

Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040); and River Corridor Closure Project (RL-0041)

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*U Plant Tank
Demolition*

*Railroad Crossing Repairs
on Route 4S-between
Wye Barricade and
300 Area*

Overview

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford*. There are three major components to this work scope:

- Deactivation and Decommissioning (M. B. Lackey);
- Waste Site Remediation (M. B. Lackey); and
- Reliability Projects (R. G. Slocum).

This section also includes PBS RL-0041, *Nuclear Facility D&D, River Corridor Closure Project*, until this work scope transitions to the River Corridor Contractor (M. B. Lackey).

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

Notable Accomplishments

PBS RL-0040, Nuclear Facility D&D, Remainder of Hanford

Deactivation and Decommissioning:

U Plant Demolition Project:

Demolition of 222U was completed August 16, 2005. Size reduction of the 203U uranyl nitrate hexahydrate (UNH) tanks is ongoing and debris removal is in process. Nine of ten structures have been completed to date. Completion of the U Plant Ancillary Facility demolition is forecast in August 2005, seven months ahead of schedule and \$5.5M under budget.

Waste Site Remediation:

200 Area Remedial Investigation/Feasibility Study (RI/FS) Work:

The Phase I Sampling and Analysis Plan (SAP) was approved by EPA and Ecology on July 6, 2005. Phase I Soil Sampling was completed on August 17, 2005. Phase II was approved by EPA and Ecology on July 21, 2005.

The TPA change request was approved to pause interim milestones by 120 days on August 4, 2005. Regulator concurrence was gained on Waste Site Model groups. Four of six workshops to gain regulator concurrence on binning of waste sites into model groups were completed.

U Plant Regional Closure:

Extended abandoned well casings in 216-U-1 and -2 Cribs and turned them over to the Groundwater Project for decommissioning. Determined well in 216-U-8 Crib was never completed (abandoned in place) and gained preliminary Ecology agreement to administratively decommission it August 1, 2005.

Notable Accomplishments, continued

Reliability Projects:

Route 4 South Repairs: Facilities and Land Management completed repair of three railroad crossings on Route 4 South (between the Wye Barricade and 300 Area) on July 27, 2005.

The construction contract was awarded for Route 4S road refurbishment on June 28, 2005; refurbishment field construction began on July 25, 2005, with a crack-sealing operation. The chip seal work will start August 22, 2005, and finish before month end.

PBS RL-0041, Nuclear Facility D&D, River Corridor Closure Project

Special Case Waste (SWC):

All Special Case Waste from Dry Storage and A Cell was removed and shipped as of August 11, 2005.

Removal of the Ion Exchange Columns (IXCs) requires a Justification for Continued Operation/Safety Evaluation Report (JCO/SER) to resume work. All packaging and shipping containers and documents are complete and ready for use. The JCO was transmitted to RL as of August 11, 2005.

300 Area D&D:

Demolition of structures 3763 and 3701U were completed during August 2005. The remaining 300 Area structure (3701D) is scheduled to be complete by mid-September.

FY 2005 Funds vs. Spend Forecast (\$M)

	Projected FY 2005 Funding	FY 2005 Fiscal Year Spend Forecast	Variance
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$ 86.1	\$ 70.2	\$ 15.9
RL-0041 Nuclear Facility D&D, River Corridor Closure	\$ 15.4	\$ 15.2	\$ 0.1
Total	\$ 101.5	\$ 85.4	\$ 16.1

NOTE: Above numbers are rounded to nearest \$0.1M.

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
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$51.9	\$56.7	\$50.6	\$4.8	9.2%	\$6.1	10.7%	\$67.1
RL-0041 Nuclear Facility D&D, River Corridor Closure	\$15.3	\$16.5	\$13.3	\$1.2	7.6%	\$3.1	19.1%	\$20.1
Total	\$67.2	\$73.2	\$63.9	\$5.9	8.1%	\$9.2	12.6%	\$87.2

Numbers are rounded to the nearest \$0.1M.

Schedule Performance (+\$5.9M/+8.1%):

RL-40 – The favorable SV (+\$1.3M) is due to favorable progress on D&D activities (+\$5.2M). This is offset by an unfavorable SV for Waste Site Remediation (-\$3.3M) due to delays to 200-PW-1 Plutonium/Organic-Rich Process Waste Group Step 2 carbon tetrachloride field investigations. Additionally, Record of Decision (ROD) delays have impacted remedial design and planning for barrier construction at U Plant Waste Sites. Delays to U Plant will continue to grow in FY 2005, but will be recovered during FY 2006 by removing physical interferences for barrier placement early via an approved Time Critical Removal Action (TCRA). The Surveillance and Maintenance (S&M) unfavorable SV (-\$0.6M) is due to delays for ventilation system shutdown, and PUREX NESHAPs inspection activities.

