

SUBJECT: HTW - BCT Meeting
October 14, 2008
1:00 p.m., Santa Rosa, CA

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1:00 p.m., Santa Rosa, CA

John Chesnut

Check
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Marty

HTW BCT Meeting

October 2008

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	Quarterly sampling
OUCTP	Status Update	RD/RA Work Plan
OU2 Landfill Gas	Status Update	
Basewide Range Assessment	Status Update	No Action Approval Memos, HA 161 IA Memo
Site 39 ROD	Status Update	
FFA Schedule	Status Update	
FOST/FOSET Issues	Status Update	
Calendar Update	Update	

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Former Fort Ord Groundwater Treatment Systems Operational Data and Status BCT Meeting, October 14, 2008

Table 1: OU2 and Sites 2/12 GWTP Treatment Statistics.

	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (lbs)
OU2				
September 2008	32,760,970	758	100	2.11
Total since October 1995	4.329 billion			573.94
Sites 2/12				
September 2008	8,602,766	199	99.9	1.16
Total since May 1999	1.139 billion			396.34

Table 2: OU2 and Sites 2/12 GWTP Calendar of events.

Key Events for OU2 and Sites 2/12 for September 2008						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9 OU2 antennae adjusted to increase Eastern network reception	10	11	12	13
14	15	16	17 Annual Sampling	18	19	20
21	22	23	24	25 Process samples collected on this date indicate discharge exceedance at OU2	26	27
28	29	30	*15 USAN Notices in September. None of these alerts required the personal attention of the Senior GWTP Operator.			

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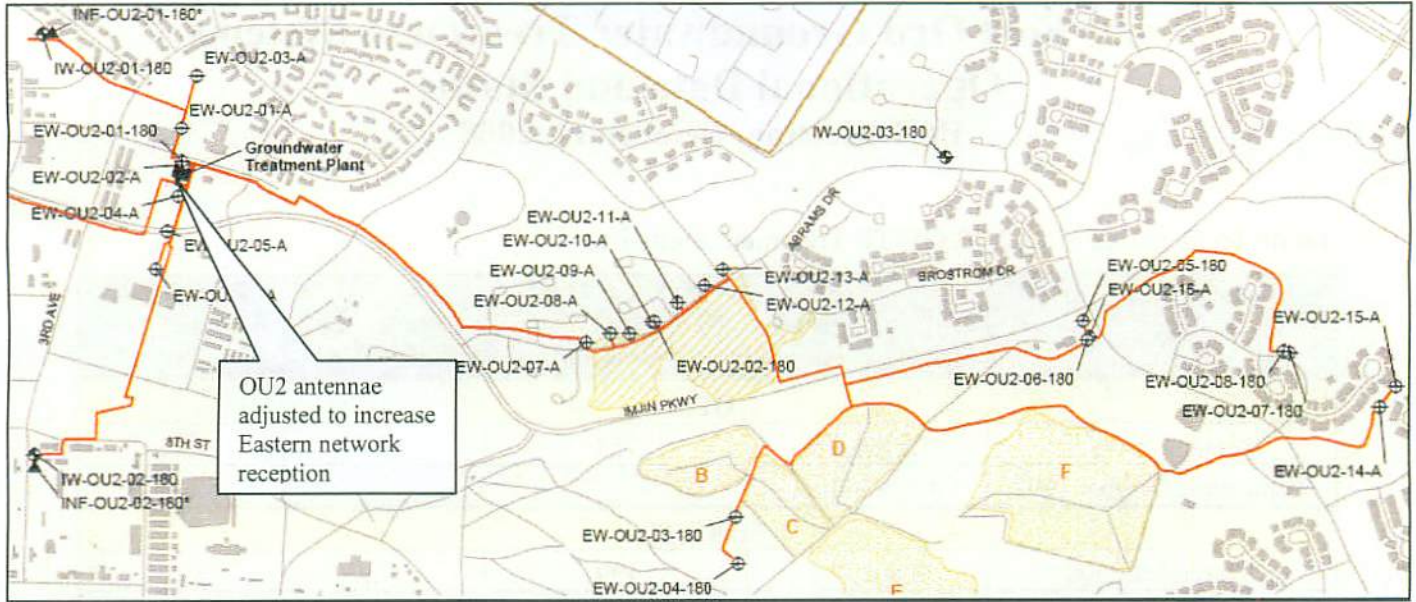


Figure 1: OU2 GWTP Treatment Events September 2008.

