

SUBJECT: HTW - BCT Meeting**June 26, 2009****10:00 BRAC Conference Room**

Check (✓)	Name	Organization	Phone	E-mail address
Phoe	Kate Burger	DTSC	916/255-6537	kburger@dtsc.ca.gov
(JD)	Franklin Mark	DTSC	916/255-3584	FMark@dtsc.ca.gov
MA	Martin Hausladen	U.S. EPA	415/972-3007	Hausladen.martin@epamail.epa.gov
JLM	Lewis Mitani	U.S. EPA	415/972-3032	Mitani.lewis@epa.gov
DBH	Grant Himebaugh	RWQCB	805/542-4636	Ghimebaugh@waterboards.ca.gov
WMM	Bill Mabey	TechLaw Inc	415/281-8730	bmabey@techlawinc.com
Yey	Gail Youngblood	Fort Ord BRAC	831/242-7918	gail.youngblood@us.army.mil
DJL	Derek Lieberman	Ahtna	831/242-4873	dlieberman@ahтнаes.com
WKC	Bill Collins	Fort Ord BRAC	831/242-7920	William.K.Collins@us.army.mil
RA	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
DE	David Eisen	COE	831/393-9692	David.Eisen@usace.army.mil

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Check (✓)	Name	Organization	Phone	E-mail address
	Mark Eldridge	AEC	410/436-6325	Mark.h.eldridge@us.army.mil
<i>PK</i>	Peter Kelsall	Shaw E&I	831/883-5810 ext. 810	Peter.Kelsall@shawgrp.com
<i>DK</i>	David Kelly	Shaw E&I	925/288-2321	David.kelly@shawgrp.com
<i>JM</i>	Jen Moser	GEM/Shaw E&I	831/883-5812	Jen.moser@shawgrp.com
	Eric Schmidt	Shaw E&I	831/883-5809	Eric.Schmidt@shawgrp.com
<i>ET</i>	Ed Ticken	MACTEC E&C	707/793-3882	ejticken@mactec.com
	Marc Edwards	COE	831/242-4828	Marc.A.Edwards@usace.army.mil
	Michael Taraszki	MACTEC E&C	510/628-3222	mdtaraski@mactec.com
	Chuck Holman	Ahtna	916/372-2000	cholman@ahtnagov.com
	Kelly O'Meara	Ahtna	916/372-2000	komeara@ahtnaes.com
	Christopher Prescott	USACE	916/557-7227	Christopher.E.Prescott@usace.army.mil
	Melissa Broadston	Fort Ord BRAC	831/393-1284	Melissa.broadston@us.army.mil
	Roy Evans	HGL	303/984-1167 xt. 5	revans@hgl.com
<i>MS</i>	Mary Snow	TechLaw	415 281 8730	msnow@techlawinc.com

HTW BCT Meeting

June 2009

Item	Action	Comment
OU1 Groundwater Remediation	Status Update	HGL
OU1 Off-Site	Status Update	
OU2 and 2/12 Treatment Systems	Status Update	
Other Groundwater Issues	Status Update	MOCO change in well permit process
OUCTP	Status Update	
Groundwater Treatment System Optimization	Status Update	
OU2 Landfill	Status Update	
Basewide Range Assessment	Status Update	No Action Memos
Site 39 ROD Amendment RDRA Work Plan	Status Update	
FFA Schedule	Status Update	
FOST/FOSET Issues	Status Update	
Calendar Update	Update	

Thermal Treatment Unit Operation Summary

TREATMENT SYSTEM			
Treatment System Start Date:		6/4/2001	
TTU Start Date:		4/4/2006	
Last Reading Date/Time:		6/6/2009	
Historical through 2008:			
Total TTU Hours:		24,048	
Total TTU Hours Operated:		9,743	
% TTU Operation:		40.5%	
Total Pounds of Methane Removed		1,331,230	
Total Pounds of VOCs Removed		154	
Current Year 2009:			
Total Hours:		3,761	
Total Hours Operated:		1,529	
% Operation:		40.7%	
Pounds of Methane Removed		60,623	
Cumulative:			
% TTU Operation (since 4/4/2006):		40.5%	
Total Pounds of Methane Removed (since 6/4/2001):		1,391,853	
EXTRACTION SYSTEM (2009)			
Location	Methane (%) (last instantaneous reading)	Flow Rate (scfm)	% Operational (total for 2009)
MIXED-TTU	39	97	40.7%
Area F			
EW-30	23	1	18.3%
EW-31	37	1	31.4%
EW-32	40	20	40.7%
EW-33	see notes below		38.7%
EW-34	39	25	40.7%
VF-4	54	6	1.9%
Area D			
EW-35	28	21	40.7%
Area E			
EP-36	40	23	23.7%

Notes:

1. Area F vent testing ongoing since 6/3
2. EW-33 disconnected for vent testing

OPERABLE UNIT CARBON TETRACHLORIDE PLUME A-AQUIFER REMEDIAL ACTION

STATUS – June 26, 2009

FIELD WORK

- Installation and development of wells at Areas 1A and 1B complete – January 16
- Well vault and pipeline installation in Preston Park (Area 1B) complete – March 17

SCHEDULE

- Subsequent quarterly monitoring for EISB pilot study conducted under Groundwater Monitoring Program.
- Draft EISB Pilot Study Report (for Agency Review) – March 19. Comments received from DTSC and EPA. Preparing Draft Final version for USACE review– June 30.
- Draft Final RA Work Plan/RD (Appendix A – A-Aquifer) – Distributed on June 9, 2009 with red-line/strike-out version made available to assist Agency review. Comments due July 10, 2009.
- Wellhead piping and electrical installation in Deployment Area 1A ongoing – 95% complete.
- Well installation at Deployment Area 1C planned for mid-July.

DATA (Preliminary)

- None

PROBLEMS/CHANGES

- Drill casing locked up while installing injection well IW-BW-90-A (Deployment Area 1A). Approximately 60 feet of drill casing was lost in the boring. Boring (with steel casing) was grouted to ground surface. New well was installed adjacent to proposed location.

