MEETING MINUTES
(prepared by HydroGeoLogic, Inc.)
Operable Unit 1 On-Post

Fort Ord Hazardous and Toxic Waste Base Closure Team Meeting
12 May 2010, 1:30 PM
Monterey, California

1. Groundwater Remediation System Update

HGL provided the following summary of system operations:

The Northwest Treatment System (NWTS) was out of service during two periods:

- PG&E power outages on 21 and 22 April took the plant down for approximately 48 hours between approximately 1 PM on the 21st through 1 PM on the 23rd.

- On 26 April a pipe leak was detected in the piping to the lead carbon units and the system shut down at approximately 5:40 PM. The pipe was repaired and operations were restored using only the lead GAC units at approximately 4:30 PM on 29 April. Repairs to the cracked pipe on the lag GAC units (leak detected on 22 March) were completed and these units returned to service on 30 April.

The injection pump software problem is also completed. HGL had temporarily increased pumping from MW-OU1-85-A from approximately 15 gallons per minute (gpm) to 30 gpm in attempt to improve injection pump performance pending software repairs. The pumping rate has been lowered back to 15 gpm. The pressure switch and EW-OU1-60-A fan repairs are awaiting parts. Extraction well EW-OU1-60-A has not operated since approximately 24 March.

Preliminary laboratory analytical results from the March 2010 performance sampling effort have been received and are shown in Table 1 (provided as a handout). The trichloroethylene (TCE) information in Table 1 was discussed during the April BCT meeting and that discussion is summarized below (italicized) for reference:

- *TCE exceeded the aquifer cleanup level (ACL) only at the two extraction wells nearest to the original source area (EW-OU1-71-A and MW-OU1-87-A). TCE concentrations increased by 1 microgram per liter (µg/L) at EW-OU1-71-A to 8.5 µg/L and rose slightly from 6.9 µg/L to 7.2 µg/L at MW-OU1-87-A.*
- *TCE concentrations at EW-OU1-66-A, MW-OU1-85-A and MW-OU1-46-AD continued to decline and all were less than 1 microgram per liter (µg/L). Concentrations at the latter two wells are approaching the detection limit (0.62 µg/L AND 0.55 µg/L, respectively.)*
- *EW-OU1-60-A was sampled and TCE was not detected. This well had not been sampled since June 2009.*
- *The influent TCE to the treatment plant was stable at 2.3 µg/L and the effluent concentration remained non-detect. Cis-1,2-dichloroethene (Cis-1,2-DCE) was present in the effluent at 0.13 J µg/L (well below the carbon change criteria of 3.0 µg/L.*

Thus far in 2010, the NWTS has removed approximately 0.16 pounds of trichloroethene (TCE). Since system start-up in 2006, the NWTS has removed approximately 4.6 pounds of total volatile organic compounds.

Extraction wells EW-OU1-62-A and EW-OU1-63-A on the northwest boundary were taken out of service in January as discussed in previous BCT meetings. Wells MW-OU1-57-A and MW-OU1-58-A were designated as replacement samples but were inadvertently omitted from the sampling program in late March. These wells were sampled on 03 May. HGL noted that TCE has not been detected in wells MW-OU1-57-A and MW-OU1-58-A for quite some time. Analytical results will be reported when available and included in the 2010 First Quarter Groundwater Monitoring Report.

2. Long-term Monitoring Update

Preliminary laboratory analytical results from the March 2010 long-term monitoring (LTM) sampling event were received the day before the April Base Closure Team (BCT) meeting and were discussed at that time. These results are shown in the attached Figure 7. HGL pointed out that for the first time there are no 10 µg/L contours shown for TCE. A brief summary of these results as discussed at the April BCT meeting is provided below (italicized) for reference:

- *The maximum TCE concentration reported in the first quarter 2010 LTM event was 7.8 µg/L at well EW-OU1-53-A. This is a decline from the 11 µg/L to 10 µg/L detected during 2009.*

- *Un-validated sample results for the long term monitoring semi-annual sampling showed general declines in TCE concentration at most wells in comparison to the previous samples collected in September 2009. TCE increased only at the following locations:*