Reliability Projects' favorable SV (+\$3.5M) is due to progress in completing FY 2004 carryover work scope and ahead of schedule FY 2005 projects (+\$8.1M), and offset by delays in initiating new starts due to continuing resolution and pending funding decisions (-\$4.4M).

The favorable schedule variance in PBS RL-0041 (+\$1.2M) is primarily due to early completion of Uranium Disposition project work scope.

Cost Performance (+\$9.2M/+12.6%):

RL-40 – The favorable CV (\$6.8M) is primarily the result of efficiencies in demolition activities (\$6.7M), Project Management and Support (PM&S) (+\$1.7M), and controlling S&M and CP Closure Strategy costs (+\$0.5M). This is offset by the Wastes Sites (-\$2.1M) additional costs to support the U Plant ROD process, decision documents, and barrier design planning. The U Plant Waste Sites overrun will be recovered during barrier construction. The S-7 (200-PW-2 Uranium Rich Process Waste Group), T-28, and Z-7 boreholes (200-LW-1, 200 Area Chemical Lab Waste Group) cost more than planned due to the unexpected levels of contamination. The 200-LW-1 and 200-PW-2 overruns are not recoverable.

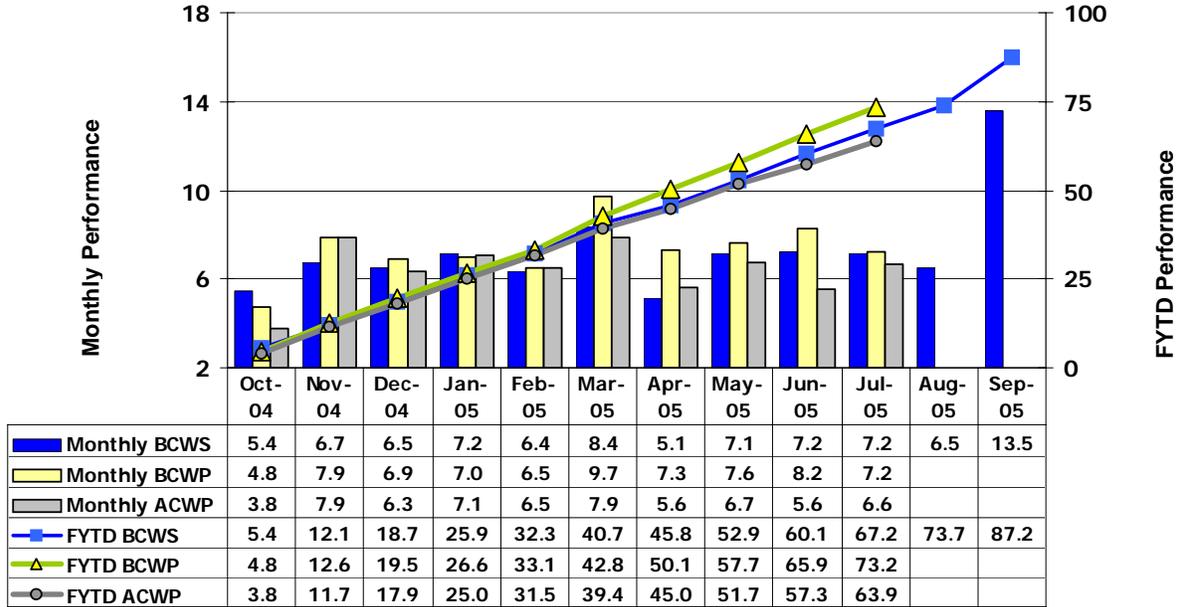
In Reliability Projects, the unfavorable cost variance (\$-1.0M) is a result of cost increases due to a nationwide increase in cost of steel and large fabricated parts for Project L-334, "Minimize Potential Environmental Impacts from Export Water System Ruptures," and L-376, "Facility Safety and Efficiency Renovations." Project L-325, "A-8 Substation," mobilization costs were higher than planned. Project L-347, "VHF Narrowband Radio," was impacted by NEC safety and code violations, and L-304, "Hanford Site Emergency Alerting System" project design and materials costs were more than planned. Planned capital equipment procurements have been deferred to mitigate these material cost increases.

Closure Services has a favorable cost variance of (+0.2M).

The favorable cost variance in PBS RL-0041 (+\$3.1M) is largely due to lower cost for Uranium Fuel Shipments, and efficiencies at the 300 Area Treated Effluent Disposal Facility (TEDF) operations.

