

**Former Fort Ord Operable Unit (OU)-1 – Base Closure Team (BCT) Meeting  
Status Update  
Groundwater Remediation, Well Destruction, and Treatment Plant Decommissioning  
Marina, California  
17 July 2015**

**OU-1 On-Post Activities for 19 June through 10 July 2015**

Prepared by HydroGeoLogic, Inc., Roy Evans, Project Manager

**Attendees: (to be revised after meeting)**

<b>Individual</b>	<b>Attended?</b>	<b>Individual</b>	<b>Attended?</b>
James Specht, USACE		Grant Himebaugh, RWQCB	
Teresa Rodgers, USACE		Edward Ticken, AMEC	
Alex Kan, USACE		Jeff Fenton, AMEC	
Bonnie McNeil, USACE		Derek Lieberman, Ahtna	
Cory Koger, USACE		Brad Clark, Ahtna	
William Collins, BRAC		Holly Dillon, Ahtna	
Tom Ghigliotto, Chenega <sup>1</sup>		Kevin Ghalambor, Burleson	
Melissa Broadston, Chenega <sup>1</sup>		Peter Kelsall, CB&I	
Bart Kowalski, Chenega <sup>1</sup>		Steve Crane, Gilbane	
Cary Stiebel, Chenega <sup>1</sup>		Erin Caruso, Gilbane	
Lewis Mitani, EPA		Lindsay Alexander, Gilbane	
Martin Hausladen, EPA		Larry Friend, Gilbane	
Kimberly Gettman, DTSC		Kevin Siemann, Gilbane	
Min Wu, Ph.D., DTSC		Roy Evans, HGL	
Steve Sterling, DTSC		Kevin Wierengo, HGL	
Edward Walker, DTSC		Gage Dayton, Ph.D., UCSC	
X = attended in person or by telephone; blank indicates absent from the meeting			

<sup>1</sup>Chenega staff supporting the BRAC  
Ahtna = Ahtna Engineering Services  
BRAC = Base Realignment and Closure Fort Ord Office  
CB&I = Chicago Bridge & Iron, Inc.  
DTSC = California Department of Toxic Substances Control

EPA = U.S. Environmental Protection Agency  
HGL = HydroGeoLogic, Inc.  
RWQCB = Regional Water Quality Control Board  
UCSC = University of California, Santa Cruz  
USACE = U.S. Army Corps of Engineers

**OU-1 Treatment Plant Operations**

HGL replaced the variable frequency drive (VFD) for the transfer pump (connecting the influent holding tank to the treatment vessels) and inspected and tested the system during the week of 15 to 19 June. The northwest treatment system (NWTS) is operable. In accordance with the Exit Strategy decision logic based on sampling results, the NWTS will remain offline. HGL noted during the June Base Closure Team (BCT) meeting that the plant would be operated briefly (less than 8 hours per quarter) to maintain and check operability. Active operation will coincide with sampling events unless unforeseen conditions dictate otherwise.

Since system startup in 2006, the NWTs has pumped approximately 212 million gallons of groundwater and removed approximately 6.0 pounds of total volatile organic compounds, primarily trichloroethene (TCE).

### **OU-1 Groundwater Sampling and Analytical Results**

Sampling results from the first Attainment Monitoring event in May were presented during the June BCT meeting. All results from the May 2015 event met the cleanup targets specified in the Record of Decision or were below the screening values specified in the approved Exit Strategy. The second Attainment Monitoring event will take place from 16 through 21 July. The regulatory agencies agreed at the June BCT meeting to remove well PZ-OU1-10-A1 from the sampling network for the emerging contaminants—this well will remain as part of the sampling network for the OU-1 chemicals of concern (COCs). The validated sampling results for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are shown on the attached Figure.

### **Reporting/Federal Facility Agreement Schedule**

All scheduled submittals have been made and the status of submitted and anticipated reports for 2015 is summarized in Table 1. The preliminary draft 2015 Fort Ord Natural Reserve Impact Assessment and Habitat and Rare Plant Species Survey Results Report was submitted for Army and Base Realignment and Closure (BRAC) Fort Ord Office review on 29 June 2015. The Technical Memorandum presenting the PFOA / PFOS Sample Results for Attainment Monitoring Event #1 is being reviewed by the Army for draft submittal on 27 July 2015. The semiannual 2015 groundwater monitoring report is being prepared for draft submittal in early August.

