



Dugway Proving Ground Restoration Advisory Board Meeting

August 21, 2006
Dugway Proving Ground
Dugway, Utah

PROJECT UPDATES

Keller Davis - Shaw Environmental, Inc.

- Consent Order Sites
- Performance Based Contract



Dugway Proving Ground
RAB Meeting
August 21, 2006

Consent Order Sites



Dugway Proving Ground
RAB Meeting
August 21, 2006

Hazardous Waste Management Units

- **HWMU (Hazardous Waste Management Units), otherwise known as Consent Order Sites, are sites at which waste disposal continued after 1980.**
- **The Consent Order, issued by the state of Utah, requires the investigation and closure for 41 sites at Dugway.**



Dugway Proving Ground
RAB Meeting
August 21, 2006

Status of HWMUs

- **HWMU Closures Approved/Response Complete**
 - 35 Total HWMUs closed: HWMUs **2, 7, 20, 30, 33, 34, 36, 37, 38, 40, 42, 43, 46, 47, 48, 59, 63-1/2, 90, 99, 124, 128, 130, 158, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170** and **190**
- **HWMU Construction Complete; Closure Pending**
 - HWMU **51**
- **HWMU Scheduled for Future Closure**
 - Five Sites: HWMUs **9, 14, 39, 55, and 58**
 - DPG intends to have these sites under contract in FY06



Dugway Proving Ground
RAB Meeting
August 21, 2006

Remaining Closure Activities

HWMU 37 – Post Closure Plan (submitted 8/06)

HWMU 51 – Closure Report (submitted 8/06)

HWMU 90 – Post Closure Plan (submittal 9/06)



Dugway Proving Ground
RAB Meeting
August 21, 2006

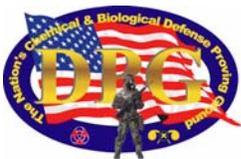
Field Activities – 2006/2007

- **HWMU 39 – Debris Consolidation and Landfill Cap construction**
- **Ditto Groundwater Management Area (GMA) – Year 0 Implementation**
 - **Install Source Area Monitoring Wells (March)**
 - **Quarterly Water Level Measurements (March & August)**
 - **High Frequency Water Levels (5 wells - ongoing)**
 - **Refine Groundwater Table**
 - **Propose Downgradient Sentinel Well Locations**



