

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

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**Progress at U Plant Ancillary
Facility demolition.**

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 (M. M. Belles).

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 December 2004.

Notable Accomplishments

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

Deactivation and Decommissioning:

U Plant Demolition Project: The public comment period on the Proposed Plan for Remediation of the 221 U Facility Canyon Disposition Initiative started on December 13, 2004, and will continue through January 31, 2005. Three comments have been received to date.

FH continues demolition preparation and asbestos abatement activities ahead of schedule on several U Plant Ancillary structures.

Waste Site Remediation:

U Plant Regional Closure: Comments were received from the State of Washington Department of Ecology (Ecology) on the Draft C of the 200-UW-1 Proposed Plan. Agreement was reached with Ecology on additional sampling required to support barrier design.

BC Cribs and Trenches: An informal review of the Focused Feasibility Study and Proposed Plan was initiated by RL and the regulatory agency. Initial comments were received and resolution is in progress. This process is anticipated to significantly shorten the overall document approval process by ensuring expectations are met prior to formal document submittal.

200 Area RI/FS Work: TPA Milestone M-13-000 was met 11 days ahead of schedule when DOE-RL submitted the 200-SW-1 Non Radioactive Landfills and Dump Group/200-SW-2 Radioactive Landfills and Dump Group RI/FS Work Plan to Ecology on December 20, 2004. (FH had originally submitted the document to DOE-RL on December 7, 2004.) FH submitted the 200-IS-1 Tanks/Lines/Pits/Boxes Waste Group/ 200-ST-1 Septic Tank and Drain Fields Waste Group RI/FS Work Plan to DOE-RL on December 16, 2004 for transmittal to Ecology.

Drilling was completed at the 216-S-7 Crib (200-PW-2 Uranium-Rich Process Waste Group/200-PW-4 General Process Waste Group), 216-T-28 Crib (200-LW-1 300 Area Chemical Laboratory Waste Group/200-LW-2 200 Area Chemical Laboratory Waste Group), and 216-U-3 French Drain (200-MW-1 Miscellaneous Waste Group).

Notable Accomplishments, continued

Reliability Projects:

Radio System Narrow Banding: Project L-347, Narrowband Radio Communications, was completed on December 30, 2004. This project modified or replaced existing radio systems to ensure Hanford systems operate in compliance with the Telecommunications and Information Administration Federal Narrowband Mandate.

182-B Pump Installation: Project L-327, Install BPA-Provided Energy Efficient Pumps at 182-B, was completed on December 20, 2004. This project designed and constructed a modern, energy-efficient pumping system to replace the 50-year-old 100 Area export water pumps and associated electrical system.

A-8 Electrical Substation: On December 30, 2004, the request for proposal was issued for Project L-325, 230KV Substation A-8 Upgrade. The A-8 Substation provides electrical power to all Hanford Central Plateau facilities.

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

Uranium Disposition: Fuel shipments were initiated for burial at the Mixed Waste Trenches more than four months ahead of schedule. As of January 21, 2004, 260 containers had been shipped.

300 Area Treated Effluent Disposal Facility (TEDF): December 29, 2004 marked the 10-year anniversary of the 300 Area TEDF initiating treatment and discharge of process wastewater. Over the past 10 years the TEDF has treated 650 million gallons of waste water.

300 Area D&D: Demolition preparation activities were completed on three additional structures (3768, 3769, and 3770), and structural demolition of 3770 was initiated. Structural demolition of all three of these structures is forecast to be completed by early February 2005. In addition, direction was received from RL to demolish two additional structures (3762 and 3764). This work is forecast to begin in February 2005.

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 | \$ 89.9 | \$ 87.5 | \$ 2.4 |
| RL-0041 Nuclear Facility D&D, River Corridor Closure | \$ 19.2 | \$ 17.0 | \$ 2.2 |
| Total | \$ 109.1 | \$ 104.5 | \$ 4.6 |

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 | \$15.1 | \$15.9 | \$14.7 | \$0.7 | 4.9% | \$1.2 | 7.4% | \$78.8 |
| RL-0041 Nuclear Facility D&D, River Corridor Closure | \$3.6 | \$3.7 | \$3.3 | \$0.1 | 2.7% | \$0.5 | 12.5% | \$18.6 |
| Total | \$18.7 | \$19.6 | \$17.9 | \$0.8 | 4.3% | \$1.6 | 8.4% | \$97.4 |

Schedule Performance (+\$0.8M/+4.3%): The favorable schedule variance for CP D&D (+\$0.5M) is due to favorable progress on U Plant Ancillary Facilities and miscellaneous structures demolition.

The unfavorable schedule variance for Waste Sites (-\$0.7M) is due to a late start on BC Cribs preliminary design, delays to planning/mobilization for the 200-PW-1 Plutonium/Organic-Rich Process Waste Group A-8 and Step 2 field investigations, delays at U Plant Regional Closure because of additional, extended regulatory reviews for the FFS/PP and ROD, delays in Phase 2 confirmatory sampling, and the planning and procurement for barrier construction.

The favorable schedule variance (+\$1.0M) in Reliability Projects is due to progress in completing FY 2004 carryover work scope (+\$3.2M); offset by delays in initiating new starts due to continuing resolution (-\$2.2M).

