

**BRAC Cleanup Team
(HTW BCT) Meeting Minutes
May 5, 2004**

Final Version

Attendees:

Roman Racca, DTSC
Claire Trombadore, USEPA
Grant Himebaugh, RWQCB
Gail Youngblood, DENR
Glen Mitchell, USACE
Peter Kelsall, Shaw (by phone)
David Eisen (phone)
Derek Lieberman, DENR
Ed Ticken, MACTEC

Marc Edwards, USACE
John Guenza, AHTNA Gov. Services
Bob Parkins, HydroGeoLogic

Agenda Items:

Item	Action
Operable Unit Carbon Tetrachloride Plume	Status Update
Operable Unit Carbon Tetrachloride Soil Gas	Status Update
Emergent Chemicals	Status Update
OU1 Groundwater Remediation	Status Update
OU2 and 2/12 Treatment Systems	Status Update
FFA Schedule	Review/Update
Site 39 Eco Risk Work	Status Update
OU2 Landfill Gas	Status Update
Basewide Range Assessment	Status Update
Range 36A Closure Activities	Status Update
FOST/FOSL/FOSET Issues	Status Update
Calendar	Update

Operable Unit Carbon Tetrachloride Plume

The Biological Treatment Pilot Study is in progress. Lactate injection is complete and sampling has started. Bromide was also injected as a tracer along with the lactate. The Army is considering installing additional monitoring wells in the A-aquifer to further delineate the plume.

Operable Unit Carbon Tetrachloride Soil Gas

The SVE system has been operating for three weeks. The initial influent concentration for carbon tetrachloride was 180 ppbv. After one week of operation, the influent concentration dropped to 85 ppbv. A handout was provided.

Emergent Chemicals

The Army will send a response to the RWQCB letter of January 2004 concerning sampling for PBDE. EPA analytical method 1614 for PBDE is still in a draft format. The Army has concerns about using a draft analytical method. Discussions will continue.

OU1 Groundwater Remediation

A handout was provided on the following topics:

Planning documents
Remedial System Modification
OU1 System Operations
OU1 Long Term Monitoring

The necessity of an ESD for the proposed remediation at OU1 was discussed. DTSC and the RWQCB indicated an ESD may not be required since the preferred remedial alternative had not changed. EPA requested documentation for the record from HGL to show why an ESD is not required based on the EPA guidance documents.

Groundwater Treatment Systems

Draft 2003 Annual Reports for OU1, OU2 and Sites 2/12 will be issued by May 30, 2004. A new Sampling and Analysis Plan (SAP) will be reissued without OU1. A new sampling schedule for OU2 and Sites 2/12 will be implemented after the next carbon change outs.

Annual Mass Removal by Site in 2003 was:

Sites 2/12	44.20 lbs of total chemicals of concern
OU2	56.64 lbs of total chemicals of concern
OU1	0.019 lbs of total chemicals of concern

A wireless alarm is being installed at Sites 2/12.

A handout was provided.

FFA Schedule

The latest draft of the Basewide FFA schedule was approved.

The draft RI Sites FFA schedule was accepted with the addition of one month to the first Site 39 document and all subsequent dates.

The OU2 FFA schedule was revised with an October 2004 comment due date for agency comments to the Draft Landfill Closure Plan

The Army will send a letter with the revised schedules and post them on the web page.

Site 39 Eco Risk Work

A meeting will be scheduled to present the BCT with a summary of all work completed at Site 39 prior to the submittal of the Ecological Risk Assessment.

Operable Unit 2 Landfill Gas

The 2003 Ambient Air Report will be issued to the BCT in late May.

Basewide Range Assessment

The Army proposed holding the Draft Site Reconnaissance /Site Inspection Report to enable Shaw to include the Group A and Group B sites, which were to be separate reports, into that report. The goal is to provide one report, which will include summarizes all historic areas investigation under the Basewide Range Assessment. Each area will be in a stand-alone section. The draft of this comprehensive report will be issued in July. The BCT accepted this proposal.