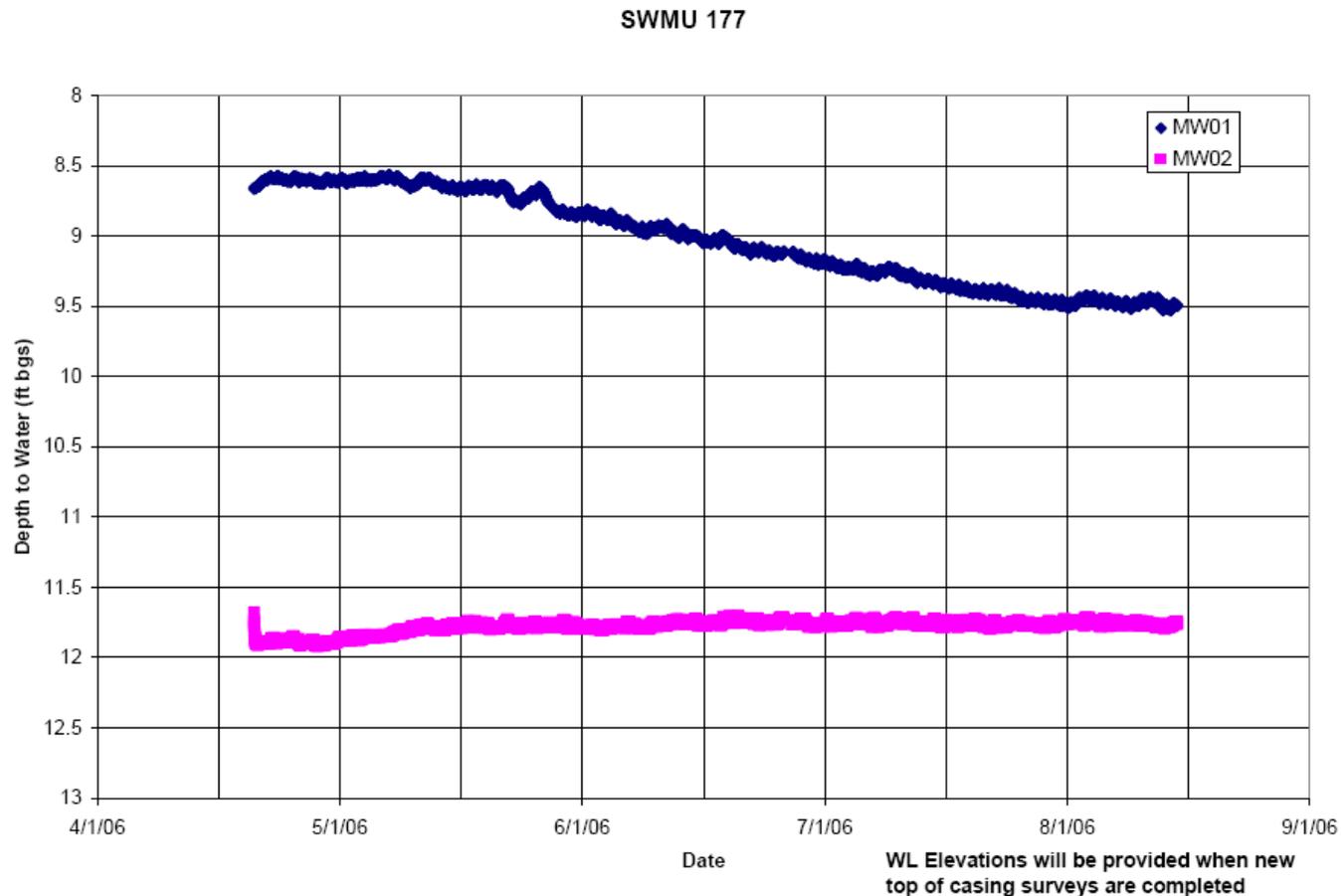
Dugway Proving Ground
RAB Meeting
August 21, 2006

