

HTW BCT Meeting

January 8, 2008 at 1:00 p.m.

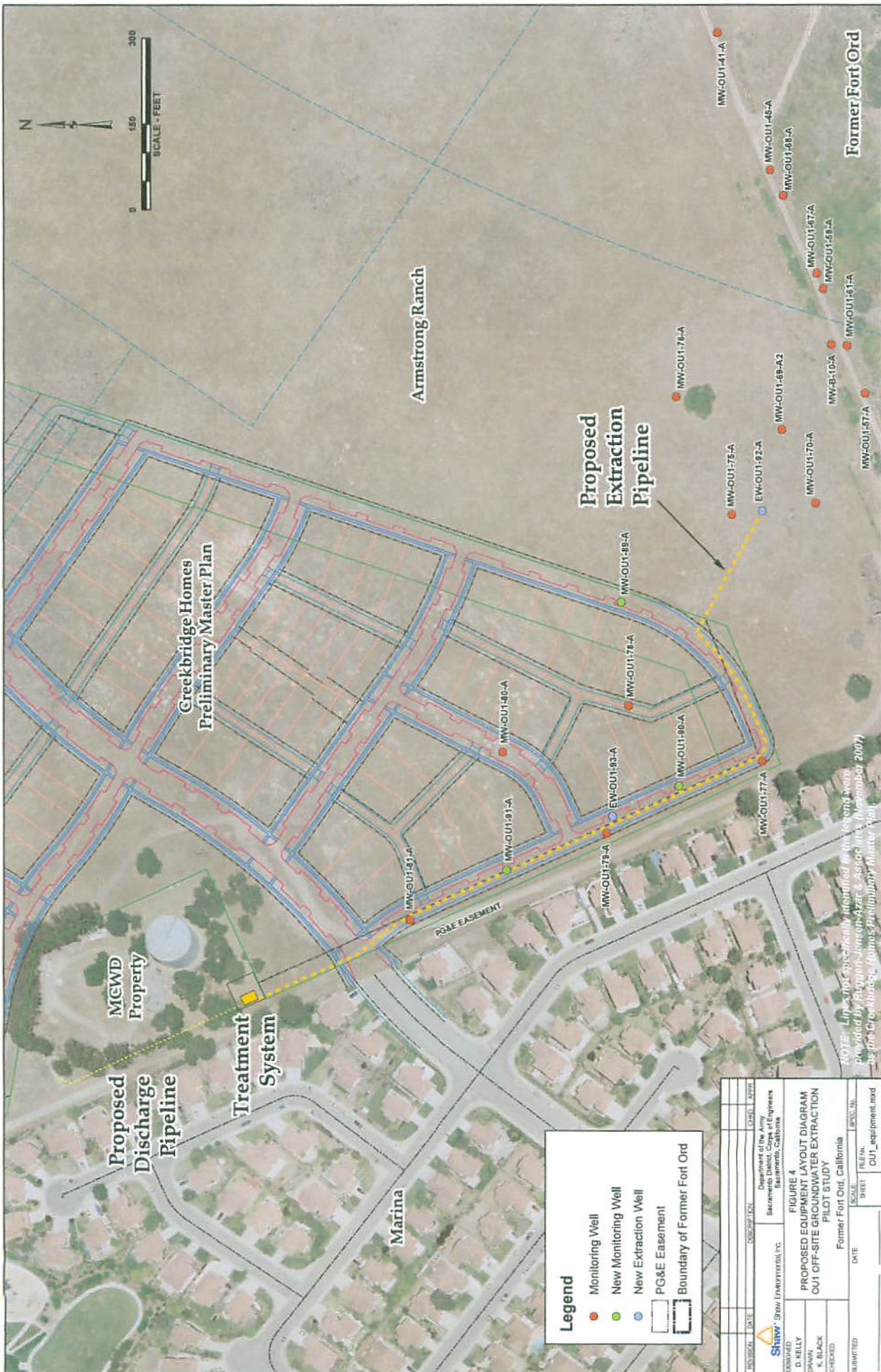
Item	Action	Comment
OU1 Groundwater Remediation	Status Update	HGL
OU1 Off-Site	Status Update	
OU2 and 2/12 Treatment Systems	Status Update	
Other Groundwater Issues	Status Update	
Groundwater Treatment System Optimization	Status Update	
OU2 Landfill Gas	Status Update	
OUCTP ROD/Pilot Study	Status Update	
Basewide Range Assessment	Status Update	
Site 39 Feasibility Study Addendum	Status Update	
Site 3 Post Remediation Monitoring	Status Update	
Five Year Review	Status Update	FOEJN Comments
FFA Schedule	Status Update	
FOST/FOSET Issues	Status Update	
Calendar Update	Update	

SUBJECT: HTW – BCT Meeting
January 8, 2008
1:00 p.m.