### **OU-1 Weed Control and Rare Plant Monitoring**

UCSC completed field observations of weed populations in selected areas to evaluate the overall effectiveness of past weed control activities. UCSC is preparing a data summary and evaluation report and expects to complete the initial draft in July.

#### **Action Items:**

- None.

#### **Ongoing:**

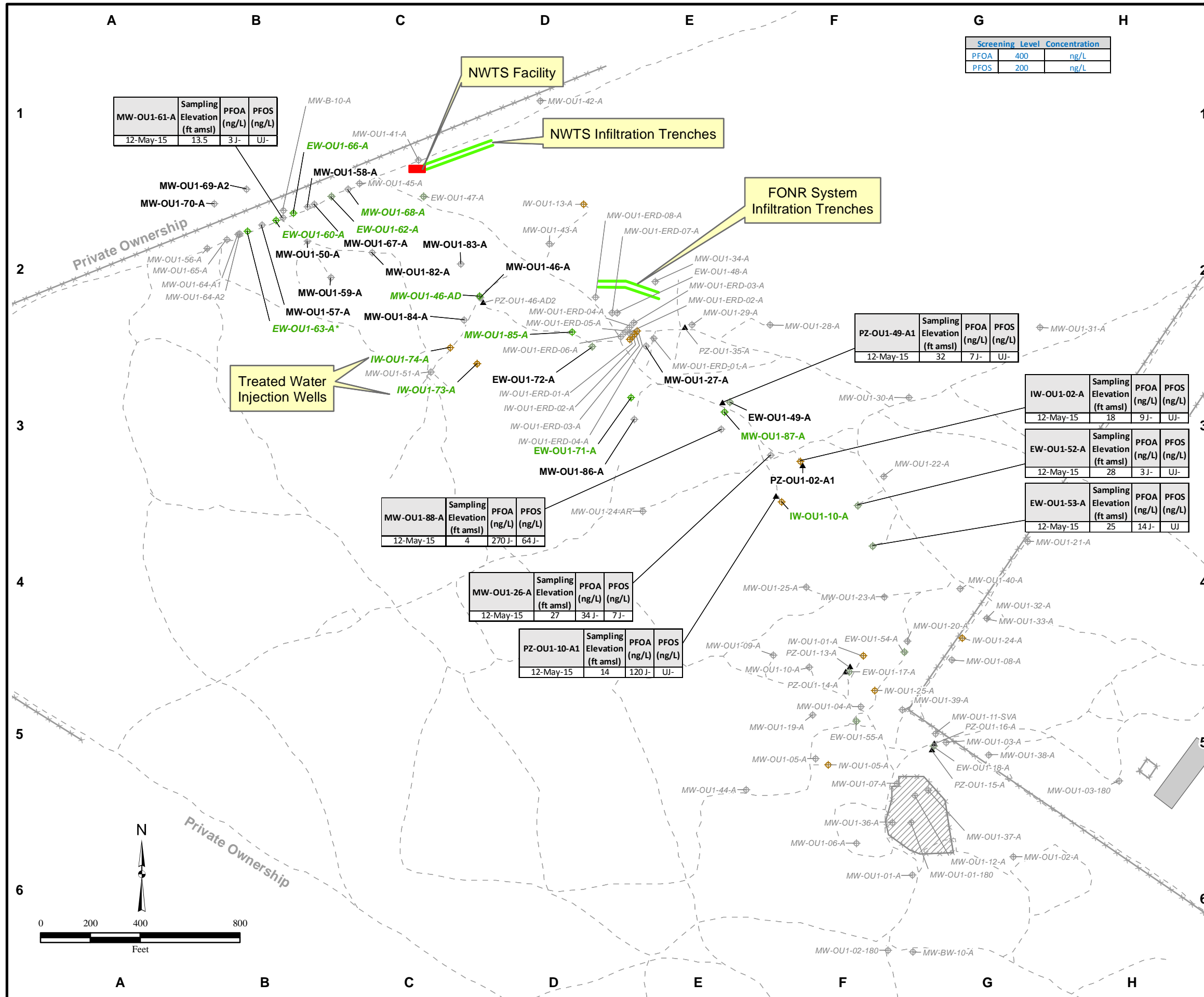
- Submit draft minutes for previous BCT meeting(s)—submitted draft and revised draft minutes for June 2015. EPA and RWQCB have approved the revised version (updated completion of action items).
- Submit final minutes for previous BCT meeting(s)—complete through May 2015.