OPERABLE UNIT 1 OFF-SITE GROUNDWATER EXTRACTION PILOT STUDY

STATUS – June 26, 2009

FIELD WORK

- Well construction complete – December 21
- Draft Final OU1 Pilot Study Work Plan distributed – April 22
- Baseline sampling and analysis – June 14
- System construction completed – July 16
- Monitoring well (City of Marina) installation – July 28
- System start-up – August 5
- Extraction Well EW-OU1-92-A shut off – December 11.
- Field Work Variance (FWV) issued to document system shut-off – February 16.
- Groundwater extraction system shut off and rebound testing initiated – February 17.
- Sampled GAC for waste profiling – March 24.
- System restarted (EW-OU1-93-A operating) – April 7.
- Quarterly sampling of monitoring and extraction wells – June 9.

SCHEDULE

- Continue system operation.
- Monthly sampling and analysis through June 2009 (MW-OU1-78-A, MW-OU1-79-A, and MW-OU1-94-A) (last sampled June 9).
- January to March 2009, Quarterly Report being prepared.
- Conduct second rebound testing July. (FWV to be issued to describe rebound test procedure).

DATA (Preliminary)

- Preliminary monitoring data from June 9 and system data through May.

PROBLEMS/CHANGES

- Treated groundwater is being discharged to a discharge basin within the MCWD property. An injection well was not installed.
- One monitoring well has been installed in the City of Marina to determine the downgradient extent of the plume. Well number and location is based on the decision criteria in the Draft Work Plan.
- Extraction Well EW-OU1-92-A shut off due to concerns of potential impact to OU1 On-Site GWETS plume capture.
- GWETS was shut off and rebound testing initiated because concentrations of TCE in all off-site wells are below Aquifer Cleanup Levels.
- GWETS restarted because TCE concentration in EW-OU1-93-A rebounded to 7.4 µg/L. TCE concentration in all other monitoring wells below detection limit.

Summary of Operable Unit 1 Off-Site Monitoring Well Analytical Results

Well Identification	Elevation (ft amsl)	TCE ^a March 28-30, 2006 (µg/L)	TCE May 4, 2006 (µg/L)	TCE May 23, 2006 (µg/L)	TCE September 25, 2006 ^b (µg/L)	TCE Feb 2 & 6, 2007 (µg/L)	TCE April 3, 2007 (µg/L)	TCE May 22, 2007 (µg/L)	TCE September 25, 2007 (µg/L)	TCE December 26, 2007 (µg/L)	TCE February 27, 2008 (µg/L)	
MW-OUI-75A	35.87	18.6	2.1	1.7	0.28J	<0.5	<0.5	<0.5J	<0.5	<0.5	NS	
MW-OUI-75A	30.87		14	9.8	2.4	0.64	1.6	0.82	0.69	0.45J	NS	
MW-OUI-75A	25.87		15	9.5	2.5	0.58	1.7	0.9	0.75	0.46J	NS	
MW-OUI-75A	20.87		17	9.5	2.6	15	1.6	0.69	0.76	0.47J	NS	
MW-OUI-75A	15.87		20	25(26)	18(18)	0.75	11	12	3.1	2	1.9	NS
MW-OUI-76A	32.33	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	
MW-OUI-76A	27.33		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	
MW-OUI-76A	22.33		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	
MW-OUI-76A	17.33		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	
MW-OUI-76A	12.33		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-OUI-77A	29.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5J ^d	<0.5	<0.5	<0.5	
MW-OUI-77A	24.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5J	<0.5	<0.5	NS	
MW-OUI-77A	19.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-OUI-78A	29.91		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5J	0.54	0.36J	NS
MW-OUI-78A	24.91		1.9	3.2	2.1J ^b	1.4	1.5	0.85	0.6J	0.56	0.46J	NS
MW-OUI-78A	19.91		2.7	2.3(2.1)	1.1(1.2)	1.7	0.94	0.81J	0.91	0.47J	0.37J	
MW-OUI-79A	29.72	<0.5	<0.5	<0.5J ^f	<0.5	<0.5	<0.5	<0.5J	<0.5	<0.5	<0.5	
MW-OUI-79A	24.72		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5J	<0.5	<0.5	NS	
MW-OUI-79A	19.72		<0.5	<0.5	<0.5	0.59	0.67(0.85)	3.5(3.6)	3.8J(4.0J)	2.9(4.5)	1.3(1.8)	3.0(4.1) ^g
MW-OUI-80A	25.32		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS
MW-OUI-80A	20.32		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS
MW-OUI-80A	15.32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	
MW-OUI-80A	10.32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-OUI-81A	21.39	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-OUI-81A	16.39		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	
MW-OUI-81A	11.39		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	
MW-OUI-81A	6.39		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	
MW-OUI-81A	1.39		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5(<0.5)	<0.5	<0.5	<0.5	
MW-OUI-89A	31.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5 ^h	
MW-OUI-89A	24.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-89A	18.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-90A	27.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-90A	22.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-90A	17.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-90A	12.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-90A	7.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-91A	26.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-91A	21.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-91A	16.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-91A	11.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-91A	7.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.5	
MW-OUI-94-A	18.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-OUI-94-A	13.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-OUI-94-A	8.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-OUI-94-A	3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-OUI-94-A	-2.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-OUI-94-A	-7.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	

^a There is no associated discrete depth with the well development samples. These are composites.

^b Data qualified as "J" is estimated with low bias.

^c Data qualified as "UJ" is estimated non-detect due to quality control outliers.

^d An estimated concentration of carbon disulfide detected in this sample (0.75J).

^e cis-1,2-dichloroethylene also detected at 0.26J µg/L.

^f cis-1,2-dichloroethylene also detected at 0.35J µg/L.

^g tetrachloroethylene also detected at 0.27J µg/L.

Detections are shown in bold.

ft amsl denotes feet above mean sea level.

