

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

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BC Control Area and excavation site



105 K East office area demolition



***Project L-641, 273E Facility Renovations,
construction activities nears completion***

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 & Decommissioning (D&D) [R. E. Wilkinson],
- Waste Sites Remediation [B. H. Ford], and
- Reliability Projects [R. G. Slocum].

NOTE: Unless otherwise noted, all information contained herein is as of the end of June 2008.

Notable Accomplishments

Deactivation and Decommissioning

231-Z Inventory Reduction

- Completed installation of standard waste box liner and cribbing.
- Completed the Documented Safety Analysis (DSA) Implementation Validation Review.
- Began Activity Based Management Review (ABMR).

BC Control Area

- RL and Ecology approved the BC Control Area (BCCA) Action Memorandum.
- RL and Ecology approved the BCCA Remedial Action Work Plan (RAWP) on July 2, 2008.
- Initiated mobilization activities.

200 North Area

- Transmitted the 212-N, P & R Buildings engineering evaluation/cost analysis (EE/CA) to RL for review.
- Transmitted the rail car white paper to RL.
- Revised the 200-CW-3 Remaining Sites Sampling and Analysis Plan (SAP) and provided to RL for regulator review/approval.
- Revised the 200-CW-3 Remaining Sites RAWP to be consistent with regulator comments to SAP; provided to RL for regulator review/approval.

U Plant Regional Closure Zone

- Completed comment resolution sessions with RL, EPA, and Ecology on "minor" comments to the 221-U Remedial Design/Remedial Action Work Plan (RD/RAWP).
- Initiated updates to U Plant Ancillary D&D RAWP.

Waste Site Remediation

- Completed the first half of the excavation work at B-26; started on the second half of the excavation (completed 7/16/08); 50 containers of excavation debris removed and sent to ERDF.
- Completed 30 slim line shallow direct pushes at 200-CW-5.
- Initiated drilling for direct pushes at 200-IS-1.
- TPA Change Notice was approved to cancel the 216-T-36 borehole (\$1.5M savings over two years).
- Reached total depth and obtained water sample from Borehole C5923 at BC Cribs (early July; PI).
- Completed and decommissioned 216-U-10 Pond borehole.
- Initiated direct pushes in the 216-S-1/2 Crib.
- Completed direct push in the 216-A-5 Crib and initiated drilling of a deep borehole .

Notable Accomplishments, continued

Reliability Projects

- Completed Project *L-614, Repeater Sites Safety Renovations*, telecommunications work scope redesign.
- Awarded the construction contract for Project *L-449, Mortar 12-Inch Water Line from 4th Street and Baltimore to 57th and Baltimore*, on June 18, 2008 and approved additional work scope construction contract on July 7, 2008.
- Completed definitive design for Project *L-645, 609 Fire Station 91 Potable Water System*, on June 20, 2008.
- Submitted DOE Order 430.1B, *Real Property Asset Management*, National Environmental Policy Act (NEPA) 5-Year Supplemental Analysis for the final Hanford Comprehensive Land Use Plan Environmental Impact Statement to RL for subsequent transmittal to DOE-HQ.
- Completed 2721-E (Patrol Operations Center) roof repairs (Project *L-396, Roof Rehabilitations*) on June 20, 2008.

FY 2008 Funds vs. Spend Forecast (\$M)

	Projected FY 2008 Funding	FY 2008 Fiscal Year Spending Forecast	Variance
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$ 86.8	\$ 72.4	\$ 14.4

Schedule/Cost Performance (\$M)

Nuclear Facility D&D, Remainder of Hanford	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 (FY08/CTD)
Current Period (Month)	\$7.9	\$6.2	\$5.2	-\$1.7	-21.6%	\$1.0	16.1%	\$80.1
Cumulative-to-Date (FY 2004-Present)	\$303.6	\$297.9	\$290.1	-\$5.7	-1.9%	\$7.7	2.6%	\$335.7

Numbers are rounded to the nearest \$0.1M.