Range 36A Closure Activities

DTSC has requested that the Closure Plan be resubmitted to include MEC sampling and remediation prior to closure. The Army believes the work completed to date may be sufficient. Discussions are ongoing.

FOST/FOSL/FOSET Issues

FOST 6 (Finding of Suitability to Transfer Track 0 parcels) – Site 39A (East Garrison Ranges trap and skeet area) is still awaiting demolition of the buildings before the clay target debris can be removed. The debris removal is scheduled for mid June.

Del Rey Oaks FOSET- Revised to reflect new MEC terminology.

The First Tee FOSE - Comments were received and the revised FOSE was forwarded to DA BRACO

Open House

The next open house is scheduled for June 12, 2004. It will consist of site tours in place of the usual static displays.

Calendar



Upcoming events were reviewed.

SUBJECT: HTW - BCT Meeting

May 4, 2004

1:00 p.m.

BRAC Conference Room

Check	Name	Organization	Phone	E-mail address
(✓) <i>ME</i>	Marc Edwards	COE	831/884-9925 ext 244	<u>Marc.A.Edwards@usace.army.mil</u>
	Michael Taraszki	MACTEC E&C	415/884-3325	<u>mdtaraski@mactec.com</u>
	John Guenza	Ahtna	707/553-1501	<u>iguenza@ahtnagov.com</u>
	Mark Fisler	Ahtna	831/384-3735	<u>mfisler@ahtna.gov</u>
	David Smith	HydroGeologic, Inc	916/614-8770	<u>dsmith@hgl.com</u>
	Bob Parkins	HydroGeologic, Inc	916/614-8770	<u>rparkins@hgl.com</u>
	Kris Escarda	DTSC	916/255-3651	<u>kescarda@dtsc.ca.gov</u>

**Former Fort Ord
Agency Meeting Agendas
May 2004**

May 4, 2004 at 1:00 p.m.
HTW BCT Meeting
BRAC Conference Room

May 5, 2004 at 10:00 a.m.
MR BCT Meeting
BRAC Conference Room

HTW BCT Meeting
BRAC Conf. Room

Item	Action	Comment
Operable Unit Carbon Tetrachloride Plume	Status Update	
Operable Unit Carbon Tetrachloride Soil Gas	Status Update	
Emergent Chemicals	Status Update	
OU1 Groundwater Remediation	Status Update	
OU2 and 2/12 Treatment Systems	Status Update	
FFA Schedule	Status Update	
Site 39 Eco Risk Work	Status Update	
Operable Unit 2 Landfill Gas	Status Update	
Basewide Range Assessment	Status Update	
Range 36A Closure Activities	Status Update	
FOST/FOSL/FOSET Issues	Status Update	
June Open House	Discussion	
Calendar	Update	

MR BCT Meeting
BRAC Conf. Room

Item	Action	Comment
Action Items	Update	
Fieldwork Update	Update	
Site Security Program	Update	
Interim Action Program	Update	
Track 0 Approval Memo	Update	East Garrison Area 1
Track 1	Update	
Track 2	Update	
FFA Schedule	Update	

April 24-30, 2004
Weekly Operations Summary
Carbon Tetrachloride Soil Vapor Extraction System Treatment System Operations
Former Fort Ord, California
Shaw Environmental, Project 783751

Period and Parameters Summary

Total Available Hours for period (04/24/04 - 04/30/04)	168
Total Hours of Operation	158
Percent Utilization (hours operated / Total hours)	94%
Average Temperature of Soil Gas in the Extraction Wells	62.2° F
Extraction Well With Highest Temp	MW-BW-62-A @ 64° F
Average Temperature - Post Blower (1 reading on 4/27/04)	128° F

Volatile Organic Compound samples collected for analysis

Sampling Event	Date Collected	Preliminary Data Due	Preliminary Data Received
Baseline	3/25/04 - 04/01/04	4/19/2004	4/19/2004
System sampling	4/06/2004	4/08/2004	4/08/2004
System sampling	4/07/2004	4/22/2004	4/22/2004
System sampling	4/13/2004	4/15/2004	4/15/2004
System sampling	4/16/2004	4/30/2004	4/29/2004
System sampling	4/27/2004	5/12/2004	Not received to date

Note: No samples were collected on 4/23/2004 as was indicated in previous report.

