

**HTW BCT Meeting Minutes for Operable Unit 1
Former Fort Ord, California
September 23, 2005**

1. An HTW BCT meeting was held September 23, 2005, in Santa Rosa, CA at the home of Mr. Martin Hausladen. The portion of the meeting dedicated to Operable Unit 1 (OU-1) was held from approximately 1:00 p.m. to about 1:45 p.m.

Attendees included the following representatives:

Gail Youngblood	US Army
David Eisen	US Army
Derek Lieberman	US Army (by phone)
Grant Himebaugh	CA RWQCB
Stewart Black	CA DTSC (by phone)
Dot Lofstrom	CA DTSC
Roman Racca	CA DTSC
Martin Hausladen	US EPA
Bill Mabey	TechLaw
HGL: Mike Bombard, Roy Evans (by phone)	

A summary of key issues and decisions/actions are described in the following paragraphs.

2. Mr. Bombard PG, CHG described progress to date in the Phase 4 field effort. Boring SB-OU1-60-A was completed and encountered the top of the Salinas Valley Aquiclude (SVA) at a depth of approximately 96 feet. Based on this result, the SVA surface elevation was estimated to be only a few feet lower than at MW-OU1-41-A, approximately 80 feet to the southwest. In accordance with the Final Phase 4 Work Plan, this boring confirmed the Conceptual Model concerning the SVA surface and was therefore abandoned. The resistivity survey results (line D-D' of August 18, 2005) was found to over-estimate the depth to the SVA surface in that area.
3. Work is continuing on the installation of piezometers near pumping test locations at existing wells MW-OU1-46-AD (under construction at time of meeting) and IW-OU1-10-A. Pumps have been installed in both wells. Mr. Bombard informed the BCT that a downhole hammer had been lost at a depth of approximately 110 feet bgs in PZ-OU1-46AD1. The drillers grouted the boring and moved approximately 4 feet away and drilled a new boring. A new sample hammer was brought out to the site. Mr. Racca expressed concern that there may be grease on the hammer. Mr. Bombard stated that the hammer was steam-cleaned prior to use in the boring and that this was a slide hammer with no zerck fittings requiring greasing.

4. The Army sent the signed well permit for the abandonment of EW-OU1-48-A on to the county. They will check to see if HGL was also sent a copy.
5. HGL requested feedback on the Draft Hydraulic Control Pilot Project Summary document. The agencies' responses are summarized below:
 - a. DTSC had no major comments at present. Ms. Lofstrom had completed a review and Mr. Black expected to finish his review early next week.
 - b. RWQCB had no significant concerns but would like clarification on the rationale for the location of injection well BIW19054. HGL indicated that they would address that question but noted that the preferred method for returning treated water to the A-Aquifer was through infiltration galleries.
 - c. EPA is concerned about the possibility that some of the TCE might "leak" past the barrier wells, particularly through the deeper part of the SVA "channel" in the vicinity of MW-B-10-A. HGL agreed that this is an important design consideration and noted that the design goal is to prevent any significant migration of TCE beyond the Former Fort Ord boundary. Both the hydraulic and the mass transport modeling conducted thus far indicate that the design meets that goal. However, HGL also stressed the importance of the phased construction with a pumping test conducted in the area of the SVA channel to confirm the effectiveness of the design.
 - d. HGL will provide an estimate of the mass of TCE within the SVA "channel" in comparison to the overall A-Aquifer at the next BCT.
6. Mr. Himebaugh brought up that HGL documents in three ring binders had been arriving with pages not attached and out of order. Other members of the BCT echoed that their copies also had come apart in transit. Mr. Bombard stated that future documents would be packed better to help avoid this problem.
7. A Figure showing the 2nd Quarter 2005 Long Term Monitoring (LTM) results was distributed as a frame of reference for the next discussion items. That Figure (attached) illustrated that all monitoring wells south of MW-OU1-20-A have met the Record of Decision (ROD) clean-up targets for the last two quarters. The 3rd Quarter LTM data has been collected and sent to the laboratory. If that data shows similar results in terms of meeting the ROD clean-up targets, HGL plans to request that the existing system be temporarily shut down to conduct a rebound evaluation and assess the need for subsequent operation. To that end, HGL requested input as to the format of such a request and the general criteria that would justify a temporary cessation of pumping. The participants provided the following guidance:
 - a. The request should be submitted as a Technical Memorandum (TM).
 - b. The TM should include data demonstrating consistent achievement of the ROD targets. Typically, the minimum requirement is 3 consecutive quarters of non-detect (ND) or concentrations significantly below the ROD target (i.e., 5 parts per billion [ppb] for TCE).

- c. Overall plume trends should also be presented to demonstrate shrinking of the plume boundary over time.
 - d. The rebound evaluation period is typically one year with quarterly monitoring during that period.
 - e. Monitoring frequency for individual wells in the evaluation area can be proposed on case-by-case basis. A possible strategy would be:
 - i. Quarterly monitoring if TCE > 2.5 ppb
 - ii. Semi-annual monitoring if TCE > ND but < 2.5 ppb
 - iii. Annual monitoring if TCE is ND
8. HGL indicated that the Draft Hydraulic Control Pilot Project Work Plan would be submitted in mid-November. The BCT agreed that the Draft would be reviewed in 30 days with an “Onboard” Review process so that the Work Plan could be finalized at a meeting in December. The date for the December meeting will be determined later. The goal is to enable start of the Pilot Project construction no later than January 2006 with the full system operational by the end of March 2006. Mr. Himebaugh suggested that an on-board review meeting be conducted in December, a month in which the BCT is typically skipped. The date will be determined later. Mr. Evans indicated that as a “heads up,” HGL doubts that we will put in any wells south of IW-10 and that we expect to add two to three wells to the design for the remediation system.
9. HGL indicated that the remainder of the OU-1 60% remedial design would be submitted in early 2006 (February). The goal of the remedial design effort is to have the construction of the full system started as early as possible within the constraints of the Habitat Management Plan (i.e., June) and the system operational by October 2006.
10. HGL will provide a projected schedule for the completion of the OU-1 remedial design and construction at the next BCT (October 12, 2005).
11. The November BCT is scheduled for November 09, 2005.

Roy Evans, P.E.
HydroGeoLogic, Inc.