The favorable schedule variance (+\$0.1M) for River Corridor Closure Project (PBS RL-0041) is within established thresholds.

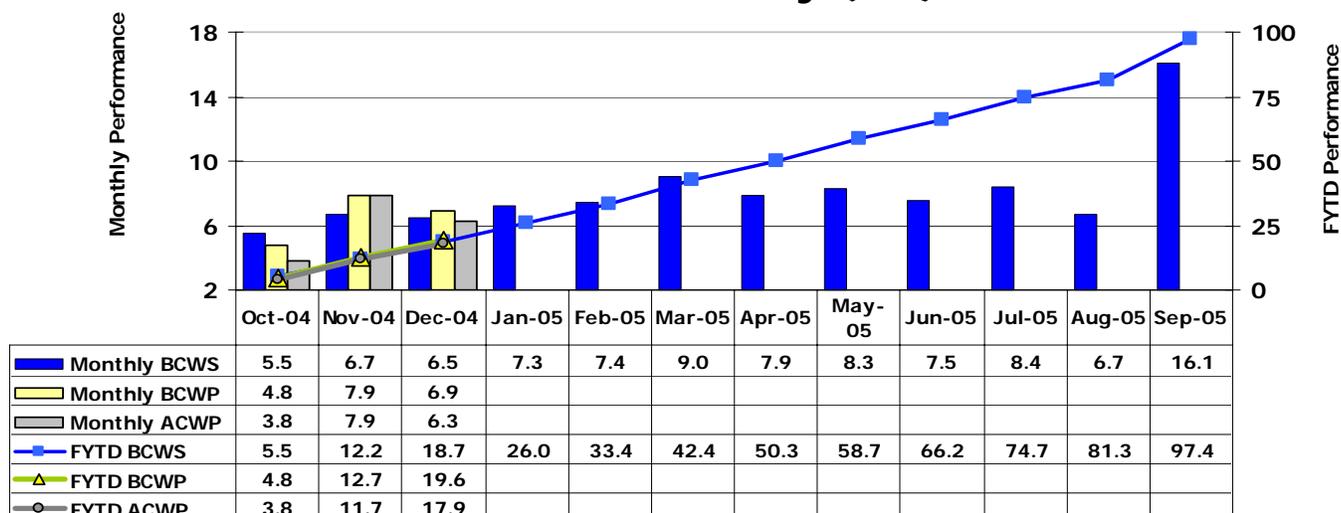
Cost Performance (+\$1.6M/+8.4%): The favorable cost variance (+\$1.7M) associated with efficiencies for CP D&D, CP Surveillance & Maintenance, and Project Management and Support; offset by overrun in Waste Site Remediation (-\$0.7M) due to extra costs to complete decision documents and update conceptual models for additional boreholes, greater than expected subcontractor/analytical costs for 200-LW-1 300 Area Chemical Laboratory Waste Group remedial investigation, and material costs in preparation for A-8 and Step 2 investigations at 200-PW-1 Plutonium/Organic-Rich Process Waste Group.

The favorable cost variance (+\$0.2M) in Reliability Projects is within established thresholds.

The favorable cost variance (+\$0.5M) for River Corridor Closure Project (PBS RL-0041) is the result of efficiencies realized in the Uranium Disposition Project by changing the disposition path from the Environmental Restoration Disposal Facility to the Mixed Waste Trench and efficiencies achieved through integration of 300 TEDF with WESF and 200 Area Liquid Effluents.

FY 2005 Schedule/Cost Performance, continued

Performance Analysis FYTD and Monthly (\$M)



Milestones

| 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-05-010 M-091-40J | M-91-40J UPDATE 218-W-3A SAP | HQ | 03/01/05 | | | On 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 | | | On schedule |
| RL-0040 | WMG-05-009 M-091-40I | M-91-40I Update 218-W-4B SAP | HQ | 03/01/05 | | | 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 | | | On 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 |
| RL-0040 | TRP-03-260 M-015-46A | 200 Area Chemical Lab Waste OUs Remedial Investigation Report. | HQ | 10/31/05 | | | On schedule |
| RL-0040 | TRP-03-248 M-020-39 | Submit 216 S-10 Pond and Ditch Closure Plan to Ecology | HQ | 11/30/05 | | | On schedule |

Milestones, continued

| PBS | MSN | Title | Type | Due Date | Actual Date | Forecast Date | Status / Comments |
|---------|-----------------------------|---|------|----------|-------------|---------------|-----------------------------|
| RL-0040 | TRP-03-245 M-015-39C | Submit 200-CS-1 Chemical Sewer Group FS and Submit PP/Proposed | HQ | 11/30/05 | | | 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 | 12/31/05 | | | On schedule |
| RL-0040 | TRP-03-263 M-015-44A | 200-MW-1 OU Remedial Investigation Report | HQ | 12/31/05 | | | On schedule |
| RL-0040 | TRP-03-254 M-015-43C | Submit 200-PW-2 OU FS & Proposed Plan/Proposed RCRA Permit Mod | HQ | 12/31/05 | | | 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 | | 09/30/05 | 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 | | 09/30/05 | 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-06-402 | Remediate BC Cribs and Trenches | RL | 09/30/06 | | | On schedule |
| RL-0040 | WDG-06-401 | Remediation of U Plant Area Waste 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 | | 09/30/05 | Ahead of schedule |