Check (✓)	Name	Organization	Phone	E-mail address
	Roman Racca	DTSC	916/255-6407	Rracca@dtsc.ca.gov
	Kate Burger	DTSC	916/255-6537	kburger@dtsc.ca.gov
	Stephen Pay	DTSC	916/255-6403	spay@dtsc.ca.gov
	John Chesnutt	U.S. EPA	415/972-3005	Chesnutt.john@epa.gov
	Martin Hausladen	U.S. EPA	415/972-3007	Hausladen.martin@epamail.epa.gov
	Grant Himebaugh	RWQCB	805/542-4636	Ghimebaugh@waterboards.ca.gov
	Bill Mabey	TechLaw Inc	415/281-8730	bmabey@techlawinc.com
	Gail Youngblood	Fort Ord BRAC	831/242-7918	gail.youngblood@us.army.mil
	Derek Lieberman	Ahtna	831/242-4873	dlieberman@ahtnagov.com
	Bill Collins	Fort Ord BRAC	831/242-7920	William.K.Collins@us.army.mil
	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

SUBJECT: HTW – BCT Meeting
January 8, 2008
1:00 p.m.

Check (✓)	Name	Organization	Phone	E-mail address
	David Eisen	COE	831/393-9692	David.Eisen@usace.army.mil
	Guy Romine	AEC	971/645-3645	Guy.romine1@us.army.mil
	Peter Kelsall	Shaw E & I	831/883-5810 ext. 810	Peter.Kelsall@shawgrp.com
	David Kelly	Shaw E & I	925/288-2321	David.kelly@shawgrp.com
	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
	Ed Ticken	MACTEC E&C	415/884-3176	ejticken@mactec.com
	Carlene Merey	MACTEC E&C	415/884-3276	cmerey@mactec.com
	Marc Edwards	COE		Marc.A.Edwards@usace.army.mil
	Michael Taraszki	MACTEC E&C	415/884-3325	mdtaraski@mactec.com
	Chuck Holman	Ahtna	916/372-2000	cholman@ahtnagov.com
	Kelly O'Meara	Ahtna	916/372-2000	komeara@ahtnagov.com
	Mike Bombard	HydroGeoLogic	916/614-8770	mbombard@hgl.com



Legend

- Monitoring Well
- New Monitoring Well
- New Extraction Well
- PG&E Easement
- Boundary of Former Fort Ord

REVISION	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
 Department of the Army Sacramento, California				
FIGURE 4 PROPOSED EQUIPMENT LAYOUT DIAGRAM OUT-OFF-SITE GROUNDWATER EXTRACTION PILOT STUDY				
Former Fort Ord, California				
DATE	SCALE	FILE NO.	SHEET	OUT_equipment.mxd

NOTE: Lines not specifically identified as the record were provided by Douglas Johnson & Associates (dated 2007) as the Geologic, Hydrogeologic, and Seismicity Report.

Former Fort Ord Groundwater Treatment Systems Operational Data and Status BCT Meeting January 8, 2008

GWTP Treatment Statistics – December 2007				
	Volume Treated (gallons)	Average Flow Rate (gallons per minute)	% of Time Online	Mass Removed (lbs)
OU2				
December 2007	29,610,000	663	100.0	2.38
<i>Since October 1995</i>	3.986 billion			552
Sites 2/12				
December 2007	7,370,000	165	100.0	1.91
<i>Since May 1999</i>	1.087 billion			388

Key Events for OU2 and Sites 2/12 for December 2007						
S	M	T	W	T	F	S
	26 USA Notices in November, none of which required onsite attention					1 Eastern Network offline. ¹ EW-OU2-16-A offline. ²
2 Eastern Network restarted.	3	4	5	6	7	8
9	10	11	12	13	14	15
16 EW-OU2-04-A offline. ³	17 Quarterly extraction well sampling.	18 Quarterly extraction well sampling.	19 Quarterly extraction well sampling.	20	21	22
23	24	25	26	27	29	30
31 Draft O&M Manual – comments due.						

