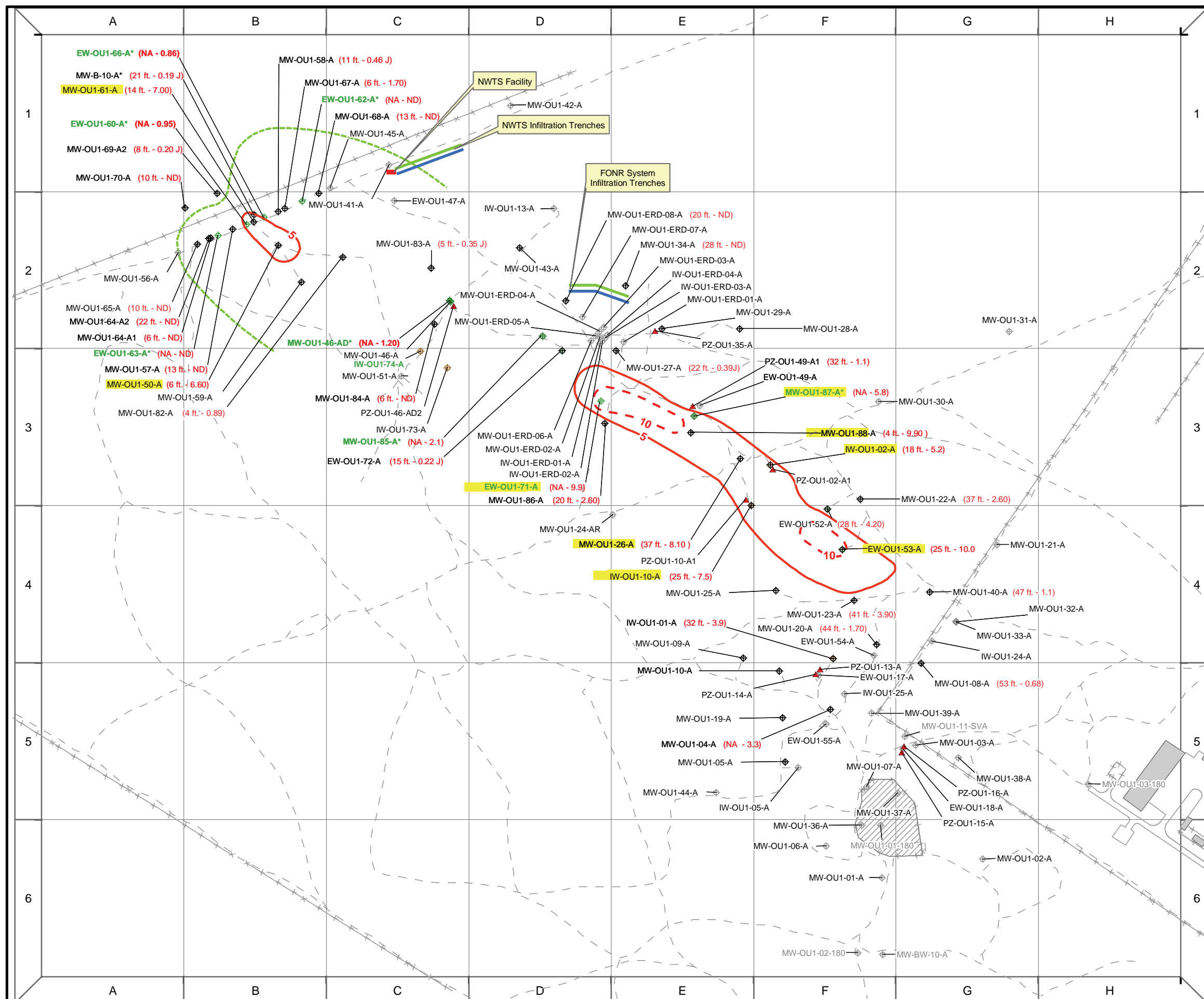
BCT Meeting for Former Fort Ord, Marina CA - 08 July 2009

Sample Date	Extraction Well								NWTS		
	Began Operation October 2007				Began Operation July 2006				INFLUENT	MIDPOINT	EFFLUENT
	MW-87	EW-71	MW-85	MW-46AD	EW-60	EW-62	EW-63	EW-66			
TCE (µg/L)											
11/9/2007	16	13	19	14	ND	ND	ND	1.7	11	ND	ND
1/18/2008	11	11	8.9	8.2	ND	ND	ND	1.2	6.0	ND	ND
3/18/2008	11	14	6.7	5.8	0.29	ND	ND	1.5	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	J 15	J 4.3	J 2.9	J 0.90	J ND	J ND	J 1.7	J 3.8	J 0.19	J ND
12/1/2008	5.8	11	2.6	1.6	0.82	ND	ND	0.91	2.7	0.35	J ND
1/26/2009	5.9	10	2.2	1.2	0.48	J ND	ND	0.78	2.4	ND	ND
3/9/2009	5.8	9.9	2.1	1.2	0.95	ND	ND	0.86	2.7	ND	ND
cis-1,2-DCE (µg/L)											
11/9/2007	1.9	1.6	2.3	1.70	ND	ND	ND	ND	1.3	ND	ND
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	0.30	ND	ND	ND	0.13	0.42	0.42	0.12
12/1/2008	0.67	1.30	0.33	0.21	J ND	J ND	J ND	ND	0.27	J 0.37	J 0.19
1/26/2009	0.63	1.20	0.29	J 0.12	J ND	J ND	ND	ND	0.26	J 0.24	J ND
3/9/2009	0.62	1.20	0.29	J 0.13	J ND	J ND	ND	ND	0.23	J 0.26	J ND
Bold font indicates concentration > ACL											

Table 2
Deliverable Schedule
BCT Meeting for Former Fort Ord, Marina CA - June 2009

