

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

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K West Pump and Treat Building

*K West Pump & Treat
Process Vessels*



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 December 2006.

Notable Accomplishments

- **Drilling**
 - Four TPA monitoring wells were constructed to monitor Carbon Tetrachloride and Technetium 99 in 200 West area.
 - Two wells are being drilled to monitor and provide information on groundwater flow in 200 East for the 200-BP-5 Operable unit.
 - Two TPA monitoring wells were constructed, and one well is being drilled at the 100K area.
 - Nine treatability test wells in the 300-FF-5 Operable Unit have been accepted. These wells are the injection wells for the Phosphate treatability test.
- **River Corridor**
 - Completed characterization boreholes to sample groundwater for Plutonium beneath the 618-2 burial ground in the 300-FF-5 Operable Unit.
 - Completed 300 and 100-D Area aquifer tube sampling. Aquifer Tubes sample groundwater at the river interface.
 - Awarded contract for iron injection to enhance the ISRM barrier (EM-22)
 - Completed startup of the 100 K West treatment system approximately two weeks ahead of schedule. This treatment system targets a Chromium plume near the KW reactor.
- **Integration**
 - Completed transects for 6 High Resolution Resistivity (HRR) lines around B/BX/BY. These transects are part of the Integrated HRR field work between Groundwater Remediation and Tank Farms to identify contamination in the soil zone.
 - Delivered a communications plan for the Key Parameters Decision document to DOE-RL.
 - Accelerated pipeline mapping; the results for completed sites are now available in the QMAP system.
 - Distributed the draft 200 Area FY 2006 Annual Report for the Pump & Treats (DOE/RL-2006-73) for internal review.
 - Distributed a draft of the Hanford Site Annual Groundwater Report for FY 2006 within FH, to DOE-RL and to the regulatory agencies for review.
 - The GW/VZ Management Plan is under going a revision, based on the many comments received from the contractor review (FH and CH2M HILL). Graphics are being developed to emphasize the key messages. It is intended to kick-off the DOE-RL review February 1, 2007.
- **Central Plateau**
 - Completed the Feasibility Study borehole to characterize the 216-A-4 waste site to 296 Ft, several weeks ahead of schedule and under budget.
 - Presented status of the ZP-1/PW-1 Feasibility Study/Risk Assessment to the Hanford Advisory Board. The presentation was well received.

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

	Projected FY 2007 Funding	FY 2007 Fiscal Year Spend Forecast	Variance
Soil & Water Remediation, Groundwater/Vadose Zone	\$ 79.6	\$ 79.1	\$ 0.5

FY 2007 Schedule/Cost Performance (\$M)

	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
Soil & Water Remediation, Groundwater/Vadose Zone	\$16.5	\$14.9	\$13.9	-\$1.6	-9.8%	\$1.0	6.6%	\$68.0

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

Schedule Performance (-\$1.6M/-9.8%).

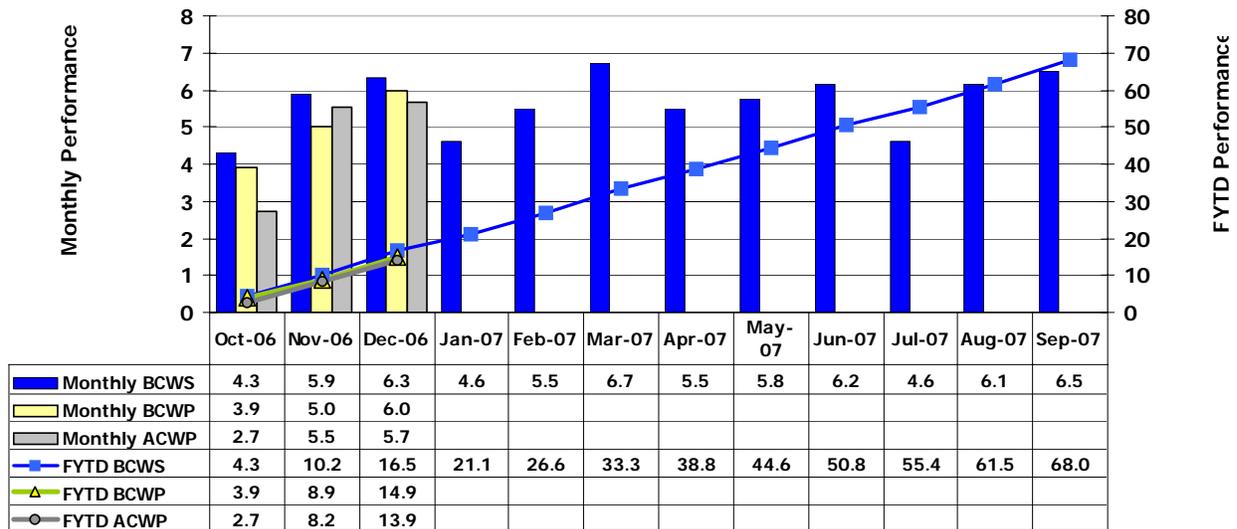
The schedule variance is being driven by four contributors:

- Groundwater/Vadose Zone Integration (-\$0.4M)
 - Competing priorities on the finalization of strategy and issuing of subcontracts; technology development, and the Deep Vadose Zone Technical Task Package (TTP)
 - Initiation of the Technical Peer Review was delayed while discussions occurred with RL and the Washington State Department of Ecology (Ecology) regarding the panel/workshop strategy re-time phasing of work by Pacific Northwest National Laboratory (PNNL) and understated earned value by PNNL
 - Environmental Databases is behind schedule primarily due to the effort to finalize subcontracting strategy (identifying scope, etc.) with Lockheed Martin Information Technology, Inc. (LMIT)
- Groundwater Monitoring and Performance Assessments (-\$0.3M)
 - Library move postponed until January; aquifer tube sampling started late
- 100-NR-2 Operable Unit (-\$0.6M)
 - Reformulation of the injection solution delayed the planned November scheduled injections; change in field implementation plan; path forward to be replanned
- 200-ZP-1 Operable Unit (-\$0.4)
 - Recovery of FY 2006 Remedial Investigation/Feasibility Study (RI/FS) activities (offsetting); less progress than planned for Waste Sampling and Characterization Facility (WSCF) analysis due to late start in drilling two T-Farm wells; behind on feasibility study due to risk modeling delays; proposed plan behind schedule; less progress taken on Abiotic Degradation Rates due to Baseline Change Request cost reduction

Cost Performance (+\$1.0M/+6.6%). Variance is within threshold; no explanation required.

FY 2007 Schedule/Cost Performance (\$M), continued

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date
RL-30					
M-013-06B	Submit the 200-BP-5 OU RI/FS Work Plan to EPA	TPA	3/31/07		3/31/07
M-016-14A	Complete Construction of a 300 foot Permeable Reactive Barrier Utilizing Apatite Sequestration at 100-N	TPA	5/31/07		5/31/07
M-015-48B	Submit the 200-ZP-1 OU Feasibility Study Report / Proposed Plan to EPA	TPA	9/30/07		9/30/07
M-013-10A	Submit the 200-PO-1 OU Remedial Investigation/Feasibility Study to Ecology	TPA	9/30/07		9/30/07
M-024-57M	Install a Cumulative of 60 Wells	TPA	12/15/07		1/31/07
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