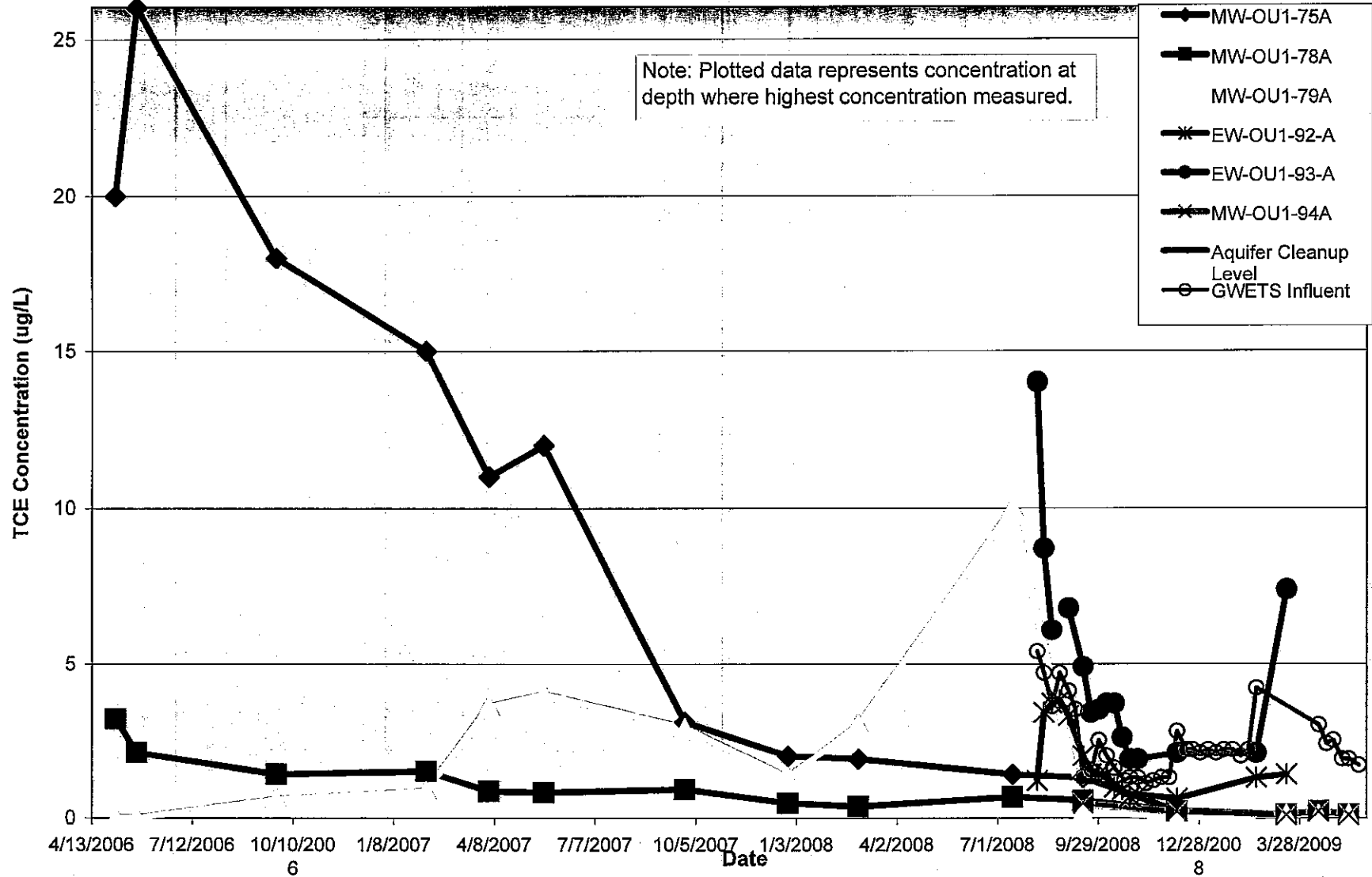
µg/L denotes micrograms per liter.

TCE denotes trichloroethylene.

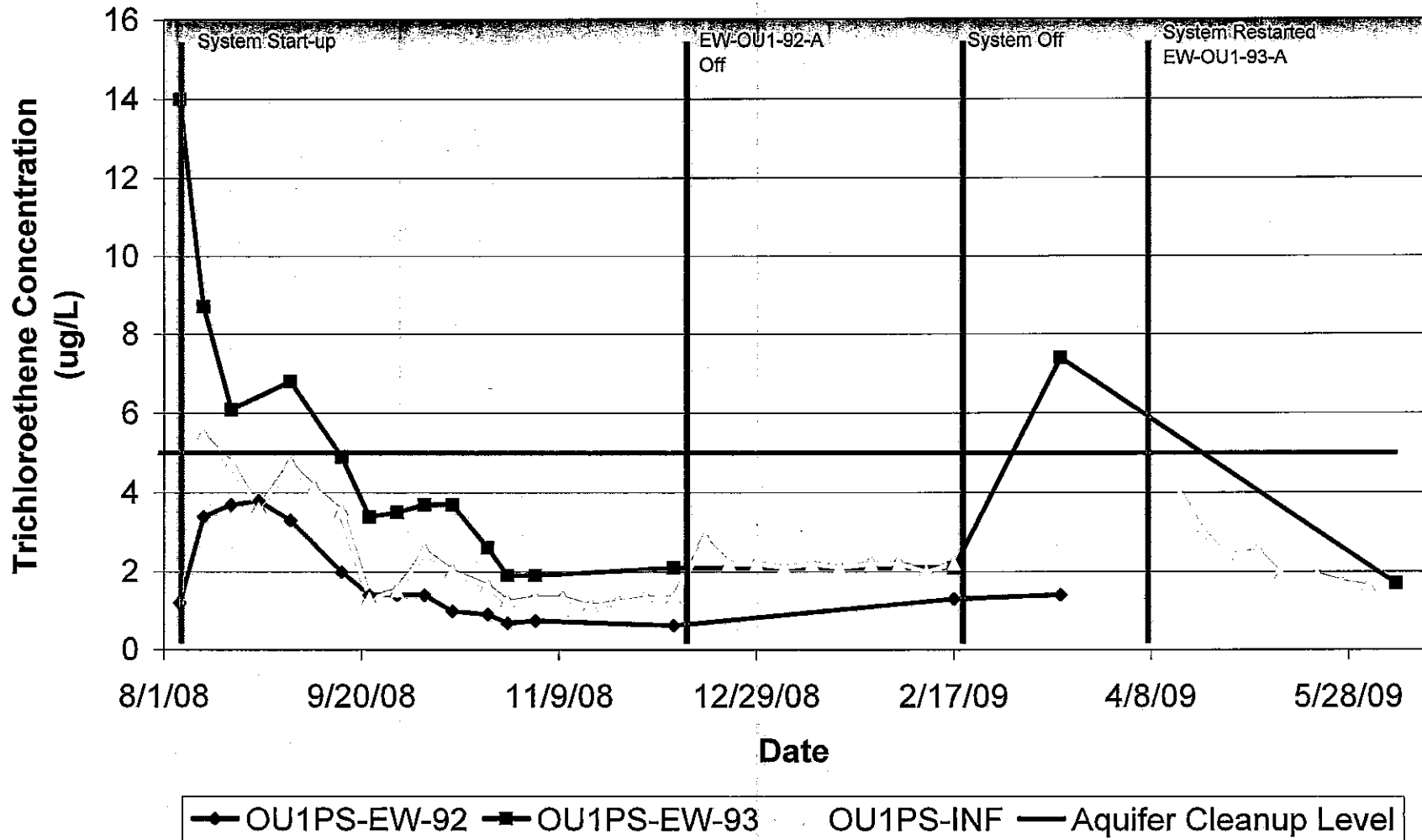
**Summary of Operable Unit 1 Process System
Operating Parameters
May 5, 2009 - June 2, 2009**