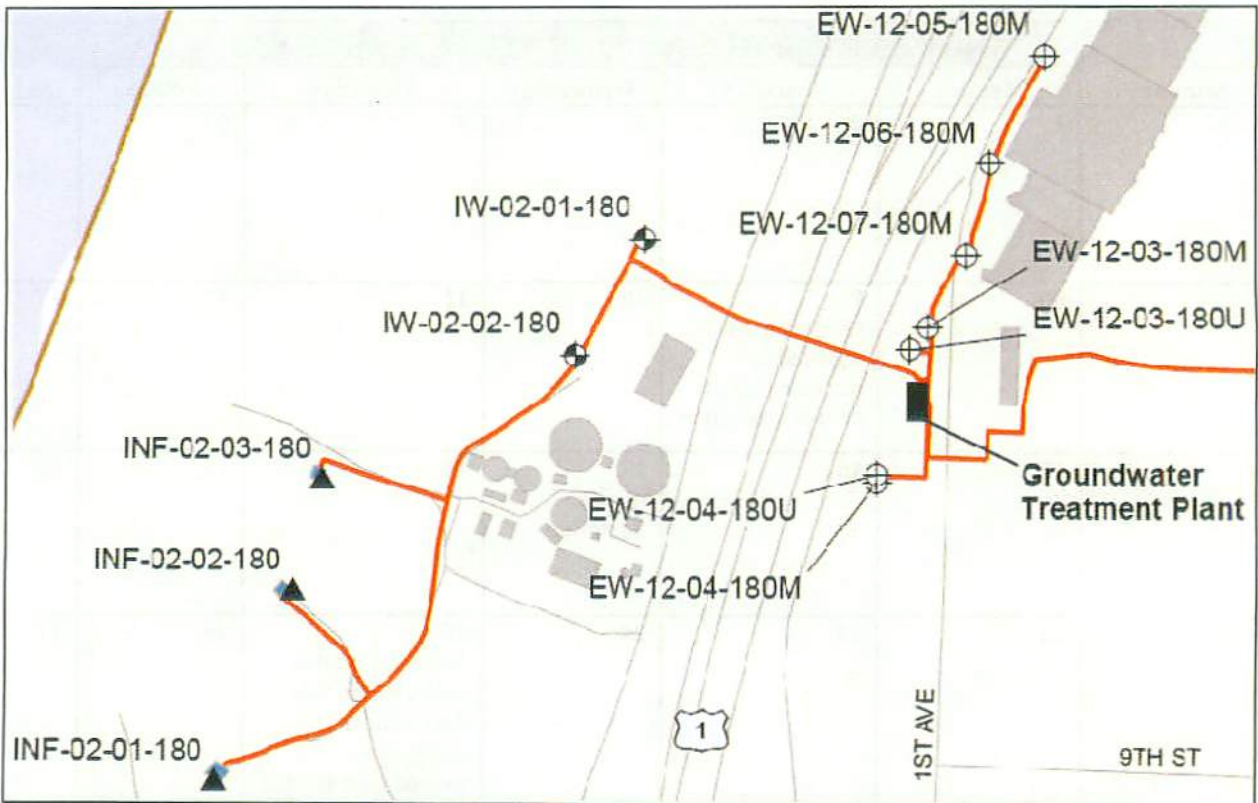


Figure 2: Sites 2/12 GWTP Treatment Events September 2008.

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Table 3: September 2008 OU2 Analytical Results at TS-OU2-INJ.

