

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

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Hydraulic Hammer



Overview

This section addresses Project Baseline Summary (PBS) RL-0013, *Solid Waste Stabilization and Disposition*; and RL-0080, *Operate Waste Disposal Facility*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of September 2005.

Top FY 2005 Accomplishments

Well Drilling: All fifteen of the TPA-required wells for Calendar Year (CY) 2005 completed drilling in August, four months ahead of schedule. In addition, seven of the fifteen CY 2006 TPA wells have been completed.

Well Decommissioning: During FY 2005 the Project decommissioned 110 wells that posed a risk for contamination to move directly to the groundwater. Seventy of the wells were constructed using multiple-casings and were considered particularly high-risk.

Uranium/Technetium-99 Remediation: The Remedial Action Objectives (RAOs) for cleaning up a uranium/technetium-99 groundwater plume in the 200 West Area were achieved, and the system was turned off. The contamination has remained below the RAOs for nine months.

New Chromium Cleanup Technology: A new technology in the 100-K Reactor Area for remediating chromium groundwater contamination was successfully demonstrated. This technology adds calcium polysulfide to groundwater that is pumped to the surface and immobilizes the chromium. The treated water is reinjected into the aquifer to treat groundwater in place.

Pump-and-Treat Systems: Two pump-and-treat systems were expanded to address changes that have been detected in the distribution of the contaminant plumes. One system is cleaning up chromium along the river and the other addresses carbon tetrachloride in center of the Hanford Site. One other chromium pump-and-treat system along the river was reconfigured twice to aggressively focus on achieving the Remedial Action Objective and the final cleanup of the plume.

Notable September Accomplishments

Well Drilling: Seven of the CY 2006 TPA wells were drilled and accepted on September 29, 2005. Two additional CY 2006 wells are in progress. Two characterization boreholes were completed in the 100-N Area and soil samples were given to the Pacific Northwest National Laboratory (PNNL) for their testing to support the emplacement of a reactive barrier for remediating Strontium-90.

Strontium-90 Cleanup: A percolation test was completed in the 100-N Area in support of the engineering design for emplacement of a reactive barrier for remediating Strontium-90. The test provided critical information to help evaluate whether it is better to follow a strategy of introducing the reactive chemical into the ground and aquifer using an infiltration or an injection approach.

FY 2005 Funds vs. Actuals (\$M)

	FY 2005 Anticipated Funding (with Carryover)	FY 2005 Actuals	Variance
Soil & Water Remediation, Groundwater/Vadose Zone	\$ 55.4	\$ 50.7	\$ 4.7

FY 2005 Schedule/Cost Performance (\$M)

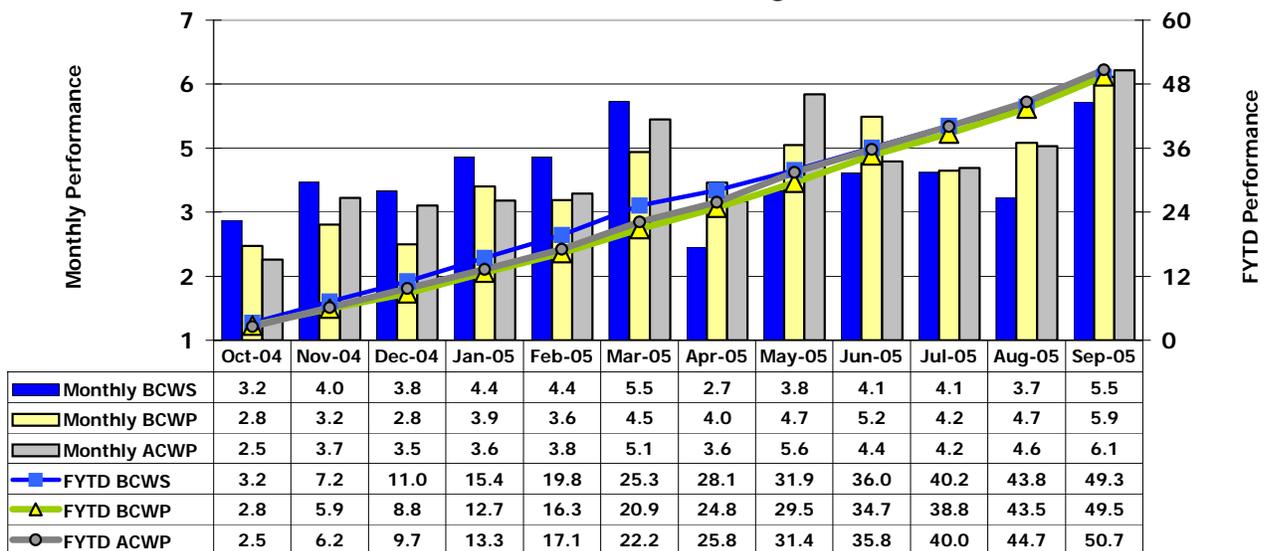
	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
Soil & Water Remediation, Groundwater/ Vadose Zone	\$49.3	\$49.5	\$50.7	\$0.2	0.4%	-\$1.2	-2.5%	\$49.3

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

Schedule Performance (+\$0.2M/+0.4%). The FY schedule variance recovered; year end variance insignificant.

Cost Performance (-\$1.2M/-2.5%). The unfavorable cost variance is due to:
Under-estimated impact of growth within the Project (labor, training, occupancy, vehicles, etc.) .

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0030	M-24-57G	Install a Cumulative of 45 Wells by December 31, 2005	RL	12/31/05	08/16/05		COMPLETE
RL-0030	M-24-57J	Install a Cumulative of 60 Wells by December 31, 2006	RL	12/31/06		07/31/06	
RL-0030	M-15-48A	Submit Draft A 200-ZP-1 CERCLA Remedial Investigation Report to EPA	RL	05/31/06		05/31/06	