	Volume Treated (gallons)	Average Flowrate (gallons per minute)	Percent of Month Online	Mass TCE Removed (pounds)	Notes
EW-OU1-92-A					EW-OU1-92-A taken offline on December 11, 2008 at Army Corp request and was not returned to service based on low TCE concentrations reported for well samples.
May 2009	0	0.0	0	0.0000	
Total	3,575,791			0.0501	
EW-OU1-93-A					Treatment system & EW-OU1-93 -A pump restarted on April 7, 2009, at 12:45, based on sample concentrations reported for EW-OU1-93-A.
May 2009	474,182	11.7	100	0.0080	
Total	3,801,247			0.1095	
System					
May 2009	464,467	11.7	100	0.0079	
Total	7,249,225			0.1502	

Change in TCE Concentration Over Time
OU1 Off-Site Wells



Change in Concentration of Trichloroethene Over Time System Monitoring



**HTW Reports to be issued
Jun - Aug 2009**

handout: 26 Jun 2009 HTW BCT meeting

<u>Grouping</u>	<u>Site</u>	<u>Activity</u>	<u>Document</u>	<u>Proposed Issue Date</u>	<u>Issue Date Status</u>	<u>Agency Comments</u> <u>Due</u>	<u>Company</u>
Primary FFA Documents	RI Sites	Soil Activities	Draft Final RD/RA Work Plan, Site 39 Remediation and OU2 Landfills Area E Construction, Rev 0	Apr-30-09		May-30-09	Shaw E&I
Secondary Documents	OU Carbon Tet Plume	Remedial Investigation	Draft Final Close Out Report, Pilot Soil Vapor Extraction and Treatment, OUCTP, Rev 0	May-30-09			Shaw E&I
Primary FFA Documents	OU Carbon Tet Plume	Remedial Action/Remedial Design	Draft Final OUCTP In Situ Bioremediation Pilot Study Completion Report, Rev 0	Jun-26-09		Jul-30-09	Shaw E&I
Primary FFA Documents	OU Carbon Tet Plume	Remedial Action/Remedial Design	Final OUCTP In Situ Bioremediation Pilot Study Completion Report		TBD		Shaw E&I
Primary FFA Documents	OU 1	Treatment System Activities	Final Interim Hydraulic Control Pilot Project Evaluation Report, OU1 (revised)	Jun-30-09			HydroGeoLogic, Inc.
Secondary Documents	OU 1	Groundwater Activities	Draft 2007 Annual and Fourth Quarter Groundwater Monitoring Report, OU1	Jul-30-09		Sep-30-09	HydroGeoLogic, Inc.
Secondary Documents	OU 1	Groundwater Activities	First Quarter 2008 Groundwater Monitoring Report, OU1 FAAF Fire Drill Area	Jul-30-09			HydroGeoLogic, Inc.
Primary FFA Documents	RI Sites	Soil Activities	Final ROD Amendment RI Site 39 (signature process)	Jul-30-09			MACTEC/BRAC
Secondary Documents	Basewide	Groundwater Activities	Final Annual Report of Quarterly Monitoring, Oct 07 - Sept 08 Basewide Groundwater Monitoring	Aug-30-09			MACTEC E&C
Secondary Documents	OU 1	Groundwater Activities	Final 2008 Annual and Fourth Quarter Groundwater Monitoring Report, OU1	Aug-30-09			HydroGeoLogic, Inc.
Primary FFA Documents	OU 1	Treatment System Activities	Final FONR System Construction Report, OU1	Aug-30-09			HydroGeoLogic, Inc.