¹ Eastern Network electrical service and PG&E meter relocated to accommodate Marina Heights development.

² EW-OU2-16-A offline for all of December 2007 (new pump installed January 2, 2008).

³ EW-OU2-04-A offline for remainder of December 2007 (new pump installed January 2, 2008).

AHTNA

Government Services Corporation

December 2007 OU2 and Sites 2/12 Extraction Well Status					
Well Identification	% On	Avg. gpm	Total Gallons	% of Total	Comments
Site 12 Extraction Wells					
EW-12-05-180M	99.9	82.1	3,667,000	49.2	
EW-12-06-180M	99.9	84.5	3,774,000	50.7	
EW-12-07-180M	0.1	0.0	2,100	0.0	Cycling due to air stripper flow limits.
EW-12-03-180U	0.1	0.0	900	0.0	Offline due to low concentrations.
EW-12-03-180M	0.1	0.1	2,900	0.0	Offline due to low concentrations.
EW-12-04-180U	0.1	0.1	3,000	0.0	Offline due to low concentrations.
EW-12-04-180M	0	0.0	0	0.0	Ceased operating on 11/21/2005. No power.
OU2 Extraction Wells					
Western Network					
EW-OU2-01-A	0	0	0	0.0	Offline due to low concentrations.
EW-OU2-02-A	97.0	54.7	2,441,550	7.1	
EW-OU2-03-A	0	0	0	0.0	Offline due to low concentrations.
EW-OU2-04-A	19.1	27.0	1,207,210	3.5	
EW-OU2-05-A	96.1	48.9	2,184,020	6.4	
EW-OU2-06-A	93.0	34.6	1,542,740	4.5	
EW-OU2-01-180	0	0	0	0.0	Offline due to low concentrations.
<i>Total gallons extracted:</i>			7,375,520	21.5	
Eastern Network					
EW-OU2-07-A	20.0	4.4	197,290	0.6	Offline due to low concentrations.
EW-OU2-08-A	99.7	28.0	1,251,690	3.6	
EW-OU2-09-A	99.7	24.4	1,089,000	3.2	
EW-OU2-10-A	92.2	22.2	992,670	2.9	
EW-OU2-11-A	0	0	0	0.0	Offline due to area construction, relocation of electrical service.
EW-OU2-12-A	0	0	0	0.0	
EW-OU2-13-A	87.1	26.2	1,171,020	3.4	
EW-OU2-02-180	0.3	0.1	4,000	0.0	
<i>Total gallons extracted:</i>			4,705,670	13.7	
Shoppette					
EW-OU2-05-180	56.3	139.3	6,217,000	18.1	
EW-OU2-06-180	74.2	114.8	5,126,300	14.9	New pump installed 11/21/2007.
EW-OU2-16-A	0.2	0.1	2,900	0.0	
<i>Total gallons extracted:</i>			11,346,200	33.1	
CSUMB					
EW-OU2-14-A	93.7	45.0	2,008,300	5.9	
EW-OU2-15-A	82.6	38.5	1,716,500	5.0	
<i>Total gallons extracted:</i>			3,724,800	10.9	
Landfill					
EW-OU2-03-180	71.7	106.0	4,731,000	13.8	
EW-OU2-04-180	0.2	0.3	11,200	0.0	Offline due to low concentrations.
<i>Total gallons extracted:</i>			4,742,200	13.8	
Bunker Hill					
EW-OU2-08-180	90.2	54.1	2,415,000	7.0	
<i>Total gallons extracted:</i>			2,415,000	7.0	

OU2 Analytical Results at TS-OU2-INJ			
COC	Discharge Limit (µg/L)	Sample Date / Analytical Results (µg/L)	
		12/04/2007**	12/20/2007**
1,1-DCA	5.0*	0.98	0.90
1,2-DCA	0.5	0.22 J	0.23 J
1,2-DCP	0.5	ND	ND
Benzene	0.5	ND	ND
Carbon Tetrachloride	0.5	ND	ND
Chloroform	2.0*	0.58	0.61
Cis-1,2-DCE	6.0*	1.2	1.5
Methylene Chloride	0.5	ND	ND
PCE	0.5	ND	ND
TCE	0.5	ND	ND
Vinyl chloride	0.5	ND	ND