COC	Discharge Limit (µg/L)‡	Sample Date / Analytical Results		
		09/02/2008**	09/18/2008**	09/25/2008**
1,1-DCA	5.0*	1.0	1.4	1.4
1,2-DCA	0.5	ND	ND	ND
1,2-DCP †	0.5	ND	0.11 J	0.11 J
Benzene	0.5	ND	ND	ND
Carbon Tetrachloride	0.5	ND	ND	ND
Chloroform	2.0*	0.52	0.69	0.80
Cis-1,2-DCE	6.0*	1.3	1.9	1.8
Methylene Chloride	0.5	ND	ND	ND
PCE	0.5	ND	ND	ND
TCE	0.5	0.25 J	0.45 J	0.53
Vinyl Chloride	0.5	ND	ND	ND

Table 4: September 2008 Sites 2/12 Analytical Results at TS-212-INJ

COC	Discharge Limit (µg/L)‡	Sample Date / Analytical Results			
		09/02/2008**	09/09/2008**	09/17/2008**	09/25/2008**
1,1-DCE	6	ND	ND	ND	ND
1,2-DCA	0.5	ND	ND	ND	ND
1,3-DCP †	0.5	ND	ND	ND	ND
Chloroform	2	0.33 J	0.39 J	0.45 J	0.64
Cis-1,2 DCE	6	2.4	2.3	2.5	3.6
PCE	3	ND	ND	ND	ND
TCE	5	0.20 J	0.27 J	0.38 J	0.65
Vinyl Chloride	0.1	ND	ND	ND	ND

NOTES:

- 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 MDL.
- * Discharge limits for low carbon affinity compounds were increased to the Aquifer Cleanup Level (ACL).
- ‡ Discharge limits are the ACLs for injection over the plume.
- † The reported value is the sum of both cis- and trans-isomers.
- ** Preliminary data; validation has not been completed.
- J± Data are qualified as estimated, with a high (+) or low (-) bias likely to have occurred. False positives or false negatives are unlikely to have been reported.

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Table 5: September 2008 OU2 and Sites 2/12 Extraction Well Status.

Well Identification	% On	Avg. gpm	Total Gallons	% of Total	Comments	TCE (µg/L) Sep 08
Site 12 Extraction Wells						
EW-12-05-180M	97.5	75.4	3,255,400	37.8		12.5
EW-12-06-180M	99.9	79.9	3,453,466	40.1		9.6
EW-12-07-180M	61.3	43.8	1,891,500	22.0		4.3
EW-12-03-180U	0.07	0.01	600	0.01	Well offline due to low concentrations.	0.48 (0.55)
EW-12-03-180M	0.0	0.0	0.0	0	Well offline due to low concentrations.	Not Sampled
EW-12-04-180U	0.07	0.04	1,800	0.02	Well offline due to low concentrations.	0.94
EW-12-04-180M	0.0	0.0	0.0	0.0	Ceased operating on 11/21/2005.	Not Sampled
Total 2/12 gallons treated:			14,799,500	100.0		
OU2 Extraction Wells						
Western Network						
EW-OU2-01-A	0.0	0.0	0.0	0.0	Well offline due to low concentrations.	Not Sampled
EW-OU2-02-A	37.5	24.9	1,074,530	3.3		1.4
EW-OU2-03-A	0.0	0.0	0.0	0.0	Well offline due to low concentrations.	Not Sampled
EW-OU2-04-A	99.7	54.8	2,367,290	7.2		1.9
EW-OU2-05-A	100	50.8	2,196,000	6.7		4.2
EW-OU2-06-A	99.7	39.5	1,706,860	5.2		0.37 (0.40)
EW-OU2-01-180	0.0	0.0	0.0	0.0	No pump in well.	Not Sampled
Total gallons extracted:			7,344,680	22.4		
Eastern Network						
EW-OU2-07-A	0.0	0.0	0.0	0.0	Well offline due to low concentrations.	ND
EW-OU2-08-A	97.0	28.6	1,236,350	3.8		0.31
EW-OU2-09-A	0.0	0.0	0.0	0.0	Pump failed September 16.	Not Sampled
EW-OU2-10-A	99.9	26.0	1,122,270	3.4		5.4
EW-OU2-11-A	0.0	0.0	0.0	0.0	Well offline due to area construction.	5
EW-OU2-12-A	0.0	0.0	0.0	0.0	Well offline due to area construction.	Not Sampled
EW-OU2-13-A	99.9	28.9	1,247,270	3.8		13.3
EW-OU2-02-180	0.0	0.0	0.0	0.0	Well offline pending installation of VFD.	4.6
Total gallons extracted:			3,605,890	11.0		
Shoppette						
EW-OU2-05-180	100	130.6	5,640,800	17.2		9
EW-OU2-06-180	100	150.4	6,496,400	19.8		4.9
EW-OU2-16-A	99.8	19.9	861,800	2.6		10.2
Total gallons extracted:			12,999,000	39.7		
CSUMB						
EW-OU2-14-A	45.8	11.8	509,200	1.6		3.8
EW-OU2-15-A	0.0	0.0	0.0	0.0	Well offline due to low concentrations.	Not Sampled
Total gallons extracted:			509,200	1.6		
Landfill						
EW-OU2-03-180	98.9	141.6	6,117,000	18.7		19.8 (20.1)
EW-OU2-04-180	0.06	0.07	3,200	0.0	Well offline due to low concentrations.	0.23
Total gallons extracted:			6,120,200	18.7		
Bunker Hill						
EW-OU2-08-180	99.6	50.5	2,182,000	6.7		1.7
Total gallons extracted:			2,182,000	6.7		
Total OU2 gallons treated:			32,760,970	100.0		