Granulated Activated Carbon Change Outs

No change outs to date -

Cumulative Operations Summary

Total Available Hours Since Start (04/06/04)	600
Total Hours of Operation	461.3
Percent Utilization (hours operated / Total hours)	76.9 %
Average Temperature of Soil Gas in the Extraction Wells	62° F
Extraction Well With Highest Temp	MW-BW-70-A @ 66° F
Average Temperature - Post Blower	122° F

Summary of Sample Preliminary Sample Results

See attached analytical summary tables:

Table 1 - Preliminary Results, Carbon Tetrachloride Soil Vapor Extraction System (new prelims in red text)

Plot of Carbon Tetrachloride Concentrations in Post Blower

See attached plot:

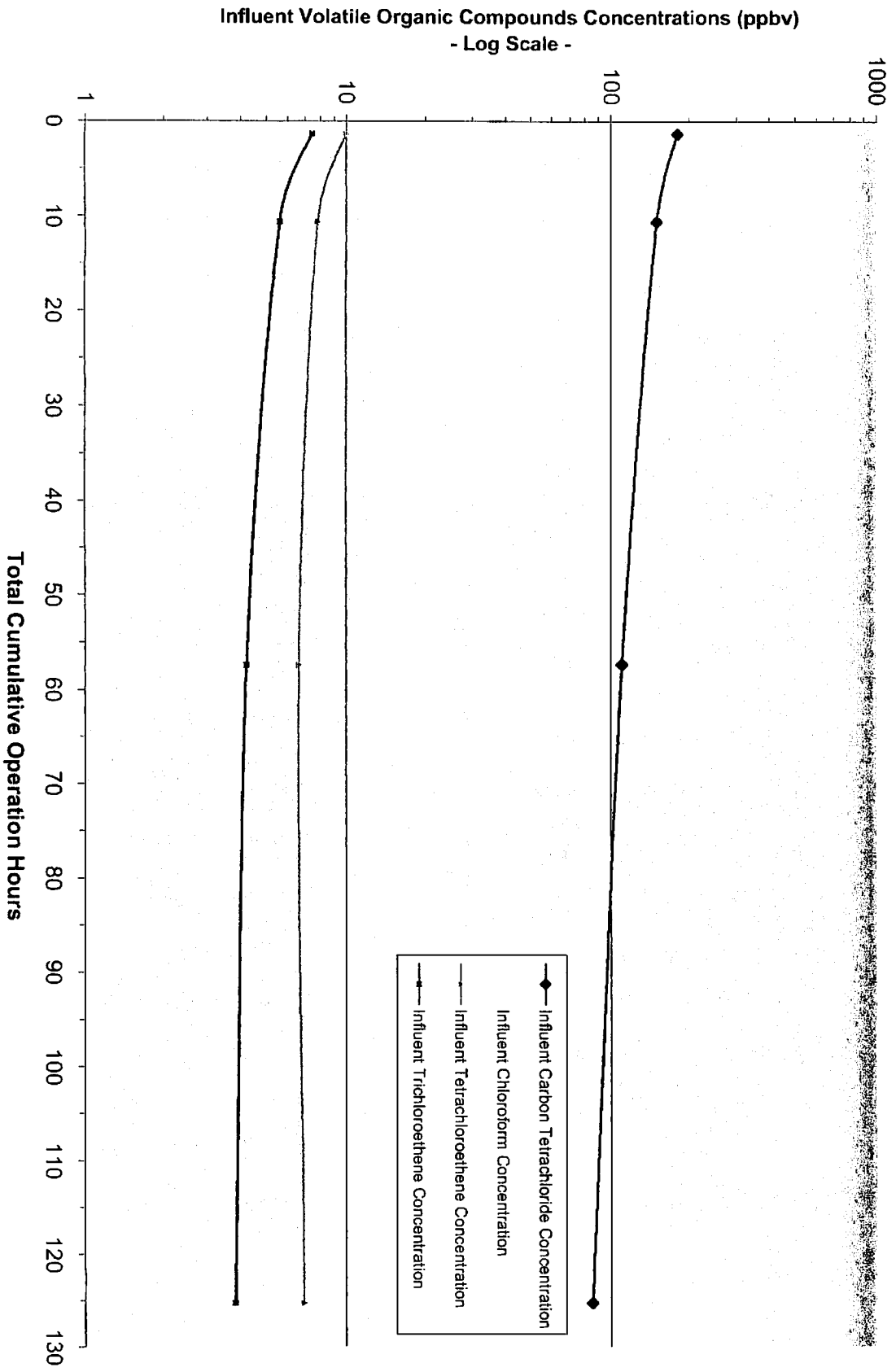
Figure 1 - Influent Volatile Organic Compound Concentration vs. Cumulative Operation Hours