Sites 2/12 Analytical Results at TS-212-INJ					
COC	Discharge Limit (µg/L)‡	Sample Date / Analytical Results			
		12/04/2007	12/11/2007**	12/20/2007**	12/26/2007**
1,1-DCE	6.0	ND	ND	ND	ND
1,2-DCA	0.5	0.18 J	0.20 J	0.18 J	0.16 J
1,3-DCP †	0.5	ND	ND	ND	ND
Chloroform	2.0	0.43 J	0.48 J	0.44 J	0.37 J
Cis-1,2-DCE	6.0	1.8	2.0	2.0	2.3
PCE	3.0	ND	ND	ND	ND
TCE	5.0	ND	ND	ND	ND
Vinyl Chloride	0.1	ND	ND	ND	ND

- 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.

OPERABLE UNIT CARBON TETRACHLORIDE PLUME ENHANCED IN SITU BIOREMEDIATION PILOT STUDY

STATUS – January 8, 2008

FIELD WORK

- Well construction complete – July 27
 - 15 extraction wells
 - 7 injection wells
 - 5 monitoring wells
- Well development complete – August 8
- Wells surveyed – August 14
- Slug testing complete – August 17
- System construction complete – October 25
 - system checkout/testing/troubleshooting in progress
- Tracer testing completed – December 5
 - Tracer injected at 3:30 pm on November 14
 - Tracer detected in all monitoring wells and EISB-EW-10
- Baseline sampling and analysis completed – January 3

