Former Fort Ord Operable Unit (OU)-1 – Base Closure Team (BCT) Meeting Final Minutes Groundwater Remediation, Well Destruction, and Treatment Plant Decommissioning Marina, California 24 February 2017

OU-1 On-Post Activities for 06 January through 15 February 2017 Prepared by HydroGeoLogic, Inc., Roy Evans, Project Manager

Attendees: (to be revised after meeting)							
Individual	Attended?	Individual	Attended?	Notes:			
James Specht, USACE		Jon Fenske, HEC	Х	¹ Chenega staff supporting the BRAC			
Teresa Rodgers, USACE		Kimberly Gettman, DTSC	X	Ahtna = Ahtna Engineering Services BRAC = Base Realignment and Closure Fort			
Alex Kan, USACE	X	Noel Shrum, DTSC	X	Ord Office			
Bonnie McNeill, USACE	X	Grant Himebaugh, RWQCB	X	CB&I = Chicago Bridge & Iron, Inc. DTSC = California Department of Toxic			
Cory Koger, USACE				Substances Control			
Jonathan Whipple, USACE	X	Jeff Fenton, AMEC	Х	EPA = U.S. Environmental Protection Agency			
David Eisen, USACE		Derek Lieberman, Ahtna	X	HGL = HydroGeoLogic, Inc. RWQCB = Regional Water Quality Control			
Paul Fluck, USACE		Holly Dillon, Ahtna	X	Board			
Curtis Payton, USACE		Brad Clarke, Ahtna		UCSC = University of California, Santa Cruz USACE = U.S. Army Corps of Engineers			
William Collins, BRAC	X	Thor Anderson, Burleson	X				
Melissa Broadston, Chenega ¹	X	Steve Crane, Kemron	Х				
Bart Kowalski, Chenega ¹	X	Erin Caruso, Gilbane	X				
Cary Stiebel, Chenega ¹	X	Larry Friend, Gilbane					
Tom Ghigliotto, Chenega ¹	X	Kevin Siemann, Gilbane					
Maeve Clancy, EPA	X	Nadia Burleson, Burleson					
Martin Hausladen, EPA		Roy Evans, HGL	X				
Min Wu, Ph.D., DTSC	X	Kevin Wierengo, HGL					
Steve Sterling, DTSC	X	Gage Dayton, Ph.D., UCSC					
Duane Balch, USACE	X	Charity Meakes, USACE	X				
X = attended in person or by telephone; blank indicates absent from the meeting							

OU-1 Treatment Plant Operations

Remediation is complete. The northwest treatment system (NWTS) is offline but operable. The alarm system is no longer functioning because the provider upgraded service (to a 4G network) and no longer supports the original installation (2G service). The Army is awaiting the determination regarding OU-1 closure to decide if the alarm system should be upgraded and restored. The system is inspected monthly to maintain operability—this month it was inspected twice (on 10 February and 21 February) because of heavy rains.

Reporting/Federal Facility Agreement (FFA) Schedule

The status of ongoing and anticipated reports for OU-1 is summarized in Table 1. The draft Well Destruction Completion Report for the Armstrong Ranch wells was accepted as written by the regulatory agencies and replacement pages and CDs to update "Draft" to "Final" were submitted on 17 February 2017. The public comments on the draft version were related to OU-1 background and events leading up to the well destruction effort and were addressed separately. It is expected that these responses will be mailed from the BRAC Office next week. The Technical Memorandum submitted to support the recommendation for OU-1 site closeout was accepted by EPA as written.

HGL noted that an error in the Final Exit Strategy Technical Memorandum (ESTM) submitted in May 2015 was discovered during preparation of the Five Year Review Report. The non-cancer hazard index (HI) for adult groundwater users based on the September 2014 groundwater sampling results was incorrectly reported in the main text as "1" although the detailed calculations presented in the ESTM Attachments showed the value to be "2". HGL noted that the HI calculated from the December 2015 groundwater sampling results is "1" because contaminant concentrations continued to decline after September 2014. Also, the regulatory agencies concurred that the OU-1 close-out should proceed without further monitoring or remediation. The regulatory agencies agreed that a replacement page for the ESTM (attached below) should be submitted to ensure that the document is corrected in the Administrative Record.