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Table 6: OU2 Extraction Well Organic Data.

Well Identification	Analytical Results (µg/L)		
	Chloroform (2.0)	Cis-1,2-DCE (6.0)	TCE (5.0)
<i>Western Network</i>			
EW-OU2-01-A	<i>Not Sampled</i>		
EW-OU2-02-A	0.23	ND	1.4
EW-OU2-03-A	<i>Not Sampled</i>		
EW-OU2-04-A	0.31	ND	1.9
EW-OU2-05-A	0.45	1.2	4.2
EW-OU2-06-A	0.75 (0.78)	2.7 (2.9)	0.37 (0.40)
EW-OU2-01-180	<i>Not Sampled</i>		
<i>Eastern Network</i>			
EW-OU2-07-A	ND	ND	ND
EW-OU2-08-A	ND	0.18	0.31
EW-OU2-09-A	<i>Not Sampled</i>		
EW-OU2-10-A	0.51	3.4	5.4
EW-OU2-11-A	0.55	1.1	5
EW-OU2-12-A	<i>Not Sampled</i>		
EW-OU2-13-A	1.7	1.3	13.3
EW-OU2-02-180	0.29	2.8	4.6
<i>Shoppette</i>			
EW-OU2-05-180	0.42	0.84	9
EW-OU2-06-180	0.42	1.4	4.9
EW-OU2-16-A	3.8	12.5	10.2
<i>CSUMB</i>			
EW-OU2-14-A	1.4	ND	3.8
EW-OU2-15-A	<i>Not Sampled</i>		
<i>Landfill</i>			
EW-OU2-03-180	0.23 (0.24)	1.8 (1.9)	19.8 (20.1)
EW-OU2-04-180	ND	ND	0.23
<i>Bunker Hill</i>			
EW-OU2-08-180	0.2	0.63	1.7

NOTES:

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 reported limit of quantitation.

Bold Sample above MCL

Numbers in parentheses are duplicate sample results.

Table 7: Site 12 Extraction Well Organic Data.