Figure 2 - Daily Hours System Operation vs. Date of Operation

Table 1
Preliminary Results
Carbon Tetrachloride Soil Vapor Extraction System

Location:	INFLUENT	BETWEEN	EFFLUENT	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT
Sample Number:	CTP-INF-056	GAC BEDS	CTP-EFF-058	CTP-INF-059	CTP-EFF-060	CTP-INF-061	CTP-EFF-062	CTP-INF-063	CTP-EFF-064		
Date Collected:	4/6/2004	CTP-MID-057	4/6/2004	4/7/2004	4/7/2004	4/13/2004	4/13/2004	4/16/2004	4/16/2004		
Sample Delivery Group:	0404115	0404115	0404115	0404178	0404178	0404236	0404236	0404344	0404344		
Result Units:	PPBV	PPBV	PPBV	PPBV	PPBV	PPBV	PPBV	PPBV	PPBV		
	Result	Result	Result	Result	Result	Result	Result	Result	Result		
Carbon Tetrachloride, (TO-15)	180	<0.82	<0.84	150	<0.76	110	<0.79	85	<0.79		
Chloroform, (TO-15)	8.5	<0.82	<0.84	7.3	<0.76	6.8	<0.79	6.2	<0.79		
Tetrachloroethene, (TO-15)	10	<0.82	<0.84	7.8	<0.76	6.6	<0.79	6.9	<0.79		
Trichloroethene, (TO-15)	7.4	<0.82	<0.84	5.6	<0.76	4.2	<0.79	3.8	<0.79		

Figure 1
Influent Volatile Organic Compound Concentrations vs. Total Cumulative Operation Hours