OU-1 Closeout

The Army submitted a Technical Memorandum to the regulatory agencies on 25 August 2016 regarding closure in view of PFOA and PFOS concentrations. As noted in previous meetings, two wells (MW-OU1-88-A and PZ-OU1-10-A1) do not meet the revised HA value of 70 nanograms per liter for the sum of PFOA and PFOS concentrations. Figure 10 from the Remedial Action Completion Report is attached for reference. The Technical Memorandum provides rationale to support the Army's recommendation that OU-1 proceed to closeout. DTSC and RWQCB have completed their review and informed the BCT that they concur with the Army's recommendations for closure. EPA Region 9 staff communicated with the FFA Facilities staff at EPA Headquarters and Army officials in the Pentagon

regarding OU-1 site closure. On 21 February 2017, EPA Region 9 informed the Army that EPA concurs that remediation is complete and closure can begin without further sampling or groundwater treatment at this time.

OU-1 Rare Plant Monitoring

The 2016 OU-1 Rare Plant Survey and Impact Assessment Report was submitted to the UCSC and to the BRAC Office for further distribution (it has not yet been submitted). HGL presented the results of the 2016 rare plant survey effort to the US Fish and Wildlife Service, the California Department of Fish and Wildlife, and others at the meeting held on 01 February 2017 in the Fort Ord BRAC Office conference room.

Five-Year Review

HGL staff are assisting the Army in preparing the 5-Year Review report.

New/Current Action Items:

- The next BCT meeting is set for 15 March 2017 at 1330.
- The Community Involvement Workshop (CIW) Open House will be on 25 February and TRC meeting on 28 February at 1000.
- Fact sheets have been updated for the CIW.
- HGL informed the meeting that the OU-1 groundwater remediation was awarded the Grand Prize in the Small Projects category for the 2017 nationwide competition sponsored by the American Academy of Environmental Engineers and Scientists.

Ongoing:

- Submit draft minutes for previous BCT meeting(s)—complete through January 2017.
- Submit final minutes for previous BCT meeting(s)—complete through January 2017.

Table 1Current OU-1 Deliverable ScheduleFormer Fort Ord, Marina, CA –February 2017

Deliverable Title	Submittal	Review Comments Due	Status/Remarks			
Primary Deliverables						
None Scheduled						
Technical Memorandum						
Attainment Monitoring Evaluation and Summary for EPA Designated Emerging Contaminants	25 August 2016	To be determined	Approved as submitted by EPA, DTSC and RWQCB			
Secondary Deliverables						
Final Armstrong Ranch Well Demolition Completion Report	17 February 2017	None	Final report submitted. Response to public comment submitted separately.			
Completed Recent Submittals						
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			
2015 Semiannual Groundwater Monitoring Report ¹	07 August 2015	10 September 2015	Accepted without comment			
Draft 2015 Annual Groundwater Monitoring Report ¹	15 October 2015	16 November 2015	Draft Accepted without comment; final submitted 03 December 2015			
Final UFP-QAPP Revision 2	14 October 2015	16 November 2015				
Draft PFOA/PFOS Sampling Results Technical Memorandum Attainment Monitoring Events 1 - 4	29 January 2016	29 February 2016	Comments received and addressed			
Final PFOA/PFOS Sampling Results Technical Memorandum Attainment Monitoring Events 1 - 4	04 March 2016	01 April 2016	Final submitted 16 March 2016			
Final 2016 OU-1 Groundwater Monitoring Report	26 August 2016	None	Comments received, addressed, and Final submitted			

¹ 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.