

Minutes
U.S. Army Dugway Proving Ground
Restoration Advisory Board Meeting
Tooele County Courthouse Auditorium
Monday, August 21, 2006
3:00 – 5:00 p.m.

Attendees: Lynn E. Appell, USACE; Jeff Carter, DPG; John Dalton, EPA; Jeff Fitzmayer, Parsons; Joe Gearo, DPG; Keller Davis, Shaw E & I; Royce Larsen, DPG; Paula Nicholson, DPG; R. Jason Reed, DPG; Ed Staes, Parsons; Mark Sydow, USACE; Paige Walton, Techlaw; Carl Wall, ERV; Paul Zianno, USACE. Recorder: Carol Shelline, Shaw E & I.

Absent:

Welcome – Introductions: Joe Gearo opened the meeting at 3:05 p.m. by welcoming all RAB members and guests. Each participant then introduced themselves, naming the organization with which each was associated.

Installation Restoration Program – Current Work Status and Upgrades:

Parsons -- RCRA Facility Investigation Sites – Ed Staes provided an update on these sites. He initially reviewed the four-step RCRA correction action process and defined “solid waste management units” (SWMU). A status report of the 32 Priority I SWMUs and the 36 Priority II SWMUs was relayed and included an overview of the sites that had been approved by DSHW.

Providing a brief description of SWMU-201, Camels Back Mountain Cave Closure, Ed Staes reported that this site consists of a series of natural caves used for cave fortification testing in the limestone cliffs of Camels Back Mountain. Phase II RFI sampling within the cave identified low levels of a chemical agent (mustard) and explosives. As a result of the findings, DPG implemented a corrective action to fence the cave entrances. Mr. Staes also shared a brief history of the site, its’ location and layout, and noted there is an existing pulley system that was used to place equipment at the site during the installation of the fencing. Pictures of the various phases of the project were provided.

The following RFI Phase II work has been completed since May 2006:

- (1), Draft Alternate Groundwater Monitoring Strategy – Down Range Area was prepared.
- (2) The final RFI report for SWMU 98 was completed.
- (3) Seven RFI Reports were submitted to the Army or DSHW.
- (4) Draft RFI Work Plans on SWMUs 192 and 208 were submitted.
- (5) Field Work since November 2005 includes corrective action at SWMU 201 and investigative at SWMU 41.

In closing, Mr. Staes noted future field work would include:

- (1) Soil sampling at SWMUs 4, 32,114, 209, and 210;
- (2) Groundwater investigation at SWMU 180;

- (3) Removal actions required at SWMUs 35, 173, 189, and 208;
- (4) Completion of reports for Phase II RFI SWMUs, to include:
 - (a) final RFI Reports for SWMUs 61, 133, 150, and 154;
 - (b) draft-final RFI Reports for SWMUs 97, 177, and 180;
 - (c) draft RFI Reports for SWMUs 8, 11, 41, 60, and 183; and,
 - (d) final Carr Groundwater Management Plan.

Parsons -- Carr Area Groundwater Management Area (GMA) Approach – Jeff Fitzmayer, Geologist, presented an update on the Carr Groundwater Management Plan. Initially, he provided a map of the locations of the various regional groundwater management areas on DPG and briefly explained the basics of groundwater hydrology, providing additional illustrations.

After reviewing previous groundwater monitoring activities, Mr. Fitzmayer explained that under Utah Regulation R315-7-13 there was an option for the development of an alternate management plan, provided that:

- (1) One or more releases have occurred; and,
- (2) The alternate plan is protective of human health and the environment.

Having met the above criteria, a proposed Groundwater Management Plan was developed. The objectives of the Groundwater Management Plan are to:

- (1) Develop a comprehensive management approach that includes a detailed understanding of:
 - (a) the nature and extent of contamination;
 - (b) hydrogeologic controls on contaminant migration; and,
 - (c) the relationship between sites.
- (2) Develop a cost-effective long-term management plan;
- (3) Employ systematic and consistent decision-making criteria for all sites; and,
- (4) Develop a well-defined exit strategy.

The proposed Groundwater Management Plan data inputs apply a three-tiered approach:

- (1) Shallow source area monitoring;
- (2) Deep source area monitoring (this is performed in an area not yet contaminated to detect vertical movement /migration of the contaminant); and,
- (3) Downgradient monitoring.