Well Identification	Analytical Results (µg/L)			
	Cis-1,2-DCE (6.0)	PCE (3.0)	TCE (5.0)	Vinyl Chloride (0.1)
EW-12-03-180M	Not Sampled			
EW-12-03-180U	ND (ND)	0.2 (0.19)	0.48 (0.55)	ND (ND)
EW-12-04-180M	Not Sampled			
EW-12-04-180U	ND (ND)	0.15	0.94	ND
EW-12-05-180M	6.4	3.5	12.5	0.4
EW-12-06-180M	5.3	2.2	9.6	ND
EW-12-07-180M	3.5	1.3	4.3	ND

NOTES:

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 reported limit of quantitation.

Bold Sample above MCL

Potential Discharge Exceedance at OU2 and Corrective Actions

- October 1 – preliminary analytical data for samples collected on September 25 were received on this date and indicated TCE at a concentration of 0.53 µg/L at TS-OU2-INJ, the injection point of compliance (the discharge limit for TCE is 0.50 µg/L). The following corrective actions were taken:
 - The laboratory was directed to re-analyze the sample collected from TS-OU2-INJ on September 25.
 - The three extraction wells with the highest concentrations of TCE (EW-OU2-03-180, EW-OU2-13-A and EW-OU2-16-A) were shut down.
 - In accordance with the provisions of Sampling and Analysis Plan (SAP) Section 5.5.1 and Operations & Maintenance (O&M) Manual Section 4.2.3, a GAC change out was scheduled (for October 10).
- October 2 – in accordance with SAP Section 5.5.1, a confirmation sample was collected at TS-OU2-INJ.
- October 3 – preliminary analytical data for the re-analysis of the sample collected at TS-OU2-INJ on September 25 were received on this date and indicated TCE at a concentration of 0.59 µg/L.
- October 8 – preliminary analytical data for the confirmation sample collected at TS-OU2-INJ on October 2 were received on this date and indicated TCE at a concentration of 0.83 µg/L. In accordance with SAP Section 5.5.1, the OU2 GWTP was shut down pending the GAC change out on October 10.
- October 10 – GAC change out was performed.
- October 11 – in accordance with SAP Section 5.5.1, a sample was collected at TS-OU2-INJ to confirm corrective action. Analytical data for this sample have not been received as of the date of this report.

Upcoming Groundwater Cleanup Activities

Installing a Portable Groundwater Treatment System Beginning Mid-October 2008

Some residents of Preston Park and Abrams Park may see workers and equipment in areas behind their homes over the next few months.

WHY? The Army will be installing shallow groundwater wells, underground piping and placing a groundwater treatment system (see photo at right) as part of the ongoing water cleanup at the former Fort Ord. These activities will take place beginning Mid-October 2008. A map of the approximate well locations and treatment system is on the back.

The system will be used to clean the groundwater in the Preston Park and Abrams Park areas.

YOUR WATER IS SAFE: The groundwater being treated in this area is not used for drinking water. Your drinking water is supplied by the Marina Coast Water District (MCWD) from a different source area. Drinking water quality is very important and it is regularly tested by the Marina Coast Water District. Your drinking water meets all federal and state standards.

Questions:

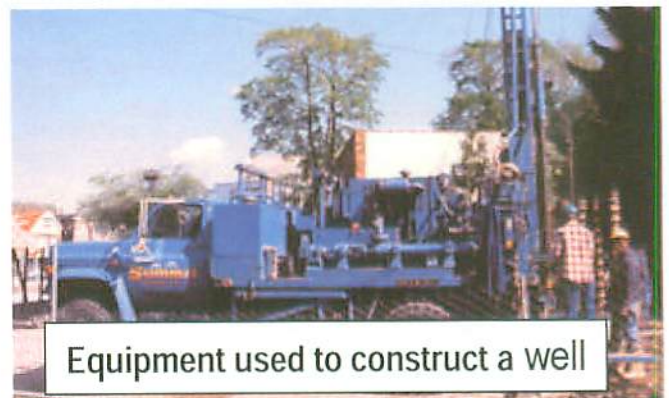
Melissa Broadston

U.S. Army Fort Ord BRAC Office

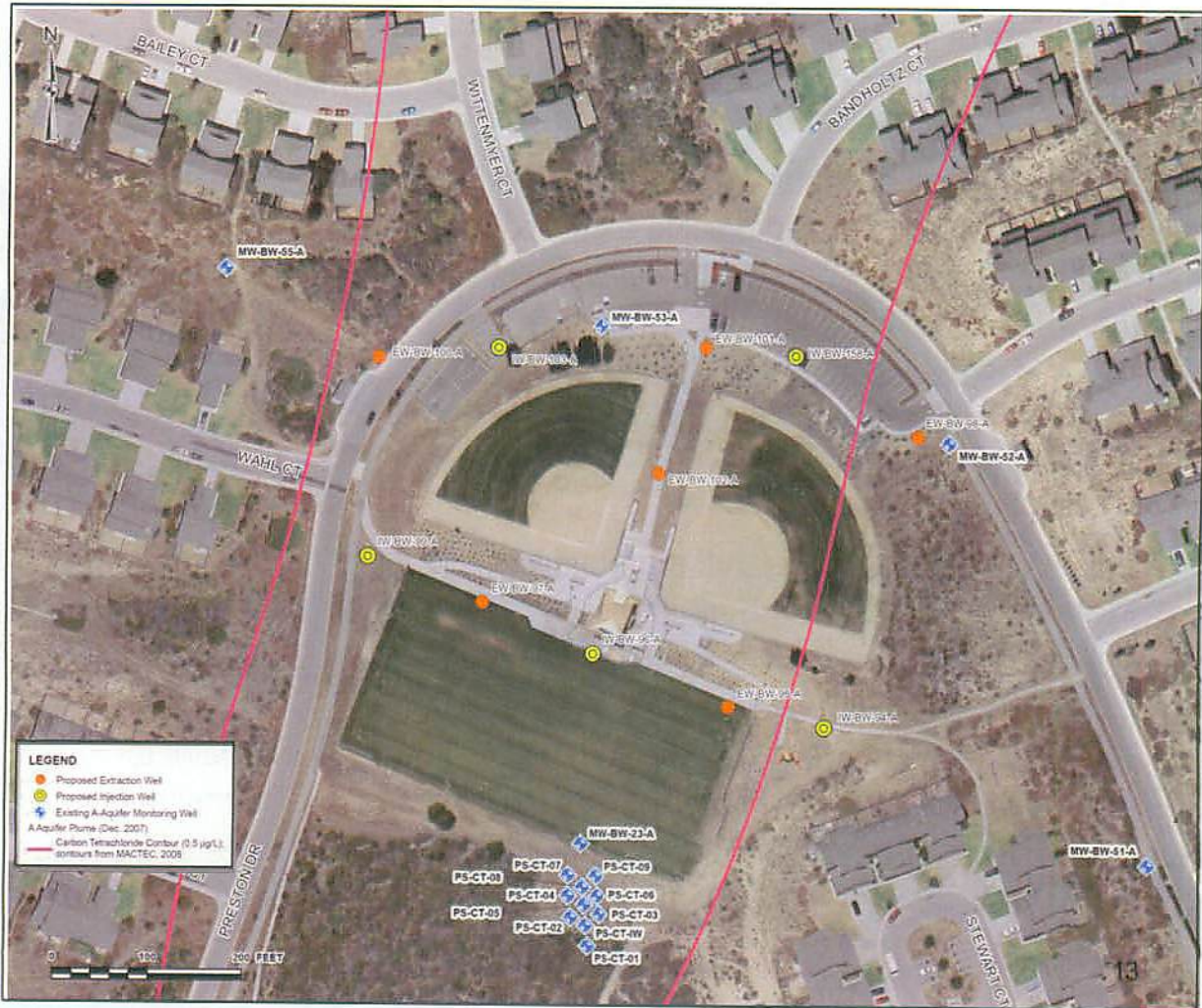
Email: Melissa.Broadston@us.army.mil

Phone: 393-1284

www.FortOrdCleanup.com



Construction Activities Near the Preston Park Playing Fields



Construction Activities Near Wittenmeyer and Bandholtz Courts



**Site 39 Remedial Action
Status Update
10/08/2008**

Documents

Document	Schedule	Comments
Habitat Restoration Plan	Issue Final by 10/31	Received additional comments from DTSC/DF&G
ROD Amendment RD/RAWP	Issued Draft Final on 9/17 Issue Draft by 10/17	Agency comments were due 10/6

Ongoing Engineering Activities

Site 39

- Data management and reporting of HMP plant species survey (transects) for remediation areas.