    - *MW-OU1-61-A from 9.9 µg/L to 15.0 µg/L*

    - *EW-OU1-52-A from 5.0 µg/L to 6.5 µg/L*

    - *MW-OU1-82-A from 0.88 µg/L to 1.4 µg/L*

    - *MW-OU1-23-A from 3.8 µg/L to 3.9 µg/L*

- *TCE concentrations decreased at 11 wells and remained at non-detect at off-Post well MW-OU1-70-A. The more notable decreases included the following wells within the trailing portion of the plume (listed in order of increasing distance from the southernmost [i.e., nearest] extraction well):*

    - *MW-OU1-86-A from 2.6 µg/L to 1.2 µg/L*

    - *MW-OU1-26-A from 7.7 µg/L to 6.4 µg/L*

    - *IW-OU1-10-A from 8.2 µg/L to 6.0 µg/L*

    - *EW-OU1-53-A (this well and well MW-OU1-23-A define the trailing edge of the plume) from 10.0 µg/L to 7.8 µg/L*

3. Report Submittals

Table 2 summarizes the status of scheduled reports through 2010. This table was provided as a handout. The Draft 2009 Annual and Third Quarter Groundwater Monitoring Report was submitted during the second week in February and the regulatory agencies had no comments. HGL also received comments from the Fort Ord Community Action Group on that document and is working with the Army to address those comments.

4. Other

4a) 2010 Rare Plant Survey

The U.S. Fish & Wildlife Service has not responded to the recommendation that the 2010 rare plant monitoring be suspended. Given that the optimal survey period for obtaining representative plant population counts has passed, the Operable Unit 1 (OU-1) survey will not be performed this year. However, HGL did survey the reference plot and will incorporate that data into the 2010 Annual Fort Ord Natural Reserve Impact Report.

4b) IW-OU1-10-A System Expansion

HGL has received bids for construction of the proposed remediation system expansion and is working with the Army to implement this project.

4c) Previous Meeting Minutes

No comments were received on the Draft April BCT OU-1 meeting minutes prior to this meeting. HGL indicated that these minutes are now accepted as final.

There were no other discussion items related to the OU-1 On-Post remedial action.

Table 1

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

BCT Meeting for Former Fort Ord, at Monterey CA - May 2010

Sample Date	FONR Extraction Well (listed from south to north) Began Operation October 2007								Boundary Extraction Well (listed from west to east) Began Operation July 2006								NWTS					
	MW-87		EW-71		MW-85		MW-46AD		EW-63		EW-60		EW-66		EW-62		INFLUENT		MIDPOINT		EFFLUENT	
TCE (µg/L)																						
11/9/2007	**16**		**13**		**19**		**14**		ND		ND		1.7		ND		**11**		ND		ND	
1/18/2008	**11**		**11**		**8.9**		**8.2**		ND		ND		1.2		ND		**6.0**		ND		ND	
3/18/2008	**11**		**14**		**6.7**		**5.8**		ND		0.29		1.5		ND		**5.6**		ND		ND	
5/27/2008	**9.7**		**18**		2.5		**6.1**		ND		ND		1.8		ND		3.9		ND		ND	
7/21/2008	**9.1**		**14**		4.4		3.4		ND		0.78		1.4		ND		3.6		ND		ND	
9/29/2008	**9.3**	J	**15**	J	4.3	J	2.9	J	ND		0.90	J	1.7	J	ND		3.8	J	0.19	J	ND	
12/1/2008	**5.8**		**11**		2.6		1.6		ND		0.82		0.91		ND		2.7		0.35	J	ND	
1/26/2009	**5.9**		**10**		2.2		1.2		ND		0.48	J	0.78		ND		2.4		ND		ND	
3/9/2009	**5.8**		**9.9**		2.1		1.2		ND		0.95		0.86		ND		2.7		ND		ND	
6/11/2009	**6.9**		**11**		2.4		1.5		ND		0.88		1.7		ND		2.6		0.14	J	ND	
9/15/2009	**6.8**		**9.4**		1.7		0.78		ND		inactive		1.1		0.036	J	2.3		0.35	J	ND	
12/14/2009	**6.9**		**7.5**		0.84		not sampled		not sampled		inactive		0.94		not sampled		2.3		0.65	J	ND	
3/22/2010	***7.2***		***8.5***		*0.62*		*0.55*		inactive		*ND*		*0.90*		inactive		*2.3*		*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		0.11		ND		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		0.13		ND		0.42		0.42		0.12	
12/1/2008	0.67		1.30		0.33		0.21	J	ND		ND		ND		ND		0.27	J	0.37	J	0.19	J
1/26/2009	0.63		1.20		0.29	J	0.12	J	ND		ND		ND		ND		0.26	J	0.24	J	ND	
3/9/2009	0.62		1.20		0.29	J	0.13	J	ND		ND		ND		ND		0.23	J	0.26	J	ND	
6/11/2009	0.71		1.10		0.30	J	0.13	J	ND		ND		0.14	J	ND		0.24	J	0.28	J	ND	
9/15/2009	0.80		1.00		0.22	J	0.08	J	ND		inactive		0.03	J	ND		0.22	J	0.37	J	0.03	J
12/14/2009	0.67		0.65		0.10	J	not sampled		not sampled		inactive		ND	J	not sampled		0.21	J	0.30	J	0.11	J
3/22/2010	*0.67*		*0.79*		*ND*		*ND*		inactive		*ND*		*ND*		inactive		*0.20*	*J*	*0.11*	*J*	*0.13*	*J*