(sorted by Proposed Issue Date)

**HTW Reports to be issued
Jun - Aug 2009**

handout: 26 Jun 2009 HTW BCT meeting

<u>Grouping</u>	<u>Site</u>	<u>Activity</u>	<u>Document</u>	<u>Proposed Issue Date</u>	<u>Issue Date Status</u>	<u>Agency Comments Due</u>	<u>Company</u>
Secondary Documents	OU 1	Treatment System Activities	Final Rebound Evaluation Report, OU1	Aug-30-09			HydroGeoLogic, Inc.
Secondary Documents	Basewide	Groundwater Activities	Report of Quarterly Monitoring, Jan-Mar 2009, Basewide Groundwater Monitoring	Aug-30-09			MACTEC E&C
Secondary Documents	OU 2	Landfill Activities	Draft Annual Report, 2008 Operations and Maintenance OU2 Landfills, Rev C		TBD		Shaw E&I

(sorted by Proposed Issue Date)

Upcoming Comments Due on Issued HTW Reports

handout: 26 Jun 2009 HTW BCT meeting

<u>Grouping</u>	<u>Site</u>	<u>Activity</u>	<u>Issued Report</u>	<u>Date Issued</u>	<u>Comments Due</u>	<u>Notes</u>
Secondary Documents	OU 1	Groundwater Activities	Draft 2008 Annual and Fourth Quarter Groundwater Monitoring Report, OU1	May-06-09	Aug-30-09	comments due date is estimated - will be 60 days after 1st quarter 2008 report is issued
Primary FFA Documents	OU 1	Treatment System Activities	Draft Final FONR System Construction Report, OU1	May-28-09	Jul-31-09	
Primary FFA Documents	OU Carbon Tet Plume	Remedial Action/Remedial Design	Draft Final Remedial Action Work Plan, OUCTP, Rev 0	Jun-04-09	Jul-10-09	
Secondary Documents	Basewide	Groundwater Activities	Draft Annual Report of Quarterly Monitoring, Oct 07 - Sept 08	May-05-09	Jul-07-09	
Secondary Documents	OU 1, OU 2, Sites 2/12	Treatment System Activities	Draft Final Annual GTS Operation Data Summary Rpt, Jan-Dec 2008, OU2 and 2/12	Jun-05-09	Jul-06-09	
Secondary Documents	Basewide	Groundwater Activities	Draft Final Tech Memo Groundwater Remediation Exit Strategy, Sites 2/12 and OU2	May-22-09	Jun-30-09	
Primary FFA Documents	Basewide	IA/NOFA	Approval Memorandum Proposed No Action Sites HA-79, HA-92, HA-98, HA-100, HA-121, HA-183	May-13-09	Jun-17-09	
Secondary Documents	OU Carbon Tet Plume	Remedial Investigation	Draft Close Out Report, Pilot Soil Vapor Extraction and Treatment, OUCTP, Rev C	Jan-13-09	Mar-19-09	DTSC comments rec'd 3/17/09. Draft Final report not issued yet.
Primary FFA Documents	RI Sites	Soil Activities	Draft RD/RA Work Plan, Site 39 Remediation and OU2 Landfills Area E Construction, Rev C	Oct-15-08	Dec-22-08	FOEJN comments 12/23/08. EPA has no comments 1/21/09. DTSC comments 3/27/09 and 4/9/09. Draft Final report not issued yet.
Secondary Documents	OU 1	Groundwater Activities	First Quarter 2009 Groundwater Monitoring Report, OU1 FAAF Fire Drill Area	Jun-19-09		As per agreement at April 2009 HTW BCT system performance sampling and LTM program will be semiannual. No second or fourth quarter reports. RTC will be included in annual report.

(sorted by Comments Due Date)

**Former Fort Ord Deliverables Schedule
Sorted by Agency Comments Due**

07-Jul-09

Grouping	Site	Activity	Deliverable	Issue Date	Agency Comments Due	Document Notes
Secondary Documents	OU 1	Groundwater Activities	Draft 2008 Annual and Fourth Quarter Groundwater Monitoring Report, OU1	May-06-09	Sep-30-09	comments due will be 60 days after 1st quarter 2008 report is issued...anticipated to be issued 7/30/09
Secondary Documents	OU 1	Groundwater Activities	First Quarter 2009 Groundwater Monitoring Report, OU1 FAAF Fire Drill Area	Jun-19-09	Sep-30-09	As per agreement at April 2009 HTW BCT system performance sampling and LTM program will be semiannual. No second or fourth quarter reports. RTC will be included in annual report.
Primary FFA Documents	OU 1	Treatment System Activities	Draft Final FONR System Construction Report, OU1	May-28-09	Jul-31-09	
Primary FFA Documents	OU Carbon Tet Plume	Remedial Action/Remedial Design	Draft Final Remedial Action Work Plan, OUCTP, Rev 0	Jun-04-09	Jul-10-09	(Rpt rec'd 6/11/09)
Secondary Documents	Basewide	Groundwater Activities	Draft Annual Report of Quarterly Monitoring, Oct 07 - Sept 08	May-05-09	Jul-07-09	DTSC email 6/29/09 with unsigned letter and comments - hardcopy to follow in the mail.
Primary FFA Documents	OE	After Action Reports	Draft Final Prescribed Burn 2008 MRS-BLM Units 18 and 22, After Action Report	May-29-09	Jul-06-09	issued as stand alone document without Notification Plan and Site Security AARs since no comments were submitted on the AARs. Final version by August 5, 2009.
Primary FFA Documents	OE	After Action Reports	Draft Final MRS-16 MEC Remedial Action Report, Rev 0	May-27-09	Jul-06-09	Layout of Title changed from draft version.
Secondary Documents	OU 1, OU 2, Sites 2/12	Treatment System Activities	Draft Final Annual GTS Operation Data Summary Rpt, Jan-Dec 2008, OU2 and 2/12	Jun-05-09	Jul-06-09	
Primary FFA Documents	OE	Remedial Investigation	Draft Remaining RI/FS Areas Management Plan, Rev C	Apr-30-09	Jun-30-09	agency approves extension on comment period from 6/4 to 6/30 as per May MR BCT discussions. EPA comments 7/1/09.
Primary FFA Documents	OE	Reports	Draft Final Work Plan RD/RA Track 3 Impact Area MRA, MEC Removal	May-25-09	Jun-30-09	BLM comments 6/17/09. EPA comments 7/1/09. FOEJN comments 5/28/09.
Secondary Documents	Basewide	Groundwater Activities	Draft Final Tech Memo Groundwater Remediation Exit Strategy, Sites 2/12 and OU2	May-22-09	Jun-30-09	DTSC email 6/29/09 with unsigned letter and comments - hardcopy to follow in the mail.
Primary FFA Documents	OE	Work Plan	Draft SSWP MEC Remedial Action Non-Burn Areas, Rev C	Apr-09-09	Jun-05-09	EPA comments 6/3/09.
Primary FFA Documents	OE	Work Plan	Draft SSWP MEC Remedial Action MRS-BLM Units 14 and 19, Rev C	Apr-28-09	Jun-04-09	rec'd 5/5/09 from Shaw. BLM comments 6/3/09. EPA comments 6/17/09.
Secondary Documents	OE	Supporting Reports	Draft Prescribed Burn Air Monitoring Report, MRS-BLM Burn Units 18 and 22, Rev C	May-04-09	Jun-04-09	(relates to Appendix L of OE-0626L). FOEJN comments dated 5/28/09 rec'd 6/5/09. EPA has no comments.
ESCA Documents	ESCA	Supporting Documents	Draft Final RD/RA, Land Use Controls Implementation, and O&M Plan, Parker Flats MRA Phase I	Apr-22-09	May-22-09	FORA ESCA DCN: 09595-08-081-006. FOCAG comments 5/21/09.
ESCA Documents	ESCA	Remedial Investigation/Feasibility Study	Draft RI/FS Work Plan, IA Ranges, MOUT, Laguna Seca, DRO/MRY MRA's, FORA ESCA RP (Group 3)	Feb-27-09	Apr-30-09	Army comments 3/25/09. FOCAG comments 3/28/09. FOEJN comments 4/30/09 rec'd 5/1/09. EPA comments 4/24/09.
Secondary Documents	OU Carbon Tet Plume	Remedial Investigation	Draft Close Out Report, Pilot Soil Vapor Extraction and Treatment, OUCTP, Rev C	Jan-13-09	Mar-19-09	DTSC comments rec'd 3/17/09
ESCA Documents	ESCA	Remedial Investigation/Feasibility Study	Draft Final Work Plan, CSUMB Off-Campus and County North MRA's, FORA ESCA RP (Group 2)	Feb-16-09	Mar-18-09	Army comments submitted 3/6/09. EPA comments rec'd 3/13/09. CAG comments dated 3/17/09 and received at AR 3/23/09. FOCAG extension request 2/27/09.