FY 2005 Schedule/Cost Performance (\$M), continued

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	TRP-03-242 M-015-40C	Submit 200-CW-5 U Pond/Z Ditches Cooling Water Group FS & Submit	HQ	10/31/04	10/29/04		Completed ahead of schedule
RL-0040	WMG-05-001 M-091-40L-004	M-91-40L.1.D Submit Quarterly Burial Ground Vent and substrate Sample	HQ	12/01/04	11/12/04		Completed ahead of schedule
RL-0040	TRP-03-139 M-013-000	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	HQ	12/31/04	12/20/04		Completed ahead of schedule
RL-0040	WMG-04-009 M-091-40K	M-91-40K Update 218-E-12B SAP	HQ	01/15/05	08/24/04		Completed ahead of schedule
RL-0040	WMG-05-005 M-091-40L-005	M-91-40L.2.A Submit Quarterly Burial Ground Vent and substrate Sample	HQ	03/01/05	02/17/05		Completed ahead of schedule
RL-0040	WMG-05-010 M-091-40J	M-91-40J UPDATE 218-W-3A SAP	HQ	06/27/05	06/27/05		Complete
RL-0040	WMG-05-009 M-091-40I	M-91-40I Update 218-W-4B SAP	HQ	45 day before field work begins			On schedule
RL-0040	WMG-05-006 M-091-40L-006	M-91-40L.2.B Submit Quarterly Burial Ground Vent and substrate Sample	HQ	06/01/05	05/12/05		Completed ahead of schedule
RL-0040	WMG-05-007 M-091-40L-007	M-91-40L.2.C Submit Quarterly Burial Ground Vent and substrate Sample	HQ	09/01/05			On schedule

Milestone Achievement, continued

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	TRP-03-260 M-015-46A	200 Area Chemical Lab Waste OUs Remedial Investigation Report.	HQ	02/28/06			On schedule
RL-0040	TRP-03-248 M-020-39	Submit 216 S-10 Pond and Ditch Closure Plan to Ecology	HQ	03/31/06			On schedule
RL-0040	TRP-03-245 M-015-39C	Submit 200-CS-1 Chemical Sewer Group FS and Submit PP/Proposed	HQ	03/31/06			On schedule
RL-0040	WMG-06-001 M-091-40L-008	M-91-40L.2.D Submit Quarterly Burial Ground Vent and substrate Sample	HQ	12/01/05			On schedule
RL-0040	TRP-04-324	Issue Action Memorandum for U Plant Ancillary Facilities	RL	12/31/05	01/23/04		Completed ahead of schedule
RL-0040	TRP-04-323	Issue Record-of-Decision for Canyon Disposition Initiative	RL	12/31/05			On schedule
RL-0040	TRP-03-257 M-020-33	Submit Closure/Post Closure Plans for 216-A-10 Crib, Etc.	HQ	04/30/06			On schedule
RL-0040	TRP-03-263 M-015-44A	200-MW-1 OU Remedial Investigation Report	HQ	04/30/06			On schedule
RL-0040	TRP-03-254 M-015-43C	Submit 200-PW-2 OU FS & Proposed Plan/Proposed RCRA Permit Mod	HQ	04/30/06			On schedule
RL-0040	WMG-06-005 M-091-40L-009	M-91-40L.3.A Submit Quarterly Burial Ground Vent and substrate Sample	HQ	03/01/06			On schedule
RL-0040	TRP-04-320	Demolish Ten U Plant Ancillary Facility Structures	RL	03/31/06		08/31/05	Forecast ahead of schedule
RL-0040	TRP-04-321	Demolish 10 B Plant Structures	RL	03/31/06	09/14/04		Completed ahead of schedule
RL-0041	TRP-04-325	Package, Ship and Dispose of Remaining N Reactor Fuel	RL	03/31/06	05/17/05		Completed ahead of schedule
RL-0040	WMG-06-006 M-091-40L-010	M-91-40L.3.B Submit Quarterly Burial Ground Vent and substrate Sample	HQ	06/01/06			On schedule
RL-0040	WMG-06-007 M-091-40L-011	M-91-40L.3.C Submit Quarterly Burial Ground Vent and substrate Sample	HQ	09/01/06			On schedule
RL-0040	TRP-03-266 M-015-46B	200 Area Chemical Laboratory Waste OUs Feasibility Study	HQ	09/30/06			On schedule
RL-0040	WDG-06-401	Remediate U Plant Area High RiskWaste Sites	RL	09/30/06			On schedule
RL-0040	TRP-04-322	Demolish 12 additional B Plant Structures	RL	09/30/06	09/14/04		Completed ahead of schedule
RL-0041	TRP-04-326 M-092-06-T02	Complete the Disposal/Disposition of Un-Irradiated Metal Fuel	RL	09/30/06	05/17/05		Completed ahead of schedule