DAILY HOURS SYSTEM OPERATION

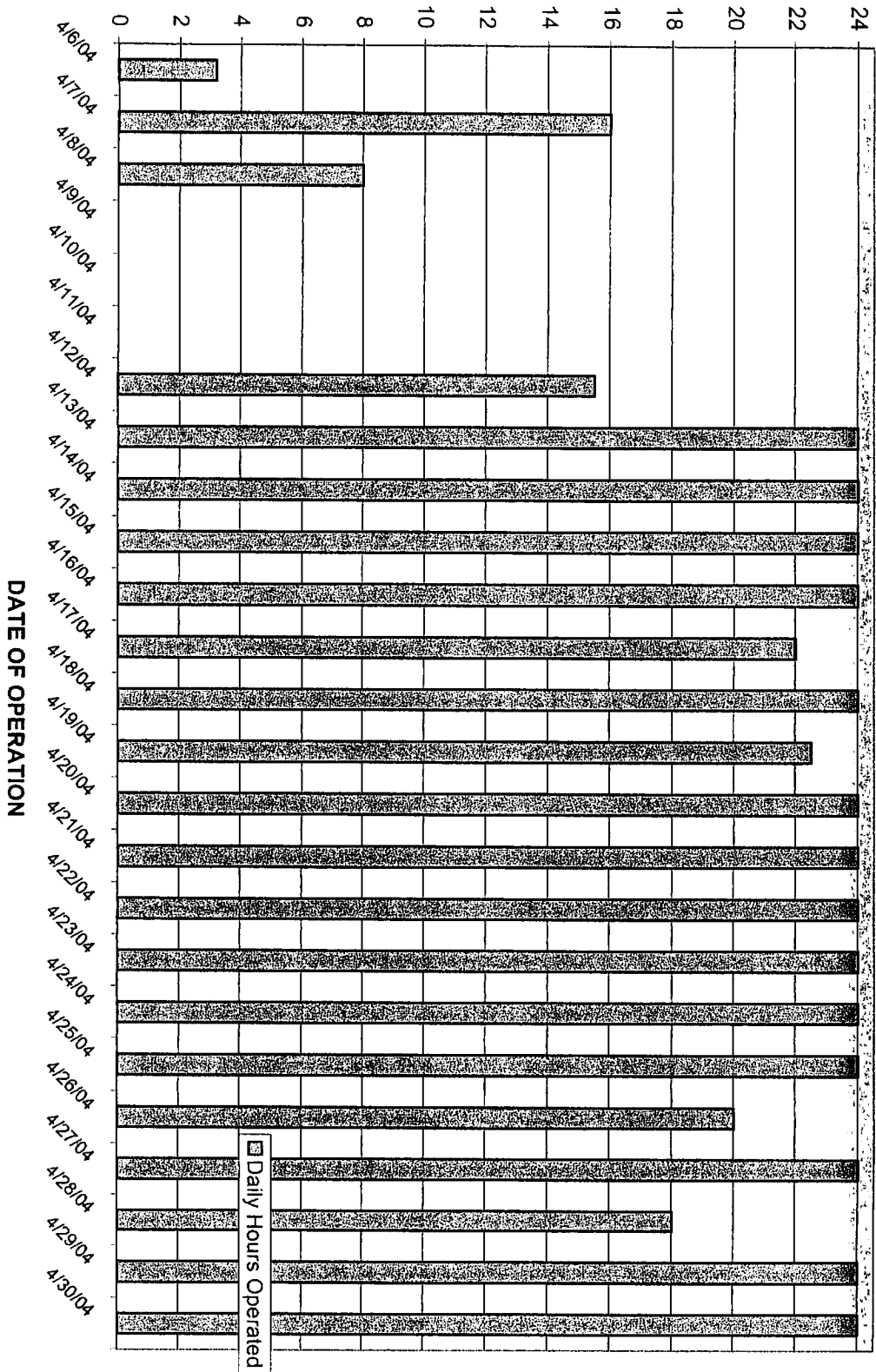


Figure 2
DAILY HOURS SYSTEM OPERATION VS. DATE OF OPERATION

BCT Meeting
OU-1 Agenda, HydroGeoLogic, Inc.
May 4, 2004

OU-1 Groundwater Remediation
Status Update

- **Planning Documents**

The following plans were submitted for regulatory review on 25 February:

- Draft Sampling and Analysis Plan (SAP)
- Draft Site Safety and Health Plan (HSP)
- Draft Quality Assurance Management Plan (QAMP)
- Draft Data Management Plan (DMP)
- Draft O&M Plan Addendum

Comments were received from the RWQCB on the SAP and O&M Manual Addendum; from DTSC on the SAP; and from EPA on the SAP. A very productive conference call was held with the DTSC on their SAP comments. HGL is responding to the agency comments.

The following plans were submitted on 10 February for internal purposes:

- Draft GFPR Coordination Plan
- Draft Security Emergency Response Contingency Plan
- Draft Waste Management and Minimization Plan

Comments were received from the BRAC on the Security/Emergency Response/Contingency and Waste Management and Minimization Plans. Comments were also received for the GFPR Plan and addressed. Responses are in progress for the remaining two plans and will be finalized soon.