**Table 1**  
**Current Deliverable Schedule**  
**Former Fort Ord, Marina, CA – 17 July 2015**

<b>Deliverable Title</b>	<b>Submittal</b>	<b>Review Comments Due</b>	<b>Status/Remarks</b>
<i><b>Primary Deliverables</b></i>			
None Pending			
<i><b>Secondary Deliverables</b></i>			
Draft PFOA/PFOS Sampling Results Technical Memorandum	Scheduled for 27 July 2015	August 2015	Preliminary draft submitted to Army on 2 July 2015.
2015 Semi-Annual Groundwater Monitoring Report <sup>1</sup>	Scheduled for 7 August 2015	September 2015	In progress.
Draft 2015 Annual Groundwater Monitoring Report <sup>1</sup>	Scheduled for 15 October 2015	November 2015	On hold pending completion of scheduled sampling.
<i><b>Completed Recent Submittals</b></i>			
Draft UFP-QAPP	March 2014	May 2014	Submitted 04 March 2014
Final UFP-QAPP	May 2014	Received	Submitted 29 May 2014
Final 2013 Annual and 3rd Quarter Groundwater Monitoring Report	April 2014	NA	Submitted 04 April 2014
Final Work Plan for Well Destruction and Treatment Plant Demolition	April 2014	NA	Submitted 04 April 2014
Draft Health & Safety Plan – OU-1 O&M/LTM	May 2014	Received	Draft accepted as Final
Draft Well Destruction and Treatment Plant Demolition Completion Report	August 2014	September 2014	Draft accepted as Final Submitted 03 October 2014
Draft Exit Strategy Technical Memorandum	December 2014	February 2015	Comments received 20 February 2015
Draft 2014 Annual Groundwater Monitoring Report	December 2014	January 2015	Accepted as Final without Comment
Final Exit Strategy Technical Memorandum	March 2015	April 2015	Draft Final approved without comment. Change pages distributed 12 May 2015.
Site Safety and Health Plan Update	March 2015	Not Applicable	Army approved revisions.
Final UFP-QAPP Revision 1	March 2015	April 2015	Draft Final approved without comment. Change pages distributed 14 May 2015.

<sup>1</sup> The Semiannual Groundwater Monitoring Report is submitted as a final document but review comments are accepted. Any comments are addressed in the Annual Groundwater Monitoring Report.

**Figure 1**  
**May 2015 PFOA and PFOS**  
**Concentrations in OU-1 A-Aquifer,**  
**Former Fort Ord, CA**



**Screening Level Concentration**

PFOA	400	ng/L
PFOS	200	ng/L

**Legend**

- Monitoring Well
- Extraction Well
- Injection Well
- Piezometer or 2-Inch Well
- MW-OU1-70-A Well Identification Name
- MW-OU1-31-A Well Destroyed
- Trail/Unimproved Road
- Fence
- Treated Water Infiltration Trench
- Former Fire Drill Area
- NWTS Facility

**Notes:**  
 Well labels in green font indicate extraction or injection well.  
 Italicized font shows pumping suspended.  
 Wells not sampled are not part of Attainment Monitoring Network.  
 ft amsl=feet above mean sea level  
 J=Sample result biased low  
 ND=Nondetect  
 ng/L=nanograms per liter  
 NWTS=Northwest Treatment System  
 PFOA=Perfluorooctanoic Acid  
 PFOS=Perfluorooctane Sulfonate  
 UJ=Not detected; Sample result biased low

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 7/1/2015 TB  
 Source: HGL