High Frequency Water Levels



Dugway Proving Ground
RAB Meeting
August 21, 2006

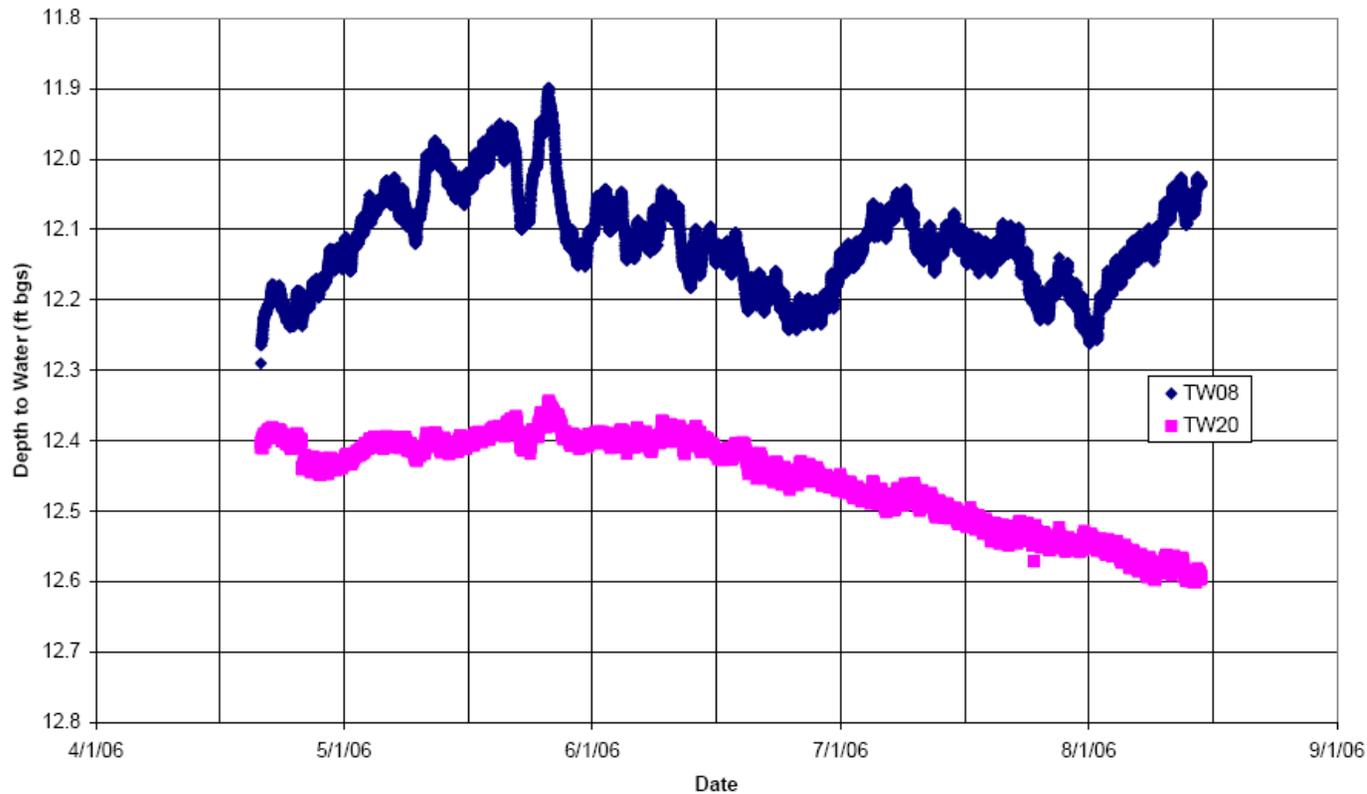
High Frequency Water Levels



Dugway Proving Ground
RAB Meeting
August 21, 2006

High Frequency Water Levels

SWMU 97



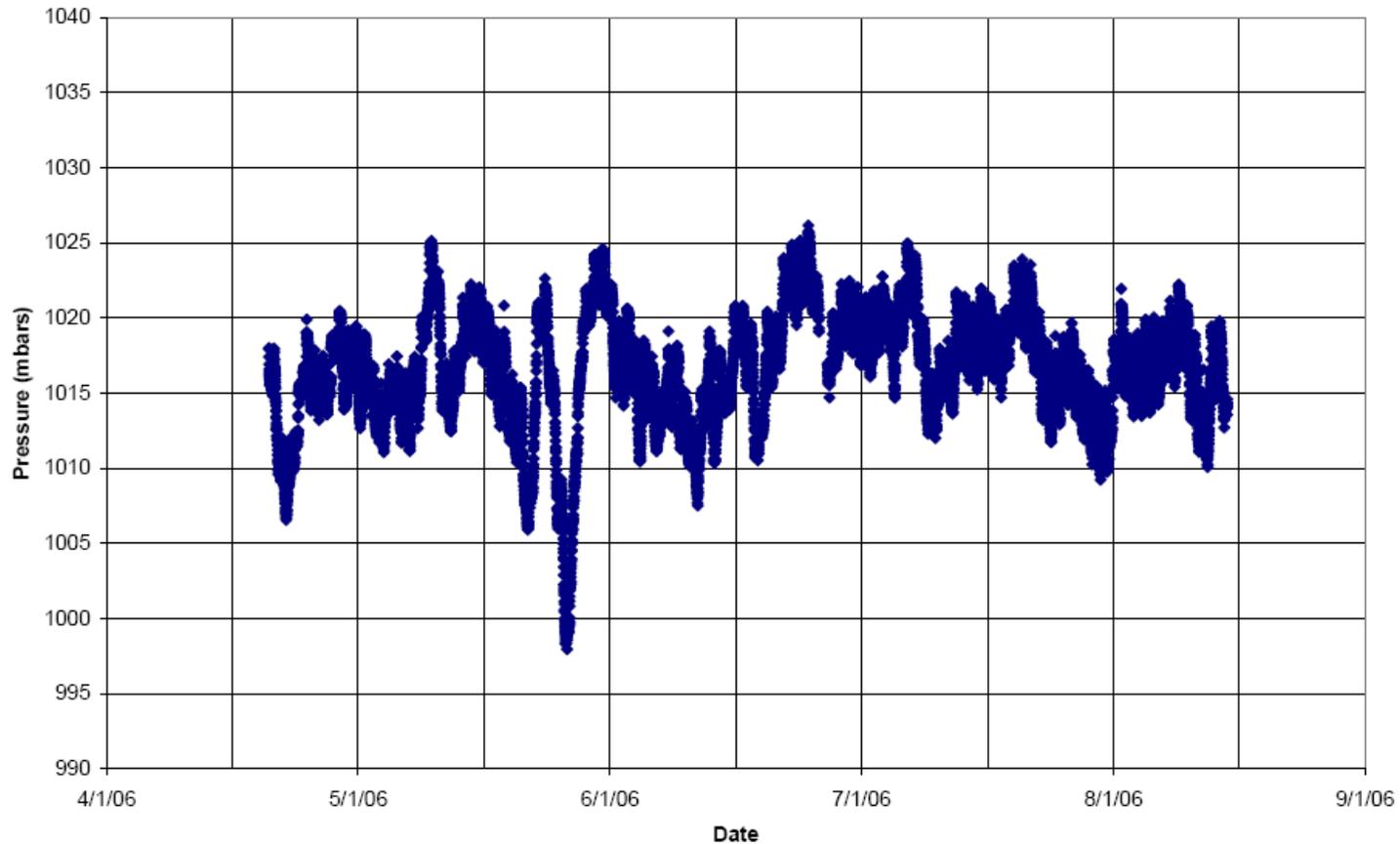
WL Elevations will be provided when new top of casing surveys are completed