- **Remedial System Modification**

- The Conceptual System Modification Plan Technical Memorandum (Tech Memo) was submitted to solicit early regulator feedback in order to determine whether or not further regulatory documentation will be required prior to the planning and construction of the modified P&T system. A very productive conference call with DTSC and the RWQCB was held on April 30 to discuss the Tech Memo. The consensus was that an Explanation of Significant Differences (ESD) for the proposed treatment concept may not be needed, provided that EPA agrees.
- HGL also submitted a Draft Natural Resources Plan (Technical Memorandum) to solicit early input from the UCNRS stakeholders to address habitat impact concerns prior to development of more formal

design documents. HGL received positive feedback from Maggie Fusari and Bill Collins and had a productive meeting with the UC interested parties in early April.

- Field work for the rare plant survey was conducted during the week of 5 April 2004. The data is being summarized and plotted for use in the Remedial Design.
- **OU-1 GWETS**
AHTNA was contracted to perform the weekly O&M visits. A summary report is attached for review of system performance, gauge measurements, and updated volumes of treated water. Samples of influent, intermediate (between GAC vessels), and effluent process water were collected on 15 April to verify the status of the treatment efficiency. Samples are being analyzed in the lab. Analytical results from the 18 February sampling indicated increasingly lower influent concentrations (5.6 ppb), and non-detect effluent concentrations. No problems have been encountered to date.
- **OU-1 LTM**
The first quarter LTM sampling was performed 24 – 28 March 2004. The results are in and a quarterly report is being written.

FFA Schedule
OU-1
Status Update

- The Revised OU-1 FFA was accepted at the last BCT meeting on 7 April.

Former Fort Ord, CA
OU-1 GWETS Summary Report
April 1, 2004 through April 27, 2004

1.0 OPERATION

HydroGeoLogic Inc. (HGL) assumed the Operations and Maintenance (O&M) of the OU-1 Groundwater Extraction Treatment System (GWETS) on January 1, 2004 following completion of the previous operator's contract, performed by AHTNA Government Services Corporation (AHTNA). The OU1 GWETS continued to operate with no shutdowns during the reporting period.

According to AHTNA's final bi-weekly reports in December 2003, the Granular Activated Carbon (GAC) tanks were last configured on August 19, 2003 where GAC B was set as lead, GAC A was set as lag, and GAC C was set in reserve. Extraction well EW-OU1-18-A was turned off June 20, 2001 in conjunction with work being done by Lawrence Berkeley Laboratories. EW-OU1-18-A has remained off in accordance with regulatory agency accepted recommendations made in the Draft Final OU1 5-year Status Report and Effectiveness Evaluation dated November 29, 1999 (Harding Lawson Associates).

Well EW-OU1-17A, and the treatment system influent, intermediate, and effluent samples were last collected on April 15, 2004. Analytical results are currently being processed at the laboratory. Analytical results for the chemicals of concern (COC) collected on February 18, 2004 are summarized in Table 1 below.

TABLE 1 - SW 8260B ANALYTICAL RESULTS - OU1 COCs			
reporting units in ug/l above Method Detection Limit (MDL)			
Sample ID	TS-OU1-INF	TS-OU1-INT	TS-OU1-EFF
Sample Date	2/18/2004	2/18/2004	2/18/2004
1.1.1-TCA	<0.2	<0.2	<0.2
1,1-DCA	<0.2	<0.2	<0.2
1,1-DCE	<0.2	<0.2	<0.2
1.2-DCA	<0.2	<0.2	<0.2
MEK	<0.4	<0.4	<0.4
Benzene	<0.1	<0.1	<0.1
Chloroform	<0.2	<0.2	<0.2
PCE	<0.2	<0.2	<0.2
Total 1,2-DCE	<0.1	<0.1	<0.1
TCE	5.6	<0.2	<0.2

Notes

ug/l - micrograms per liter (equivalent to parts per billion)

<0.2 - Sample is non-detect for target analyte at or above the MDL

Sample TS-OU1-INF is the influent sample representative of EW-OU1-17A

Sample TS-OU1-INT is collected following the lead

GAC unit

Sample TS-OU1-EFF is the collected following the lag GAC unit and before discharge

Sample TS-OU1-EFF is the discharge point of compliance

Key events during the period:

- EW-OU1-18-A remained off throughout the reporting period in accordance with regulatory agency accepted recommendations made in the Draft Final OU1 5-year Status Report and Effectiveness Evaluation dated November 29, 1999.