**Former Fort Ord Deliverables Schedule
Sorted by Agency Comments Due**

07-Jul-09

Grouping	Site	Activity	Deliverable	Issue Date	Agency Comments Due	Document Notes
Primary FFA Documents	RI Sites	Soil Activities	Draft RD/RA Work Plan, Site 39 Remediation and OU2 Landfills Area E Construction, Rev C	Oct-15-08	Dec-22-08	FOEJN comments 12/23/08. EPA has no comments 1/21/09. DTSC comments 3/27/09 and 4/9/09.



**Former Fort Ord Monthly Summary Report
OU2 and Sites 2/12 Groundwater Treatment Plants (GWTPs)
Operations and Maintenance**

May 2009

1.0 OU2 GWTP

The following sections describe the operations, key events, and maintenance activities that occurred during the May 2009 reporting period at the OU2 GWTP.

1.1 Operations

The OU2 GWTP was operable 100% of the time during May 2009 (the “reporting period”). Analytical results for the eleven identified chemicals of concern (COCs) for samples collected at TS-OU2-INJ, the discharge point of compliance with respect to contaminant limits, are summarized in Table 1. The results show all COCs were below allowable discharge limits. OU2 GWTP statistics are summarized in Table 2.

Table 1: OU2 Analytical Results at TS-OU2-INJ.

COC	Discharge Limit (µg/L)‡	Sample Date / Analytical Results	
		05/07/2009	05/14/2009
1,1-DCA	5.0*	0.44 J	ND
1,2-DCA	0.50	0.12 J	ND
1,2-DCP	0.50	ND	ND
Benzene	0.50	ND	ND
Carbon Tetrachloride	0.50	ND	ND
Chloroform	2.0*	0.22 J	ND
Cis-1,2-DCE	6.0*	0.56	ND
Methylene Chloride	0.50	ND	ND
PCE	0.50	ND	ND
TCE	0.50	ND	ND
Vinyl Chloride	0.10	ND	ND

NOTES:

- * Discharge limits are the ACLs for injection over the plume.
- J The analyte was positively identified, but the associated numerical value is an approximate concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
- ND The analyte was not detected above the limit of quantitation.

Table 2: OU2 GWTP Treatment Statistics

OU2 Treatment (Month)	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online
May 2009	29,245,250	655	100
Total since October 1995	4.518 billion		

1.2 Key Events at OU2

- May 14 – Removed and replaced granular activated carbon (GAC) in treatment units 600-B and 600-C. Spent GAC trucked off-site for regeneration and reuse.

1.3 Routine Maintenance

Routine maintenance was conducted on the OU2 GWTP, including inspections, maintenance, and system control adjustments throughout the reporting period.

1.4 Maintenance Issues for Resolution

Table 3 identifies the current maintenance issues that are pending or require resolution for the OU2 GWTP.

Table 3: OU2 GWTP Maintenance Issues.

Description	Resolution	Status	Responsible Party
EW-OU2-01-A: pump failure	Remove pump and convert to monitoring well.	Pending	AES
EW-OU2-11-A: biofouled	Disinfect well w/o pulling pump.	Pending	AES
EW-OU2-12-A: low recovery	Redevelop well.	Pending	AES
EW-OU2-14-A: manual only	Take draw-down measurements.	Pending	AES
EW-OU2-15-A: pump failure	Remove pump and convert to monitoring well.	Pending	AES
EW-OU2-16-A: manual only	Lower pump deeper into water column.	Pending	AES
EW-OU2-04-180: no output from pressure transducer.	Replace pressure transducer.	Pending	AES
EW-OU2-05-180: pump failure	Replace pump, rethread drop pipe.	Pending	AES
Leak detection system has not been calibrated.	Calibrate leak detection system.	Pending	AES
Upgrade Site Security	Re-key deadbolts and replace site padlocks; install security camera systems.	Completed	AES

2.0 Sites 2/12 GWTP

The following sections describe the operations, key events, and maintenance activities that occurred during the reporting period for the Sites 2/12 GWTP.