Dugway Proving Ground
RAB Meeting
August 21, 2006

High Frequency Water Levels

Barometric Pressure SWMU 177



Dugway Proving Ground
RAB Meeting
August 21, 2006

Performance Based Contract



Dugway Proving Ground
RAB Meeting
August 21, 2006

Performance Based Contract (PBC)

- ACSIM-ID/IQ: Army Chief of Staff for Installation Management-Indefinite Delivery/Indefinite Quantity
- **Scope** of work: Achieve site closure on 22 previously investigated sites
- **Performance Based**: Contractor paid upon successful execution of milestones
- **Fixed Price**: No change orders; risk transferred to contractor



Dugway Proving Ground
RAB Meeting
August 21, 2006

PBC “Scope”

- 22 sites
 - 20 SWMUs; 2 HWMUs
 - Site types include waste piles, landfills, buildings, and test structures
 - Nature and extent of contamination has been characterized for all but 2 sites
 - Attain closure approval from regulators and perform any post-closure requirements



Dugway Proving Ground
RAB Meeting
August 21, 2006

PBC – “Performance”

- Payment based on successful execution of work (Milestone Schedule).
- Monthly invoicing and reporting not required
- Places responsibility and impetus on contractor to achieve results.



Dugway Proving Ground
RAB Meeting
August 21, 2006

PBC – “Fixed Price”

- Change Orders – By not mandating a particular remedy or path to closure the Army is reducing the possibility for change orders
- Milestone prices agreed to up front
- Contractor assumes risk from cost overruns
- No insurance requirement at DPG



Dugway Proving Ground
RAB Meeting
August 21, 2006

PBC 2006 Execution Strategy

- Group sites by type and closure strategy
- Assess data needs to design/construct remedy (February 2006)
- Collect data: Geophysics and topographical surveys to refine material quantities (April 2006)
- Finalize designs and acquire regulator approval (ongoing)
- Construct remedies (underway)



Dugway Proving Ground
RAB Meeting
August 21, 2006

PBC 2006 Execution Strategy (cont.)

- 13 landfill sites
- Safety assessments show they are unsafe to excavate and remove
- Closure will include impermeable covers
- Post closure will include cover maintenance and repairs and groundwater monitoring.



Dugway Proving Ground
RAB Meeting
August 21, 2006

Questions?



Dugway Proving Ground
RAB Meeting
August 21, 2006