

# Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040)

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232-Z Scrubber  
Cell  
Demolition  
(before)

232-Z Scrubber Cell  
Demolition (after)



L-334, Minimize Potential Environmental Impacts  
from Export Water Systems Ruptures, valve removal

## Overview

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

- Central Plateau Remediation (CPR) (M. B. Lackey), and
- Reliability Projects (R. G. Slocum).

NOTE: Unless otherwise noted, all information contained herein is as of the end of May 2006.

## Notable Accomplishments

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

#### Central Plateau Remediation Projects:

##### U Plant Waste Sites Remediation

- Working 200-UW-1 U Plant Waste Sites Action Memorandum (AM) for removal of 200-W-42 vitrified clay pipeline (VCP) and other interferences
  - Completed excavation of approximately one hundred feet of 200-W-42 in Phase II
  - Evaluating sample results to enable backfill of Phase I excavation

##### Closure Projects

- Radiological Control Team completed surveys in the BC Crib control area and declared the area non-radiological
  - Surveys were completed June 1, 2006, five months ahead of schedule
  - Deactivation and Decommissioning (D&D) is currently identifying additional areas that may be downposted

##### D&D Projects

- Continue to provide support to the Plutonium Finishing Plant (PFP), PBS RL-011, demolition work scope
  - Completed hand demolition of PFP's Door 176 Airlock on May 31, 2006
  - Completed demolition of the 232-Z Scrubber Cell

#### Reliability Projects:

- Project L-325A, Phase 2, A-7 to A-8 Substation Tie Line
  - Awarded construction contract on June 8, 2006

## FY 2006 Funds vs. Spend Forecast (\$M)

|  | Projected FY 2006<br>Funding | FY 2006 Fiscal Year<br>Spend Forecast | Variance      |
|--|------------------------------|---------------------------------------|---------------|
| RL-0040 Nuclear Facility D&D, Remainder of Hanford | \$ 66.6                      | \$ 62.8                               | \$ 3.8        |
| <b>Total</b>                                       | <b>\$ 66.6</b>               | <b>\$ 62.8</b>                        | <b>\$ 3.8</b> |

## FY 2006 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 | \$32.5                          | \$38.4                          | \$31.9                        | \$5.9                | 18.1%               | \$6.5            | 16.9%           | \$55.1               |
| <b>Total</b>                                       | <b>\$32.5</b>                   | <b>\$38.4</b>                   | <b>\$31.9</b>                 | <b>\$5.9</b>         | <b>18.1%</b>        | <b>\$6.5</b>     | <b>16.9%</b>    | <b>\$55.1</b>        |

Numbers are rounded to the nearest \$0.1M.

### Schedule Performance (+\$5.9M/+18.1%):

The favorable schedule variance (SV) for CPR (+\$1.4M) is primarily due to close out of post contract period no action waste sites (+\$1.8M), completion of FY 2005 carry over work scope: PUREX NESHAPs, B Plant filter change out, Haul Road Construction, and Ecological Sample Analysis (+\$1.2M), and progress in demolition of post-contract industrial facilities (+\$0.2M).

The favorable variance is offset by delays in submittal of the 218-W-4B Sampling and Analysis Plan (SAP) (-\$0.2M), 200-UW-1 to install electrical power to support barrier monitoring (-\$0.2M), the Data Quality Objective (DQO) and Phase II surface investigation for 200-SW-1, Non-Radioactive Landfills and Dump Group (-\$0.7M), the DQO and follow-on characterization for 200-IS-1, Tanks/Boxes/Pits/Lines Group (-\$0.6M). The completion of the 200-UW-1 barrier monitoring, and the 218-W-4B SAP are recoverable. Work scope is projected to carry over into FY 2007 for 200-SW-1 and 200-IS-1 field work.

The favorable SV for Reliability Projects (+\$4.5M) is primarily due to progress on prior year carryover work scope: Project L-325, "A-8 Substation," completed under cost (+\$5.0M), Project L-334, "Minimize Potential Environmental Impact from Export Water System Ruptures," forecast for completion July 2006 (+\$0.4M), Project L-580, "Trunking Hanford's Secured Radio System," forecast for completion June 2006 (+\$0.2M), and Project L-304, "Hanford Site Emergency Alerting System" (+\$0.5M), completed earlier this fiscal year.