Italics (if used) indicate data not yet validated

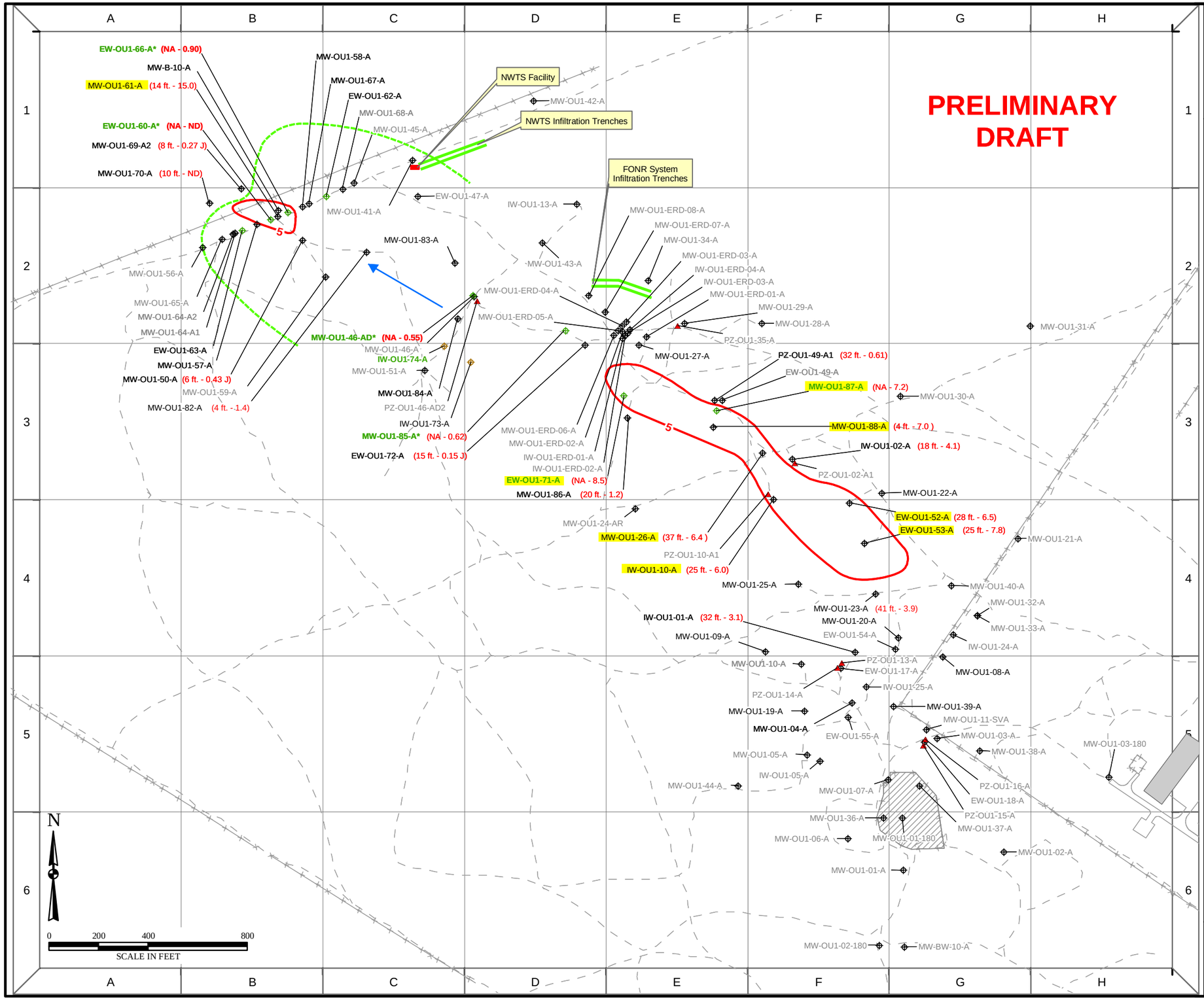
Bold font indicates concentration > ACL

Table 2
Deliverable Schedule
IPM / BCT Meeting for Former Fort Ord, Marina CA –May 2010

Deliverable	Scheduled Submittal	Status / Remarks (Bold font indicates submittal)
Primary Deliverables		
None Scheduled for 2010		
Secondary Deliverables		
Draft 2007 Annual and Fourth Quarter Groundwater Monitoring Report	June-2010	In Progress.
Agency Comments	August-2010	
Final 2007 Annual and Fourth Quarter Groundwater Monitoring Report	September-2010	
Agency Comments	NA	
First Quarter 2008 Groundwater Monitoring Report	**July-2009**	**Submitted 21 August 2009**
Agency Comments	**NA**	
Third Quarter 2008 Groundwater Monitoring Report	**March-2009**	**Submitted 19 March 2009**
Agency Comments	**May-2009**	**No Comment**
Draft 2008 Annual and Fourth Quarter Groundwater Monitoring Report	**May-2009**	**Comments received on 2nd through 4th Quarter reports**
Agency Comments	**Sept-2009**	**Received**
Final 2008 Annual and Fourth Quarter Groundwater Monitoring Report	**December-2009**	**Submitted 18 December 2009**
Agency Comments	**NA**	
First Quarter 2009 Groundwater Monitoring Report	**June-2009**	**Submitted 22 June 2009**
Agency Comments	**August-2009**	**No Comment**
Draft 2009 Annual and Third Quarter Groundwater Monitoring Report	**February-2010**	**Submitted 08 February 2009**