Deliverable	Scheduled Submittal	Status / Remarks
<i>Primary Deliverables</i>		
Final Interim Hydraulic Control Pilot Project Evaluation Report	June-2009	Comments resolved. Edits to previous version will affect only Title page and submittal date.
Agency Comments	NA	
Draft Final FONR Groundwater Remediation System Construction Report	May-2009	Submitted 28 May 2009
Agency Comments	July-2009	Comment period underway
Final FONR Groundwater Remediation System Construction Report	August-2009	
Agency Comments	NA	
<i>Secondary Deliverables</i>		
Draft 2007 Annual and Fourth Quarter Groundwater Monitoring Report	July-2009	
Agency Comments	Sept-2009	
Final 2007 Annual and Fourth Quarter Groundwater Monitoring Report	October-2009	
Agency Comments	NA	
First Quarter 2008 Groundwater Monitoring Report	July-2009	
Agency Comments	Sept-2009	
Third Quarter 2008 Groundwater Monitoring Report	March-2009	Submitted 19 March 2009
Agency Comments	May-2009	Awaiting comments
Draft 2008 Annual and Fourth Quarter Groundwater Monitoring Report	May-2009	Submitted 06 May 2009
Agency Comments	Sept-2009	Comments tied to 2008 Q1 Report
Final 2008 Annual and Fourth Quarter Groundwater Monitoring Report	October-2009	
Agency Comments	NA	
First Quarter 2009 Groundwater Monitoring Report	June-2009	Submitted 22 June 2009
Agency Comments	August-2009	Comment period underway
Draft 2009 Annual and Fourth Quarter Groundwater Monitoring Report	December-2009	
Agency Comments	February-2010	
Final 2009 Annual and Fourth Quarter Groundwater Monitoring Report	March-2010	
Agency Comments	NA	

Figure 7
OU-1 FONR
TCE Concentrations in Groundwater
March 2009



Legend

- ⊕ Monitoring Well
- ⊕ Extraction Well
- ⊕ Bold green font indicates active well.
- ⊕ Injection Well
- ⊕ Bold green font indicates active well.
- ⊕ Well Not Sampled
- ▲ Piezometer
- MW-OU1-87-A Locations With March 2009 TCE Concentration At Or Above ACL (5 µg/L)
- 5- TCE Contour (µg/L) Based on March 2009 Data
- - - Inferred Extent – See Notes Below
- MW-OU1-87-A Well ID
- (42 ft. - 9.30) March 2009 TCE Result (µg/L)
- Sample Elevation (feet above mean sea level)
- - - Trail/Unimproved Road
- ××× Fence
- - - Estimated Northwest Treatment System Capture Zone
- Former Fire Drill Area

Notes:
 Units of TCE concentrations are in ppb
 ND = Non-detect
 NA = Depth is not applicable - sample is from pumping well
 J = Estimated Value
 µg/L = Micrograms per liter
 Wells shown with an asterisk were not used to develop contour boundaries. Active extraction wells were typically not included because the data is not location-specific. Data from extraction well EW-OU1-71-A was used to infer the 10 µg/L TCE contour (shown as dashed line) because the results at that well (9.9 µg/L) and at MW-OU1-88-A (also 9.9 µg/L) suggest higher TCE concentrations in that vicinity. The TCE concentration at EW-OU1-53-A was 10 µg/L and nearby well data was less than 10 µg/L. Consequently, the 10 µg/L contour enclosing well EW-OU1-53-A was also dashed because the extent is inferred from recent results. Data from MW-B-10-A was excluded because the well does not fully penetrate the A-Aquifer. Well names appearing in gray were not included in OU1-Groundwater Monitoring Program. Wells for which no data are posted were not sampled.

ATTACHMENT A
ATTENDANCE LIST

SUBJECT: HTW - BCT Meeting**July 8, 2009****1:00 BRAC Conference Room**

Check (✓)	Name	Organization	Phone	E-mail address
<i>Done</i>	Kate Burger	DTSC	916/255-6537	kburger@dtsc.ca.gov
✓	Franklin Mark	DTSC	916/255-3584	FMark@dtsc.ca.gov
	Steve Sterling	DTSC	916/255-3739	SSterlin@dtsc.ca.gov
<i>[Signature]</i>	Martin Hausladen	U.S. EPA	415/972-3007	Hausladen.martin@epamail.epa.gov
<i>[Signature]</i>	Lewis Mitani	U.S. EPA	415/972-3032	Mitani.lewis@epa.gov
<i>DGH</i>	Grant Himebaugh	RWQCB	805/542-4636	Ghimebaugh@waterboards.ca.gov
	Bill Mabey	TechLaw Inc	415/281-8730	bmabey@techlawinc.com
<i>[Signature]</i>	Gail Youngblood	Fort Ord BRAC	831/242-7918	gail.youngblood@us.army.mil
<i>[Signature]</i>	Derek Lieberman	Ahtna	831/242-4873	dlieberman@ahtnaes.com
<i>[Signature]</i>	Bill Collins	Fort Ord BRAC	831/242-7920	William.K.Collins@us.army.mil
<i>[Signature]</i>	Rob Robinson	Fort Ord BRAC	831/242-7900	clinton.w.robinson@us.army.mil
	George Siller	COE	916/557-7418	George.L.Siller@usace.army.mil

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Check (✓)	Name	Organization	Phone	E-mail address
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<i>Am</i>	Jen Moser	GEM/Shaw E&I	831/883-5812	<u>Jen.moser@shawgrp.com</u>
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	Kelly O'Meara	Ahtna	916/372-2000	<u>komeara@ahtnaes.com</u>
	Christopher Prescott	USACE	916/557-7227	Christopher.E.Prescott@usace.army.mil
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