SCHEDULE

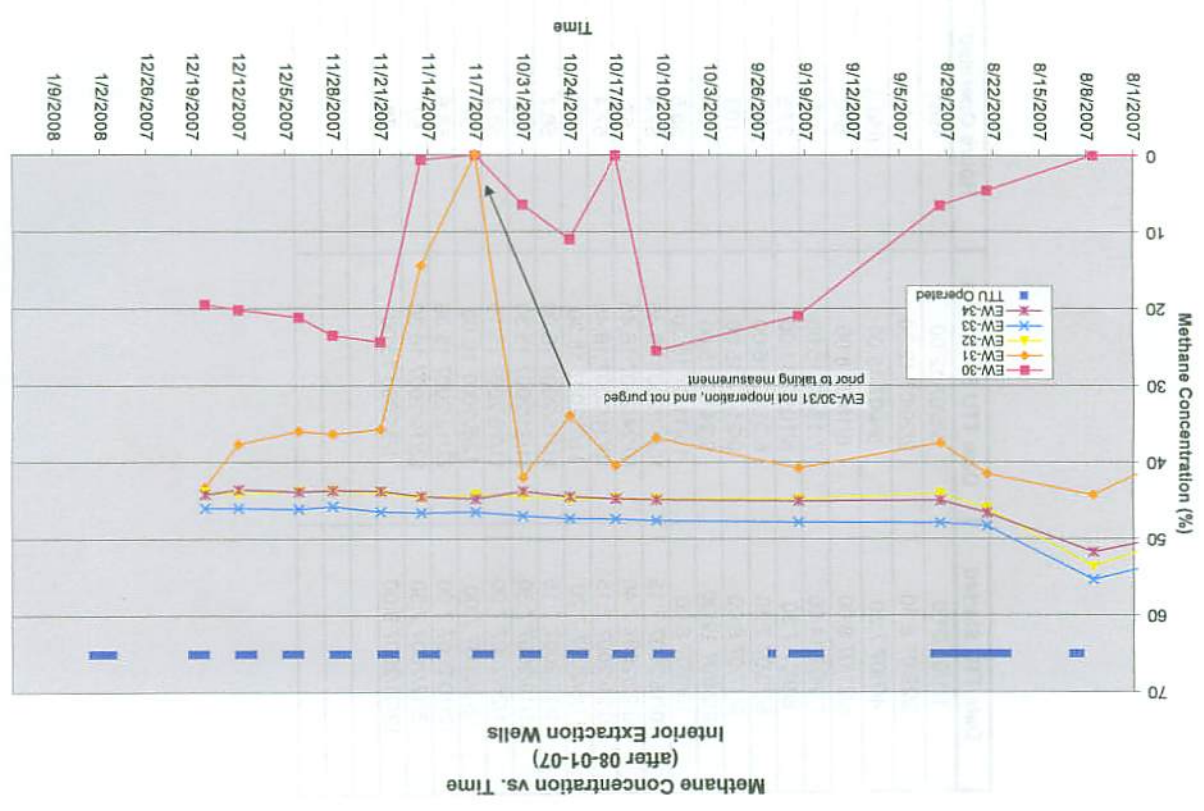
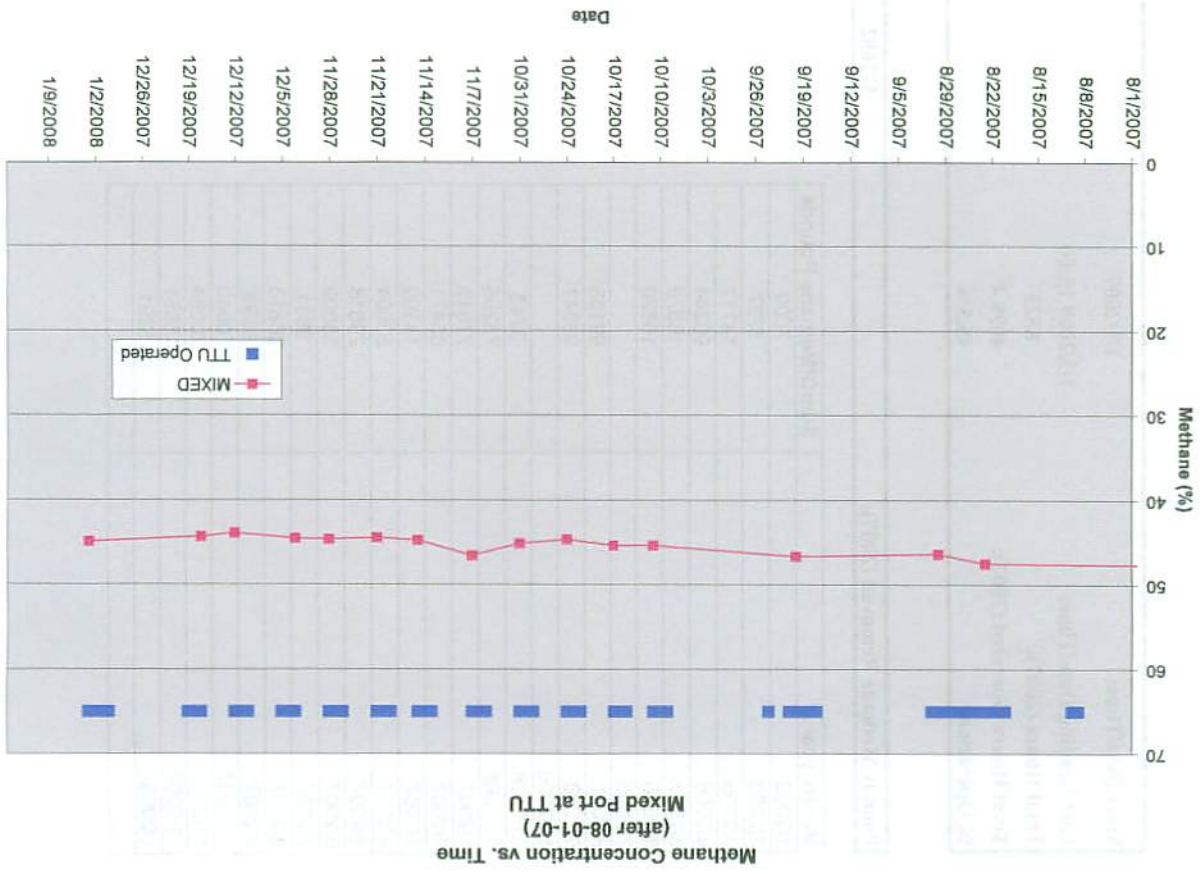
- Start substrate injection – week of January 21

DATA (Preliminary)

- Baseline sampling and analysis results being received.
- Reviewing achievable extraction flowrates obtained and reviewing substrate distribution model.

PROBLEMS/CHANGES

- Several achievable groundwater extraction rates are lower than anticipated/modeled.
- Need to replace one extraction pump and three downwell pressure transducers before system can be started for substrate injection.