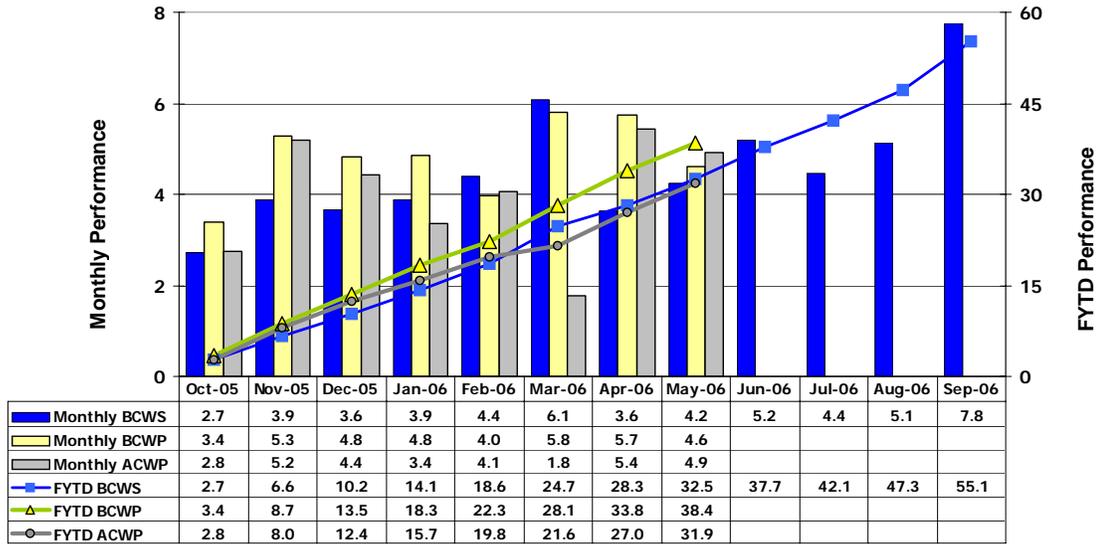
This is offset by the delay in award of contract for Project L-573, "Closure Support Facility" (+\$0.1M), and Project L-325A, "Tie Line from A-8 to A-7" (-\$1.7M), delays due to environmental regulatory requirements and unavailability of survey group resources to perform design modifications.

### Cost Performance (+\$6.5M/+16.9%):

The favorable cost variance (CV) for CPR (+\$6.6M) is primarily the result of closing out post-contract period no action waste sites at no cost (+\$1.8M), efficiencies in the haul road construction (+\$0.7M), Surveillance and Maintenance (S&M) (+\$0.3M), and Project Management and Support (PM&S) (+\$0.3M), and a variance distribution for PBS RL-40 (+\$3.4M).

The CV for Reliability Projects (-\$0.1M) is within thresholds; therefore no explanation is required.

Performance Analysis  
FYTD and Monthly (\$M)



Milestone Achievement

| MSN                         | Title  | Type | Due Date | Actual Date | Forecast Date | Status / Comments           |
|-----------------------------|--|------|----------|-------------|---------------|-----------------------------|
| WMG-06-001<br>M-091-40L-008 | M-91-40L.2.D Submit Quarterly Burial Ground Vent and substrate Sample          | HQ   | 12/01/05 | 11/08/05    |               | Completed ahead of schedule |
| TRP-04-324                  | Issue Action Memorandum for U Plant Ancillary Facilities                       | RL   | 12/31/05 | 01/23/04    |               | Completed ahead of schedule |
| TRP-04-323                  | Issue Record-of-Decision for Canyon Disposition Initiative                     | RL   | 12/31/05 | 10/03/06    |               | Completed ahead of schedule |
| TRP-03-260<br>M-015-46A     | 200 Area Chemical Lab Waste OUs Remedial Investigation Report.                 | HQ   | 02/28/06 | 02/28/06    |               | Completed on schedule       |
| WMG-06-005<br>M-091-40L-009 | M-91-40L.3.A Submit Quarterly Burial Ground Vent and substrate Sample          | HQ   | 03/15/06 | 02/09/09    |               | Completed ahead of schedule |
| TRP-03-248<br>M-020-39      | Submit 216 S-10 Pond and Ditch Closure Plan to Ecology                         | HQ   | 03/31/06 | 03/30/06    |               | Completed ahead of schedule |
| TRP-03-245<br>M-015-39C     | Submit 200-CS-1 Chemical Sewer Group FS and Submit PP/Proposed RCRA Permit Mod | HQ   | 03/31/06 | 03/30/06    |               | Completed ahead of schedule |
| TRP-04-320                  | Demolish Ten U Plant Ancillary Facility Structures                             | RL   | 03/31/06 | 09/07/05    |               | Completed ahead of schedule |
| TRP-04-321                  | Demolish 10 B Plant Structures   | RL   | 03/31/06 | 09/14/04    |               | Completed ahead of schedule |
| TRP-03-257<br>M-020-33      | Submit Closure/Post Closure Plans for 216-A-10 Crib, Etc.                      | HQ   | 04/30/06 | 04/27/06    |               | Completed ahead of schedule |
| TRP-03-263<br>M-015-44A     | 200-MW-1 OU Remedial Investigation Report                                      | HQ   | 04/30/06 | 04/28/06    |               | Completed ahead of schedule |