OU2 Landfills

- Evaluate E/F Hill as borrow source for vegetative cover. Grading plan sent to Army on 9/24.

Future Field Activities

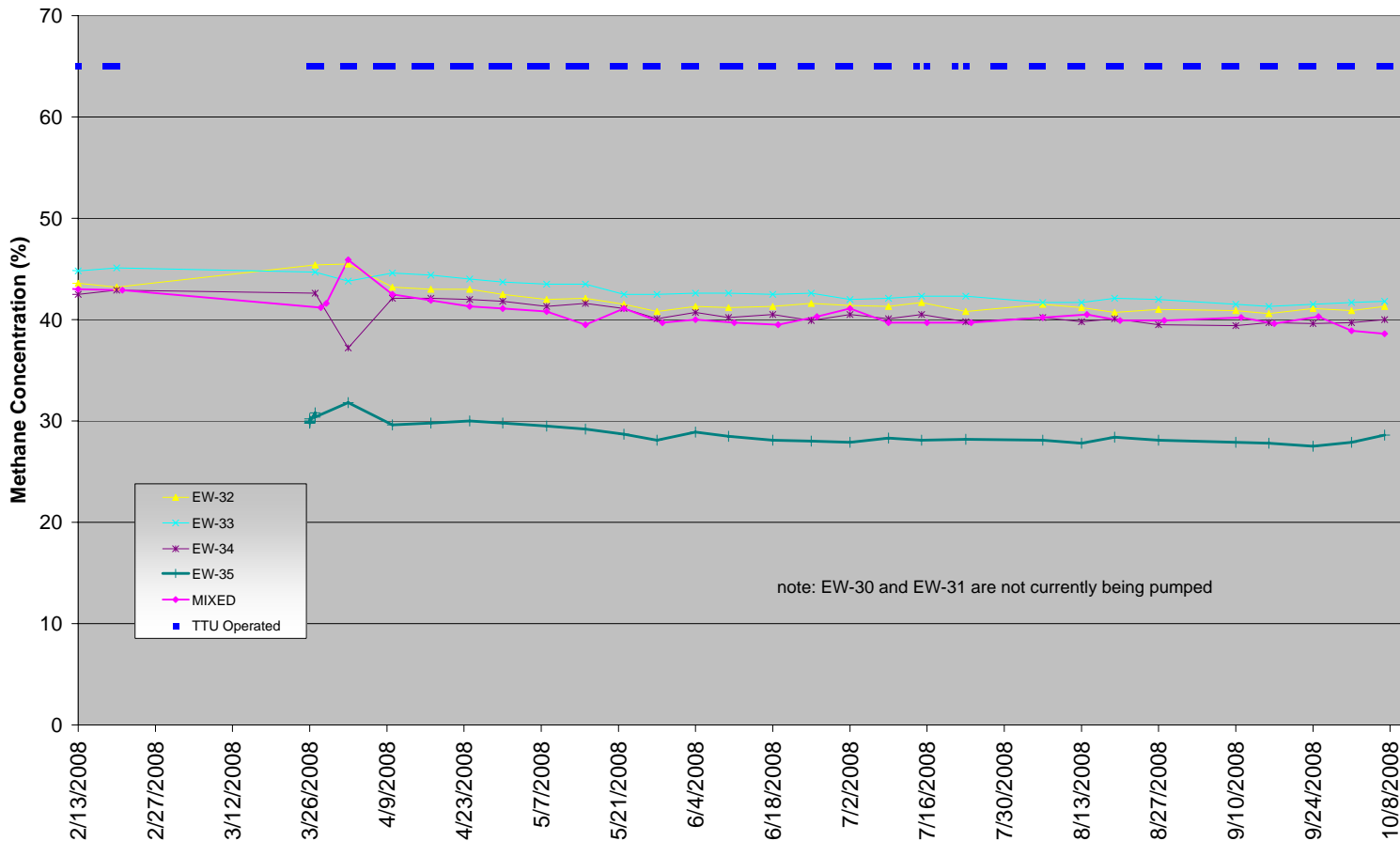
- Wetland monitoring - Ponds 8 and 30 still need survey data if possible before range remediation. No ponding from 2006 through 2008.
- Site Preparation scheduled to start January 2009.
- Excavation scheduled to start March 2009.