**Thermal Treatment Unit
Operation Summary
2007**

Date TTU Started	Date TTU Shutdown	Hours Operated
1/1/07 0:00	3/8/07 12:00	1561
3/29/07 8:30	3/29/07 12:30	4
4/7/07 7:30	5/4/07 16:00	656.5
5/21/07 8:00	6/18/07 8:00	672
7/9/07 14:00	7/13/07 15:00	97
8/9/07 7:30	8/10/07 11:00	27.5
8/20/07 7:30	8/31/07 16:00	272.5
9/17/07 8:00	9/21/07 15:00	103
9/24/07 12:00	9/24/07 15:00	3
10/9/07 8:00	10/11/07 16:30	56.5
10/15/2007 7:15	10/17/2007 16:45	57.4
10/22/2007 7:40	10/24/2007 16:45	57
10/29/2007 7:15	10/31/2007 16:45	57.4
11/5/2007 7:20	11/7/2007 15:30	56.2
11/13/2007 7:15	11/15/2007 16:00	56.7
11/19/2007 7:30	11/21/2007 15:30	56
11/26/2007 7:00	11/28/2007 15:15	56.2
12/3/2007 7:00	12/5/2007 16:00	57
12/10/2007 7:00	12/12/2007 15:30	56.5
12/17/2007 7:30	12/19/2007 16:30	57
12/31/2007 9:00	1/3/2008 15:00	78

Start Date/Time:	1/1/2007
Last Reading Date/Time:	1/3/2008 15:00
Total Hours (2007):	8823
Total Hours Operated (2007):	4098.4
% Operation:	46.5%

Pounds Methane Removed (2007)	372682
--------------------------------------	---------------

Month_year	SumOfMethane Pounds
1/2006	7000
2/2006	5737
3/2006	14717
4/2006	90244
5/2006	18879
6/2006	16520
7/2006	
8/2006	99133
9/2006	93941
10/2006	
11/2006	3743
12/2006	78298
1/2007	77613
2/2007	63471
3/2007	14309
4/2007	53604
5/2007	29618
6/2007	38009
7/2007	8631
8/2007	26813
9/2007	9893
10/2007	20940
11/2007	20083
12/2007	15851
1/2008	5291

HGL AGENDA

Fort Ord HTW BCT Meeting
1:00 PM, 08 January 2008
Monterey, California

1. Groundwater Remediation Project Update
 - Northwest Treatment System operation update (summary attached).
2. Quarterly LTM
 - Third quarter 2007 groundwater monitoring report to be submitted on 09 January 2008
 - Analytical results for fourth quarter 2007 groundwater monitoring event scheduled received from laboratory and submitted to validators.
3. Other Documents
 - Final Interim HCPP Evaluation Report to be submitted mid January 2008.
 - Draft FONR Construction Report to be submitted on 30 January 2008.

**Fort Ord OU-1
Northwest Treatment System Operational Summary
January 8, 2008 BCT Meeting**

Date	Influent TCE Concentration (µg/L)	Volume Treated (gal)	Mass Removed (lb)
6/27/06-7/1/06	6.90	190,000	0.011
7/2/06-7/12/06	3.80	781,680	0.025
7/13/06-7/19/06	4.80	425,980	0.017
7/20/06-7/26/06	3.90	371,170	0.012
7/27/06-9/29/06	6.00	3,497,030	0.175
9/30/06-1/29/07	3.70	5,514,470	0.170
1/30/07-3/13/07	2.90	2,351,090	0.057
3/13/07-5/22/07	2.00	3,698,570	0.062
5/22/07-7/16/07	1.70	2,571,340	0.037
7/17/07-9/11/07	1.20	2,833,230	0.028
9/12/07-10/07/07	0.88	1,035,270	0.008
10/8/07-10/11/07	4.80	345,910	0.014
10/11/07-10/17/07	9.00	897,440	0.067
10/18/07-10/22/07	8.10	468,080	0.032
10/23/07-12/26/07	11.00	8,136,320	0.747
Total Volume Pumped (gal)			33,117,580
Total Mass Removed (lb)			1.46
Average Pumping Rate (gpm)			43.07

Date	Influent Totalizer FI-131 Reading	Gallons since previous reading	Average Rate (gpm)	%Uptime
12/4/2007	29980310	754,820	103.6	100
12/13/2007	31278750	1,298,440	101.3	100
12/16/2007	31606020	327,270	79.1	67
12/19/2007	32099830	493,810	105.5	100
12/26/2007	33117580	1,017,750	102.8	100
December Total Gallons Treated				3,892,090
December Average Pumping Rate (gallons per minute)				100.3
December % Uptime				96.5