## Milestone Achievement (continued)

| MSN                                | Title  | Type | Due Date                        | Actual Date | Forecast Date | Status / Comments           |
|------------------------------------|--|------|---------------------------------|-------------|---------------|-----------------------------|
| TRP-03-254<br>M-015-43C            | Submit 200-PW-2 OU FS & Proposed Plan/Proposed RCRA Permit Mod   | HQ   | 05/31/06                        | 05/31/06    |               | Completed on schedule       |
| WMG-06-006<br>M-091-40L-010        | M-91-40L.3.B Submit Quarterly Burial Ground Vent and substrate Sample  | HQ   | 06/15/06                        |             |               | On schedule                 |
| WMG-06-007<br>M-091-40L-011        | M-91-40L.3.C Submit Quarterly Burial Ground Vent and substrate Sample  | HQ   | 09/15/06                        |             |               | On schedule                 |
| WDG-06-401                         | Remediate U Plant Area High Risk Waste Sites   | RL   | 09/30/06                        |             |               | On schedule                 |
| TRP-04-322                         | Demolish 12 additional B Plant Structures  | RL   | 09/30/06                        | 09/14/04    |               | Completed ahead of schedule |
| WMG-05-010<br>M-091-40J            | M-91-40J Update 218-W-3A SAP   | HQ   | 45 day before field work begins |             |               | On schedule                 |
| WMG-05-009<br>M-091-40I            | M-91-40I Update 218-W-4B SAP   | HQ   | 45 day before field work begins |             |               | On schedule                 |
| TRP-04-322                         | Demolish 12 additional B Plant Structures  | RL   | 09/30/06                        | 09/14/04    |               | Completed ahead of schedule |
| D&D Project Performance Objectives | Demolition of five facilities (2707E, 2713E, 2715E, 2719E, & 2722E) to slab on grade.  | RL   | 09/30/06                        |             |               | On schedule                 |
| D&D Project Performance Objectives | Remediation of two 200-UW-1 Operable Unit waste sites (200W-42 vitrified clay pipeline/UPR 200-W-163) in the U-Plant Regional Closure Area as identified in the waste site proposed plan | RL   | 09/30/06                        |             |               | On schedule                 |
| D&D Project Performance Objectives | Data Quality Objectives (DQO) and respective Sampling and Analysis Plans (SAPs) for model groups 2-7 that integrate groundwater and source unit needs.                                   | RL   | 09/30/06                        |             |               | On schedule                 |
| D&D Project Performance Objectives | Slant borehole at 216-Z-19 Trench and delivery of the 200-PW-1 Draft A, Remedial Investigation Report to RL  | RL   | 09/30/06                        |             |               | On schedule                 |
| TRP-06-001<br>M-015-45A            | Submit 200-PW-1 OU Remedial Investigation Report   | HQ   | 10/31/06                        |             | 10/15/06      | Forecast ahead of schedule  |
| TRP-03-266<br>M-015-46-B           | 200 Area Chemical Laboratory Waste Ous Feasibility Study   | HQ   | 11/30/06                        |             |               | On schedule                 |
| WMG-07-001<br>M-091-40L-012        | M-91-40L.3.B Submit Quarterly Burial Ground Vent and substrate Sample  | HQ   | 12/15/06                        |             |               | On schedule                 |