TABLE 2 - OPERATIONAL DATA				
Date	EX-17 Meter Reading	Gallons since previous reading	Average Rate (gpm)	%Uptime
12/19/2003*	1594750	--	--	100
12/26/2003*	1681520	86,770	8.6	100
1/14/2004	1920420	238,900	8.7	100
1/22/2004	2020760	100,340	8.7	100
1/29/2004	2107940	87,180	8.7	100
2/5/2004	2196160	88,220	8.7	100
2/12/2004	2283770	87,610	8.7	100
2/18/2004	2356280	72,510	8.4	100
2/28/2004	2487340	131,060	8.8	100
3/6/2004	2574640	87,300	8.7	100
3/13/2004	2664480	89,840	9.0	100
3/20/2004	2750160	85,680	8.4	100
3/27/2004	2838280	88,120	8.7	100
4/2/2004	2911460	73,180	8.7	100
4/9/2004	2998260	86,800	8.7	100
4/16/2004	3087360	89,100	8.7	100
4/23/2004	3173100	85,740	8.7	100
	Total Volume Treated since 12/26/04	1,491,580		
	Total Volume Treated since October 1995**	111,074,580		

Notes:

*Final Measurements recorded by AHTNA

**Starting amount of 109.583 million gallons taken from AHTNA's final Bi-Weekly Summary Report dated January 9, 2004

2.0 MAINTENANCE

- Routine

3.0 ISSUES

- None

4.0 SCHEDULED ACTIVITIES FOR NEXT REPORTING PERIOD

- Continued weekly O&M
- GAC vessels may require reconfiguration. A sample of effluent was collected on April 15, 2004 to verify status of treatment efficiency. Samples are still being processed at the laboratory.

GWTP O&M

- Annual Evaluation Reports
 - Preliminary Drafts for OU 1, OU 2, and Sites 2/12 will be issued for internal review by May 15.
 - Drafts will go out for agency review by May 30.
 - Annual Mass Removal Stats
 - Sites 2/12: 44.02 lbs of total COCs removed
 - OU 2: 56.64 lbs of total COCs removed
 - OU 1: 0.19 lbs of total COCs removed.

SAP

- Will be reissued without OU 1.
- New sampling schedule is being implemented at the Sites 2/12 and OU 2 GWTPs following carbon unit servicing.
- Semiannual Groundwater Treatments Systems Evaluation Report will be issued in July.

Maintenance Items

- **Wireless Alarm installation at Sites 2/12 GWTP**
is in the process of being installed.
- **Influent Gallery INF-02-180 was cleaned out**
with no apparent effect.
 - Video scan planned for next week.

**Basewide ROD/RD/RA, Former Fort Ord
 DRAFT**

Deliverable/Event	Current Deadlines (Previous Deadlines)	Dcadline Revision Rationale
Base Wide ROD Activities		
Draft Basewide Proposed Plan	1/2014 (1/04)	Extended based on OE activities schedules
Comments Due	3/2014 (3/04)	"
Draft Final Basewide Proposed Plan	4/2014 (4/04)	"
Comments Due	5/2014 (5/04)	"
Final Proposed Plan	6/2014 (6/04)	"
Public Comment Period	8/2014 (8/04)	"
Draft Basewide ROD	9/2014 (9/04)	"
Comments Due	11/2014 (11/04)	"
Draft Final Basewide ROD	12/2014 (12/04)	"
Comments Due	1/2015 (1/05)	"
Final Basewide ROD Signed	1/2016 (1/06)	"