2.1 Operations

The 2/12 GWTP was operable 99% of the time during the reporting period. Analytical results for the eight identified COCs for samples collected at TS-212-INJ, the discharge point of compliance with respect to contaminant limits, are summarized in Table 4. Sites 2/12 GWTP statistics are summarized in Table 5.

Table 4: Sites 2/12 Analytical Results at TS-212-INJ

COC	Discharge Limit (µg/L)‡	Sample Date / Analytical Results
		5/07/2009
1,1-DCE	6.0	ND
1,2-DCA	0.50	0.13 J
1,3-DCP †	0.50	ND
Chloroform	2.0	0.18 J
Cis-1,2 DCE	6.0	0.46 J
PCE	3.0	ND
TCE	5.0	ND
Vinyl Chloride	0.10	ND

NOTES:

† The reported value is the sum of both cis- and trans-isomers.

‡ Discharge limits are the ACLs for injection over the plume.

ND The analyte was not detected above the reported limit of quantitation.

J The analyte was positively identified, but the associated numerical value is an approximate concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

Table 5: Sites 2/12 GWTP Treatment Statistics.

Sites 2/12 Treatment (Month)	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online
May 2009	9,169,100	205	99
Total since May 1999	1.211 billion		

2.2 Key Events at Sites 2/12

- May 7 – GWTP offline 4.35 hours to evaluate operability of EW-12-03-180M.
- May 14 – GWTP offline 4.73 hours during GAC changeout at OU2 GWTP.
- May 29 – Removed and replaced pump in EW-12-03-180M. Old pump sent back to the manufacturer under warranty.

2.3 Routine Maintenance

Routine maintenance was conducted on the Sites 2/12 GWTP, including inspections, maintenance, and system control adjustments throughout the reporting period.

2.4 Maintenance Issues for Resolution

Table 6 identifies the current maintenance issues that are pending or require resolution for the Sites 2/12 GWTP.

Table 6: Sites 2/12 GWTP Maintenance Issues.

Description	Resolution	Status	Responsible Party
Condensation build-up in KMnO ₄ air stream treatment vessels.	Pump condensate from air stream piping and KMnO ₄ tanks into 55-gallon drums.	On-going	AES
EW-12-03-180M pump failure	Pull pump & send back under warranty.	Completed	AES
EW-12-04-180M pump failure	Remove pump and convert to monitoring well.	Pending	AES
EW-12-06-180M construction quality control	Pull and inspect pump.	Pending	AES
Upgrade Site Security	Re-key deadbolts and replace site padlocks; Install security camera systems.	Completed	AES

3.0 Underground Service Alert Network Notifications

There were 30 USAN notifications during the reporting period. None of these alerts required the personal attention of the GWTP Operator.

4.0 Operations Status of Extraction Wells

Table 7 provides the status of each of the extraction wells for OU2 and Sites 2/12 during the reporting period and includes the most recently available data for TCE concentrations in samples collected during quarterly groundwater monitoring events.

Table 7: May 2009 OU2 and Sites 2/12 Extraction Well Status

Well Identification	% On	Avg. gpm	Total Gallons	% of Total	Comments	TCE (µg/L) Q2_2009
Site 12 Extraction Wells						
EW-12-05-180M	98.7	64.0	2,858,700	31.2		9.2
EW-12-06-180M	98.7	81.6	3,644,300	39.7		8.7
EW-12-07-180M	95.8	59.7	2,665,500	29.1		3.2
EW-12-03-180U	< 0.1	< 0.1	600	0	Well offline due to low concentrations	0.14
EW-12-03-180M	0	0	0	0	Pump replaced this month	pending
EW-12-04-180U	0	0	0	0	Well offline due to low concentrations	0.99
EW-12-04-180M	0	0	0	0	Ceased operating on 11/21/2005	not sampled
Total 2/12 gallons treated:			9,169,100	100.0		
OU2 Extraction Wells						
Western Network						
EW-OU2-01-A	0	0	0	0	Well offline due to low concentrations	not sampled
EW-OU2-02-A	99.5	60.8	2,713,610	9.3		0.87
EW-OU2-03-A	0	0	0	0	Well offline due to low concentrations	pending
EW-OU2-04-A	92.5	48.4	2,159,830	7.4		1.1
EW-OU2-05-A	99.5	51.0	2,276,620	7.8		2.9
EW-OU2-06-A	99.5	36.5	1,630,920	5.6		5.1
EW-OU2-01-180	0	0	0	0	No pump in well	pending
Total gallons extracted:			8,780,980	30.0		
Eastern Network						
EW-OU2-07-A	0	0	0	0	Well offline due to low concentrations	ND
EW-OU2-08-A	61.1	20.2	902,560	3.1		1.2
EW-OU2-09-A	99.4	20.1	895,700	3.1		3.7
EW-OU2-10-A	99.4	17.7	790,100	2.7		4.4
EW-OU2-11-A	0	0	0	0	Low yield due to biofouling	3.4
EW-OU2-12-A	2.8	0.7	29,650	0.1	Low yield; running at reduced capacity	8.8
EW-OU2-13-A	99.4	32.8	1,462,660	5.0		9.7
EW-OU2-02-180	99.4	36.6	1,632,000	5.6		12.6
Total gallons extracted:			5,712,670	19.5		
Shoppette						
EW-OU2-05-180	0	0	0	7.1	Failed pump to be replaced in June	pending
EW-OU2-06-180	78.6	86.1	3,845,300	13.1		6.8
EW-OU2-16-A	0	0	0	0	Runs in manual mode only	14.1
Total gallons extracted:			3,845,300	13.1		
CSUMB						
EW-OU2-14-A	< 0.1	< 0.1	300	< 0.1	Runs in manual mode only	3.9
EW-OU2-15-A	0	0	0	0	Well offline due to low concentrations	not sampled
Total gallons extracted:			300	< 0.1		
Landfill						
EW-OU2-03-180	96.8	197	8,788,000	30.0		18.3
EW-OU2-04-180	0	0	0	0	Well offline due to low concentrations	0.32
Total gallons extracted:			8,788,000	30.0		
Bunker Hill						
EW-OU2-07-180	0	0	0	0	No pump in well	pending
EW-OU2-08-180	99.4	47.4	2,118,000	7.2		0.98
Total gallons extracted:			1,775,000	7.2		
Total OU2 gallons treated:			29,245,250	100.0		

Property Transfer Update 06-26-09 HTW BCT

May 8, 2009 – FOSET 5 deeds recorded, property transferred (3,337 acres)!