The advantages of a Regional Groundwater Management Plan is that:

- (1) Fewer wells/samples are required;
- (2) The analyte list is limited;
- (3) There is a well-defined exit strategy;
- (4) It provides a framework for the addition of new sites; and,
- (5) The costs are lower.

Shaw E & I -- Consent Order Hazardous Waste Management Units – Keller Davis, Project Manager, provided an update on activities at HWMU (Hazardous Waste Management Units), otherwise known as Consent Order sites. HWMUs are sites at which waste disposal continued beyond 1980. The Consent Order issued by the State of Utah requires DPG to investigate and close 41 sites.

Thirty-five HWMUs have closures approved and responses complete. They are: HWMUs 2, 7, 20, 30, 33, 34, 36, 37, 38, 40, 42, 43, 46, 47, 48, 59, 63, 90, 99, 124, 128, 130, 158, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, and 190.

Remedial construction at HWMU 51 is complete. The closure report has been submitted and closure is pending.

HWMU sites scheduled for future closure include: HWMU 9, 14, 39, 55, and 58. Shaw is under contract for HWMUs 9, 14, and 39. Dugway Proving Ground intends to have HWMUs 55 and 58 under contract in FY 2006.

The following HWMU-related activities are scheduled for completion by November 2006:

- (1) HWMU 37 Post Closure Plan (submitted August 2006);
- (2) HWMU 51 Closure Report (submitted August 2006); and,
- (3) HWMU 90 Post-Closure Plan (to be submitted September 2006).

Shaw's HWMU field activities for FY 2006-2007 will include debris consolidation and landfill cap construction on HWMU 39. The project has been approved by the State. The other field activity for the new fiscal year will be the continued Ditto Groundwater Management (GMA), Year 0 Implementation.

Shaw E & I -- Ditto GMA Implementation – This project is currently underway to collect Year 0 data. Year 0 implementation includes:

- (1) Installation of source area monitoring wells, which occurred in March 2006;
- (2) Quarterly water level measurements on 124 wells in the Ditto area;
- (3) High frequency water level measurements every 15 minutes on five wells for a year.

At the completion of the Year 0 activities, the groundwater table will be refined and a proposal for the downgradient sentinel well locations will be submitted.

Shaw E & I -- Performance Based Contracting – Explaining performance based contracting (PBC), Mr. Davis said they are unique to environmental contracts. Payment is based on the successful execution of the work as well as the initially established Milestone Schedule, which places the responsibility and impetus on the contractor to achieve results. Monthly invoicing and reporting are not required. Different from "fixed price" contracts, PBCs minimize, if not eliminate, the need for change orders because the client—Army—has not mandated a particular remedy or path to closure. Milestone prices are agreed to at the onset of the contract, with the contractor assuming the risk from any cost overruns. There is no insurance requirement at DPG.

The scope of work for the current Army Chief of Staff for Installation Management (ACSIM-ID/IQ) contract is to achieve site closure on 22 previously investigated sites. Twenty of the sites are SWMUs and two of the sites are HWMUs. The site types include waste piles, landfills, buildings, and test structures. The nature and extent of contamination has been characterized for all but the two HWMU sites. Contract scope is to attain closure approval from regulators and perform any post-closure requirements.

The execution strategy for PBC in 2006 includes:

- (1) Group sites by type and closure strategy;
- (2) Assess data needs to design/construct remedy (February 2006);
- (3) Collect geophysical and topographical survey data to refine material quantities (April 2006);
- (4) Finalize designs and acquire regulator approval (ongoing); and,
- (5) Construct remedies (underway).

The sites included in the PBC 2006 field schedule include 13 landfill sites where safety assessments show the sites are not safe enough to excavate and remove. Closure activities will include construction of impermeable covers. Post closure will include cover maintenance and repairs and groundwater monitoring.

Old Business – None

New Business – None

Questions and Discussion – None recorded

Next Meeting – Date/Time/Location: Monday, November 6, 2006, 3:00 – 5:00 p.m., DPG
Please submit agenda topics to _____ no later than Friday, November 3.

The meeting adjourned at 4:10 p.m.

Attachments:

Parsons RFI and Carr GMA presentation slides
Shaw E & I, Inc. presentation slides