**RI Sites, Former Fort Ord
DRAFT**

Deliverable/Event	Current Deadlines (Previous Deadlines)	Deadline Revision Rationale
Site 39		
Draft Basewide Range Assessment Report	7/04 (12/03)	Extension to comment period on Draft Report and Expand the Draft Report
Comments Due	9/04 (2/04)	"
Draft Final Basewide Range Assessment Report	10/04 (3/04)	"
Comments Due	11/04 (4/04)	"
Draft Ecological Risk Assessment for Small Arms Ranges Report	11/04 (6/04)	"
Comments Due	12/04 (8/04)	"
Draft Final Ecological Risk Assessment for Small Arms Ranges Report	1/05 (9/04)	"
Comments Due	2/05 (10/04)	"
Draft Assessment of Soil Treatment Alternatives (Supplemental Feasibility Study)	10/04 (3/04)	"
Comments due	11/04 (5/04)	"
Draft Final Assessment of Soil Treatment Alternatives (Supplemental Feasibility Study)	12/04 (6/04)	"
Comments due	1/05 (7/04)	"
Draft Proposed Plan	3/05 (10/04)	"
Comments due	4/05 (12/04)	"
Draft Final Proposed Plan	5/05 (1/05)	"
Comments due	6/05 (2/05)	"
Final Proposed Plan	7/05 (3/05)	"
Public comment period	8/05 (4/05)	"
Draft ROD Amendment	9/05 (5/05)	"
Comments due	10/05 (6/05)	"
Draft Final ROD Amendment	11/05 (7/05)	"
Comments due	12/05 (8/05)	"
Final ROD Amendment	1/06 (9/05)	"

**RI Sites, Former Fort Ord
DRAFT**

Draft Remedial Action Work Plan	2/06 (10/05)	“
Comments due	3/06 (12/05)	“
Draft Final Remedial Action Work Plan	4/06 (1/06)	“
Comments due	5/06 (2/06)	“
Draft Confirmation Report	3/09 (12/08)	“
Comments due	5/09 (2/09)	“
Draft Final Confirmation Report	6/09 (3/09)	“
Comments due	7/09 (4/09)	“

**OU 2, Former Fort Ord
DRAFT**

Deliverable/Event	Current Deadlines (Previous Deadlines)	Deadline Revision Rationale
Landfill Activities		
Draft Landfill Closure Report	3/03 (12/02)	Closure delays due to lawsuit activities
Comments Due	10/04 (6/04)	<i>Pending resolution of landfill gas issues</i>
Draft Final Landfill Closure Report	11/04 (7/04)	"
Comments Due	12/04 (8/04)	"

Proposal to Streamline Basewide Range Assessment reports

BCT

May 4, 2004

Current reports and status. Planned sequentially following different stages of investigation.

1. **Literature Review**, Issued March 02. No comments received.
2. **Site Reconnaissance/Site Inspection Report**, Issued December 03. Comments received from EPA. DTSC requested additional copy last week. *Note: this is the "Basewide Assessment Report" in the FFA schedule but it is not the last report in the sequence.*
3. **Site Characterization Report**. In internal review.
4. **Range Mapping Report**. Field work in progress.

Getting difficult to keep track of these reports and to see "at a glance" the status of >200 ranges.

Proposal is to combine into one report:

- Introduction will describe the investigation process (avoiding repetition from one report to another)
- Summary tables will show current status of all ranges (e.g. what work has been done, and current recommendation)
- Separate sections to be included for each range with text, tables and figures. Placeholders included for ranges not completed yet.
- First version will be issued June/July (FFA date to be determined). Will include results of literature review, recon and SI (responding to agency comments) and characterization (not yet seen by agencies). Will not include all ranges, therefore not a complete draft.
- Updated later (inserts or revisions) with results of investigations after OE clearance and remediation mapping.
- Will produce detail sections on individual ranges as much as possible on CD