CTD Schedule Performance (-\$5.7M/-1.9%):

The schedule variance (SV) for the D&D Project (-\$0.2M) is within reporting thresholds.

The unfavorable SV for Waste Site Remediation (-\$4.6M) is due to regulator delays in approving documents required to initiate waste site characterization field activities and delayed approval of baseline change requests associated with scope deferrals and cancellations. Resource availability (nuclear operators and borehole drilling equipment) is also impacting aggressive field characterization schedules. FH is evaluating the ability to recover schedule but expects to have a significant amount of uncompleted work that will be carried into FY 2009.

The unfavorable SV for Reliability Projects (-\$0.8M) is associated with the delayed approval of the Memorandum of Agreement required to initiate Project *L-614, Repeater Sites Safety Renovations*, *L-606, Overlay Road to Rattlesnake*, construction activities on hold per RL direction, and deferral to out-year of the development of the *L-631, Restoring Reliability to Hanford Central Plateau Water Supply*, conceptual design report.

Schedule/Cost Performance (\$M), continued

CTD Cost Performance (+\$7.7M/+2.6%):

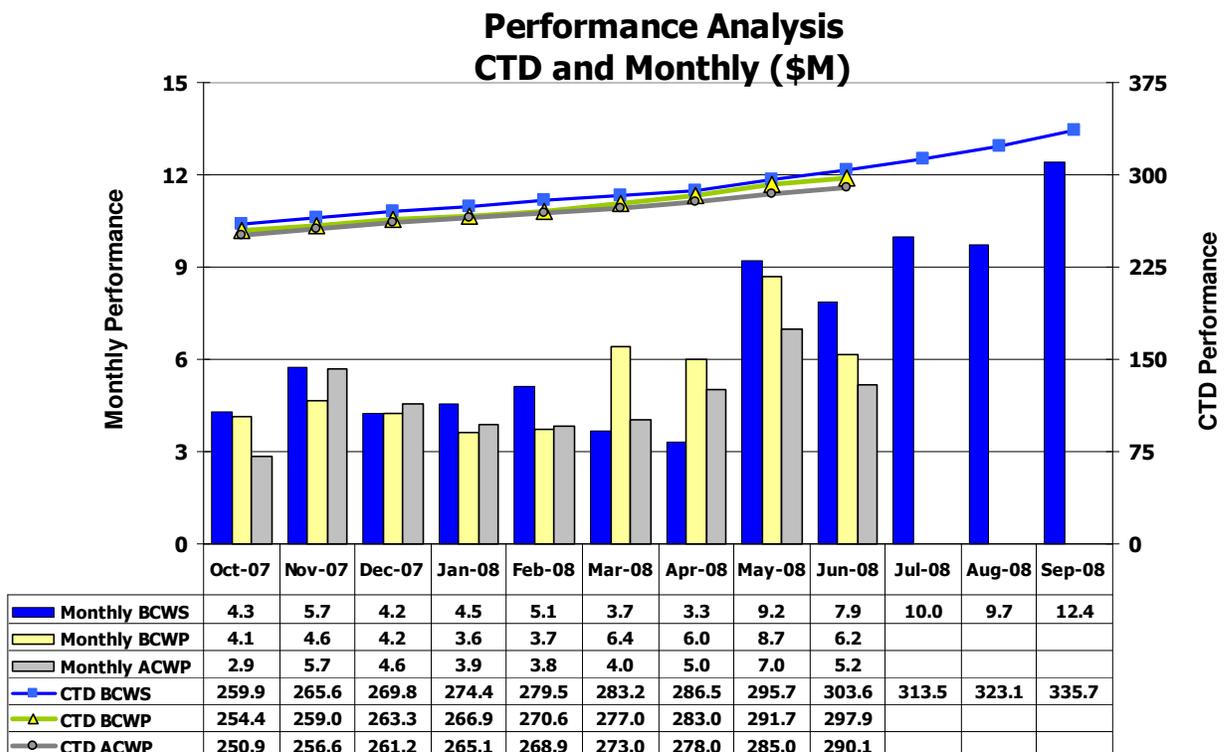
The favorable cost variance (CV) for D&D (+\$4.0M) is primarily due to the following:

- Prior year cost overruns in 200-UW-1 U Zone Waste Site Remediation (-\$4.2M) resulting from:
 - Additional direct push sampling during field investigation to determine contamination levels.
 - Greater than planned effort to resolve Feasibility Study/Planning Package (FS/PP) comments and Remedial Design SAP.
 - Delays in barrier construction without reductions in staffing levels.
 - Lateral spread of contamination at 200-W-42 resulting in more waste containers being shipped to the Environmental Restoration Disposal Facility (ERDF) than planned.
- CP Surveillance and Maintenance prior year efficiencies in staffing and lower than planned corrective maintenance in prior years for 209E and B Plant (+\$3.1M).
- Offset by prior year efficiencies and variance distributions (+\$5.0M).

The favorable CV for Waste Site Remediation (+\$3.0M) is due to lower than estimated material costs, favorable variance distributions, and prior year project management savings offset by prior year increased costs associated with high-risk boreholes.

The favorable CV for Reliability Projects (+\$0.2M) is primarily due to the following: Efficiencies and favorable bids in prior year electrical projects (+\$1.5M), road refurbishments (+\$0.7M), capital equipment procurements (+\$1.0M), Project L-429, *12-Inch Water Line Mortar Lining Along 4th Street from Baltimore to Canton*, (+\$0.7M), offset by increase in steel prices for prior year facility and water projects (-\$3.2M), and prior year telecommunication projects technology deployment (-\$0.5M).

The unfavorable CV for Closure Services (+\$0.6M) is within established thresholds.



Milestone Achievement

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The FY 2008 Enforceable Agreement milestone information provided herein is based upon the current baseline including RL-approved changes. Changes from month-to-month in both the total number of milestones to be completed and in the forecast status of upcoming milestones are the result of BCRs approved during the reporting period.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
CPDD-07-004	212-N nuclear facility hazard reduction and downgrade completed	PI	11/30/07	10/25/07		Complete
M-091-40L-016	M-91-40L.4.D Quarterly Burial Ground vent/substrate sampling results (1st Qtr 2008)	TPA	12/15/07	11/21/07		Complete
CPDD-07-008	Complete Construction of Project L-626, 100B-A Water System Enhancement	PI	12/31/07	12/11/07		Complete
M-091-40L-017	M-91-40L.5.A Quarterly Burial Ground vent/substrate sampling results (2nd Qtr 2008)	TPA	3/15/08	2/25/08		Complete
CPDD-07-0010	Complete phase one of the BC Cribs and Trenches Treatability Test Plan	PI	3/30/08	3/28/08		Complete
CPDD-08-001	241-U-361 Settling Tank Characterization and Sampling completed	PI	3/31/08	3/4/08		Complete
M-091-40L-018	M-91-40L.5.B Quarterly Burial Ground vent/substrate sampling results (3rd Qtr 2008)	TPA	6/15/08	5/30/08		Complete
CPDD-08-004	Complete phase 2a of the BC Cribs and Trenches Treatability Test Plan	PI	7/31/08	7/16/08		Complete
M-15-40D	Submit Revised Feasibility Study Report and Revised Proposed Plan for the 200-CV-5 OU	TPA	7/31/08		7/31/08	On schedule
M-091-40L-019	M-91-40L.5.C Quarterly Burial Ground vent/substrate sampling results (4th Qtr 2008)	TPA	9/15/08		9/15/08	On schedule
CPDD-08-003	Complete characterization of potential contamination plume in the BC Cribs and Trenches	PI	9/30/08		9/30/08	On schedule
CPDD-08-006	Complete 231Z nuclear facility hazard reduction	PI	9/30/08		8/27/08	Ahead of schedule
CPDD-08-011	Excavate 20,000 tons of contaminated Soil at BC Control Area	PI	9/30/08		9/9/08	Ahead of schedule
CPDD-08-007	Complete 224T nuclear facility hazard reduction	RL	9/30/08			