Agency Comments	April-2010	Agencies approved changes to 2010 sample frequency with no other comments. FOCAG comments are being addressed.
Final 2009 Annual and Third Quarter Groundwater Monitoring Report	May-2010	
Agency Comments	NA	
Final Rebound Evaluation Report	June-2010	In Progress.
Agency Comments	NA	

Bold denotes completed submittals.

Figure 7
OU-1 FONR
TCE Concentrations in Groundwater
March 2010



Legend

- Monitoring Well
- Extraction Well
  Bold green font indicates active well
- Injection Well
  Bold green font indicates active well
- Piezometer
- MW-OU1-88-A — Locations With March 2010 TCE Concentration At Or Above ACL (5 µg/L)
- 5 — TCE Contour (µg/L)
  Based on March 2010 Data
- MW-OU1-88-A (4 ft. - 7.0) — Well ID; March 2010 TCE Result (µg/L); Sample Elevation (feet above mean sea level)
- Trail/Unimproved Road
- Fence
- Treated Water Infiltration Trench
- Estimated Northwest Treatment System Capture Zone
- Former Fire Drill Area
- General Direction of Groundwater Flow

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 wells EW-OU1-71-A and MW-OU1-87-A were used to infer the 5 ug/L TCE contour because the results at those wells suggest higher TCE concentrations nearby.
Well names appearing in gray were not included in OU1-Groundwater Monitoring Program.
Wells for which no data are posted were not sampled.

X:/OMA009/FT_Ord/TO_201/Maps/GW_Monitoring_Y7Q1/TCE_in_GW_Mar_2010.mxd
Source: HGL
05/03/10 PD

HydroGeoLogic, Inc