**Thermal Treatment Unit
Operation Summary
2007/2008**

Start Date/Time:	4/4/2006
Last Reading Date/Time:	10/8/2008 16:30
Total Hours (2006):	6528
Total Hours Operated (2006):	2891.50
% Operation (2006):	44.3%
Total Hours (2007):	8760
Total Hours Operated (2007):	4035.4
% Operation (2007):	48.7%
Total Hours (2008):	6760.5
Total Hours Operated (2008):	2189.4
% Operation (2008):	32.4%
Cumulative % Operation (since 4/4/2006):	41.3%

Pounds of Methane Removed (2007)	372759
Pounds of Methane Removed (2008)	166694

**Methane Concentration vs. Time
(after 02-13-08)
Interior Extraction Wells**



OPERABLE UNIT CARBON TETRACHLORIDE PLUME A-AQUIFER REMEDIAL ACTION

STATUS – October 14, 2008

FIELD WORK

- EISB pilot study system construction complete – October 25
- EISB pilot study substrate injection initiated - January 29
- 7000 gallons substrate injected – March 27
- EISB pilot study system shut off – April 11
- EISB pilot study monitoring completed – July 24
- Equipment demobed from site – September 26

SCHEDULE

- Subsequent quarterly monitoring for EISB pilot study conducted under Groundwater Monitoring Program.
- Draft RA Work Plan/RD (Attachment 1 – A-Aquifer) [Agency Comments Due] – November 17
- Preston Park Sports Complex shut down November 17 through February 1

DATA (Preliminary)

- None

PROBLEMS/CHANGES

- None

HGL AGENDA & NOTES

Fort Ord HTW BCT Meeting
1:00 PM, 14 October 2008
Santa Rosa, California

1. Groundwater Remediation System Update

Northwest Treatment System (NWTs) has operated continuously since last update on 18 September 2008. Total volume pumped through 06 October 2008 is 68,804,400 gallons. The average treatment rate over the last four weeks has been 90.9 gallons per minute.

The last bi-monthly samples from the treatment system and extraction wells were collected on 29 September and analytical results are not yet back from the laboratory. The validated data from the July 2008 sampling was reported previously and is summarized below:

- System influent TCE concentration decreased slightly to 3.6 µg/L (from 3.9 µg/L in May).
- System influent cis-1,2-DCE concentration increased slightly to 0.41µg/L (from 0.36 µg/L in May).
- System effluent concentrations were below detection limit for all ten compounds monitored.
- TCE at individual extraction wells (except MW-85) and system influent slightly lower than the previous sample in May; MW-85 increased from 2.5 to 4.4 ppb.
- All extraction wells showed TCE concentrations less than 5 µg/L except the two wells located in the central portion of the plume: MW-87 (9.1 µg/L) and EW-71 (14 µg/L).

2. Long Term Monitoring Update

Third quarter (includes annual frequency wells) samples were collected during the period from 29 September through 02 October. The bi-monthly system performance samples were collected on 29 September.

3. NWTs Operation Relative to Carbon Change-out

HGL submitted a letter to the US 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 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 µg/L or if the cis-1,2-DCE concentration exceeds 3.0 µg/L.