

Soil and Water Remediation, Groundwater/Vadose Zone (RL-0030)

**B. H. Ford, Vice President
(509) 373-3809**



*100-D Biostimulation
Test Wells*



Overview

This section addresses Project Baseline Summary (PBS) RL-0030, *Soil and Water Remediation, Groundwater/Vadose Zone*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of May 2007.

Notable Accomplishments

- **River Corridor**
 - Completed borehole characterization flow measurement for In-Situ Redox Manipulation (ISRM).
 - Completed drilling five of twelve EM-22 biostimulation wells at 100-D.
 - Completed drilling five of six polyphosphate treatability test wells in the 300 Area.
 - Conducted cultural monitoring with the assistance of Wanapum, Nez Perce and Yakama tribes at 100-KR-4.
 - Initiated batch and continuous operations of the electrocoagulation treatability test system.
- **Central Plateau**
 - Completed decommissioning eighty-seven of ninety FY 2007 wells.
 - Continued characterization drilling at two boreholes adjacent to the T Tank Farms.
- **Integration**
 - Received and resolved comments on the draft Hanford Integrated Groundwater and Vadose Zone Management Plan from Washington State Department of Ecology and the U.S. Environmental Protection Agency (EPA).
 - Deep Vadose Treatability Test Plan team began writing first sections of the plan.

FY 2007 Funds vs. Spend Forecast (\$M)

	Projected FY 2007 Funding	FY 2007 Fiscal Year Spend Forecast	Variance
Soil & Water Remediation, Groundwater/Vadose Zone	\$ 91.9	\$ 84.3	\$ 7.6

Schedule/Cost Performance (\$M)

Soil & Water Remediation, Groundwater/Vadose Zone	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY07/CTD)
Current Period (Month)	\$6.1	\$6.1	\$5.7	\$0.0	0.5%	\$0.4	6.4%	\$76.8
Cumulative-to-Date (FY 2004-Present)	\$177.2	\$172.8	\$176.6	-\$4.4	-2.5%	-\$3.8	-2.2%	\$278.1

Numbers are rounded to the nearest \$0.1M and include the Closure Services allocation.

CTD Schedule Performance (-\$4.4M/-2.5%):

The schedule variance is being driven by three main contributors:

- Groundwater/Vadose Zone Integration
 - Competing priorities delaying finalization of strategy and subcontracts.
 - Initiation of the Technical Peer Review was delayed while discussions were held with RL and Ecology regarding the panel/workshop strategy.
 - Environmental Database is behind schedule primarily due to the effort to finalize subcontracting strategy (identifying scope, etc.) with Lockheed Martin Information Technology, Inc. (LMIT).
- 100-NR-2 OU
 - Injections delayed until late February; change in field implementation plan.
- 200-ZP-1 OU
 - Drilling delays due to mechanical problems with resultant delays in lab analysis; four months behind schedule on feasibility study due to risk modeling delays; proposed plan four months behind schedule. Projected to be back on schedule by the end of July.

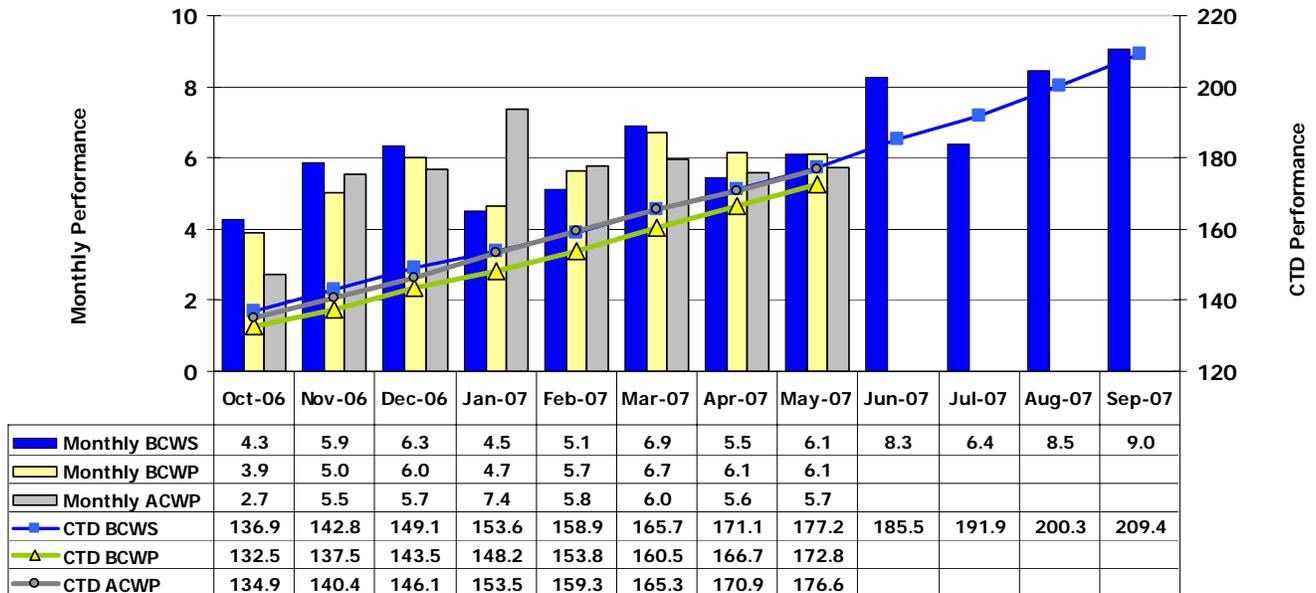
CTD Cost Performance (-\$3.8M/-2.2%):

The cost variance is being driven by three main contributors:

- Well Management
 - Recovery costs for damaged 200-ZP-1 well and stuck well casing; higher than projected subcontractor costs for 100-KR-4 wells; advanced authorization to start 618-2 burial ground boreholes and A-4 monitoring well, pending baseline change request (BCR) approval.
- Groundwater monitoring and Performance Assessments
 - Higher initial work load for decommissioning wells (Geo Science Logging); RCRA Monitoring and Reporting unbudgeted labor; higher costs than planned for Waste Sampling and Characterization Facility (WSCF)/Office of Sample Management.
- 100-KR-4
 - Overrun on the K West Reactor Chromium Plume construction; the tie-in to relocate injection wells (BCR being incorporated).

Schedule/Cost Performance (\$M), continued

Performance Analysis CTD and Monthly (\$M)



Milestone Achievement

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status/Comments
M-013-06B	Submit the 200-BP-5 OU RI/FS Work Plan to EPA	TPA	3/31/07	3/30/07		Complete
M-016-14A	Complete Construction of a 300 foot Permeable Reactive Barrier Utilizing Apatite Sequestration at 100-N	TPA	5/31/07	3/25/07		Complete
M-015-48B	Submit the 200-ZP-1 OU Feasibility Study Report / Proposed Plan to EPA	TPA	9/30/07		9/30/07	On schedule
M-013-10A	Submit the 200-PO-1 OU Remedial Investigation/Feasibility Study to Ecology	TPA	9/30/07		9/30/07	On schedule
M-024-57M	Install a Cumulative of 60 Wells	TPA	12/31/07	4/6/07		Complete
M-015-50	Submit a Treatability Work Plan for Deep Vadose Zone Technetium and Uranium to Ecology and EPA	TPA	12/31/07		12/31/07	On schedule