FOST 10 deeds:

1. June 8 – eight of ten deeds signed by FORA and USACE.¹
2. June 9 – Kutak Rock (FORA legal counsel) sent the eight deeds to FORA.
3. Deed for Parcel L3.2 is on hold pending agreement between York School (recipient), FORA and Monterey County.
4. USACE is working on deed for Parcel L23.5.2 for public benefit conveyance to Monterey Peninsula College (FORA is not involved in transaction).

FOST 11:

1. Parcels L2.3, L2.4.1 and S2.1.2 (OU1 source area)
2. Parcels L2.3, L2.4.1 – MEC-related CRUP.
3. Parcel S2.1.2 – no CRUP required.
4. Supporting documentation for FOST:
 - a. HGL reports?
 - b. Demonstration of Operating Properly and Successfully?

FOSET 2 deed amendments:

1. Five deed amendments were issued to FOSET 2 property recipients for signature:
 - a. Monterey-Salinas Transit – signed and returned to USACE.
 - b. City of Marina – reviewed by Kutak Rock, comments submitted to USACE.
 - c. City of Seaside – reviewed by Kutak Rock, comments submitted to USACE.
 - d. University of California (UC) – comments submitted to USACE.
 - e. CSUMB – tabled pending completion of FOSET 5 deed.
2. Sixth deed amendment for Parcel L37 is pending.
3. “Hold harmless” provision likely to be deleted per discussions with Kutak Rock. All deed amendments may be reissued for signature pending Army review.

FOSET 4 deed amendments:

1. ROD for Del Rey Oaks MRA complete and signed.
2. One deed amendment issuing the CERCLA Warranty drafted, but finalization pending completion of FOSET 2 deed amendments and LUCIP.

FOSET 5 deed amendments:

1. ROD for Parker Flats MRA complete and signed, Draft Final LUCI and O&M Plan complete.
2. June 11 – three deed amendments issuing the CERCLA Warranty for Parker Flats Munitions Response Area drafted and submitted to USACE and FORA for review.
3. FORA’s Parker Flats Phase I schedule indicates deed amendments to be complete by October 15, 2009.

Parcel F7.1 (FO-30, FOST 6):

1. Army/UC MOA states this parcel to be transferred to University of California (UC).
2. Transfer status uncertain because incorrect legal description was included in the deed.
3. USACE has proposed a Memorandum of Understanding whereby:
 - a. Army executes deed amendment correcting original deed;
 - b. MCWD executes quitclaim deed conveying its interest in Parcel 7.1 to UC;
 - c. FORA executes quitclaim deed conveying any outstanding interest in Parcel 7.1 to UC;
 - d. Army executes quitclaim deed conveying any outstanding interest in Parcel 7.1 to UC;

¹ Signature authority for deeds delegated from Joseph Calcara, DASA (I&H) to Scott Whiteford, USACE Director of Real Estate.

Property Transfer Update 06-26-09 HTW BCT

- e. City of Marina executes quitclaim deed conveying any outstanding interest in Parcel 7.1 to UC; and,
- f. Army executes Bill of Sale confirming transfer of ownership of water system to FORA for the benefit of MCWD.

HGL AGENDA & NOTES

Fort Ord HTW BCT Meeting
10:00 AM, 26 June 2009
Monterey, California

1. Groundwater Remediation System Update

The Northwest Treatment System (NWTS) has operated nearly continuously (more than 98% uptime) since the last update at the BCT meeting on 19 May 2009. Extraction wells EW-OU1-63-A and MW-OU1-46-AD were returned to service on 04 June. After approximately 12 hours of full operation (early morning on 05 June), the filter bags clogged and the system automatically shut down. Given the circumstances (EW-OU1-63-A was pumping at less than 1 gallon per minute [gpm] and MW-OU1-46-AD at approximately 25 gpm), this occurrence is taken as conclusive evidence that suspended particles from MW-OU1-46-AD were responsible for the shutdown. It is assumed the fine particles from MW-OU1-46-AD have also been primarily responsible for previous shutdowns due to clogged filter bags – this assumption is consistent with the operating history of the NWTS to date. The filter bags were replaced later in the day on 05 June and all wells were returned to service; the system has operated continuously (as of noon on 25 June) since then.

The flow controller for the injection pump was replaced on 19 May 2009 and treated water has been distributed as before among the NW infiltration trench, the grassland infiltration trench and injection well IW-OU1-74-A since that time.

Total volume pumped through 25 June 2009 is 98,360,110 gallons. The average weekly treatment rate has been approximately 74 gpm since the last BCT meeting (19 May). Through 24 June 2009, the NWTS has removed approximately 3.3 pounds (0.27 gallons) of TCE and 0.3 pounds (0.03 gallons) of cis-1,2-DCE.

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. 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 µg/L 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 Draft 2008 Annual and Fourth Quarter Groundwater Monitoring Report was submitted on 06 May 2009. The First Quarter 2009 Groundwater Monitoring Report is in preparation and was submitted on 22 June. The Draft Final FONR System Construction Report (primary deliverable) was submitted on 28 May 2009.

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. The Draft Final FONR System Construction Report (primary deliverable) will be submitted this month.

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

Table 2 summarizes the status of recent and near-term deliverables.

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 - 26 June 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	
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	

